

Urban Dereliction as Environmental Injustice

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Abstract

With double-digit foreclosure rates and new home sales dropping to all-time lows, American cities are increasingly suffering from property abandonment and dereliction. In this paper, we identify urban dereliction as an important and underexamined phenomenon in American cities, and one that warrants attention under the conceptual umbrella of environmental justice. An environmental justice approach that emphasizes both distributional and procedural justice provides an important lens through which to examine abandonment and dereliction. We provide an empirical example of dereliction in Atlanta neighborhoods and report preliminary findings from a study of the distribution of urban neglect and the presence (or absence) of resident activism in both high- and low-dereliction areas. Our study indicates that some residents in high-dereliction areas, while acutely aware of dereliction and actively involved in neighborhood and community organizations, are unsuccessful in pressuring city government agencies to enforce

code violations and to maintain the physical infrastructure. By examining the procedural abilities of residents to address urban dereliction, we call attention to the relations of social power that shape the uneven geographies of urban neglect.

Key words: urban dereliction, environmental justice, procedural justice, Atlanta

Introduction

Like many cities across the United States, Atlanta contains neighborhoods with abandoned and neglected homes, streets strewn with trash, and heaps of garbage that are illegally dumped in driveways and along roadsides. These derelict areas dot the urban landscape and characterize residential streets that lead to areas as varied as Atlanta's historic central business district, the international airport, and the city's landfills. They occur in the streetcar suburbs of bungalows and Victorian homes, just minutes away from the tallest skyscraper in the southeastern United States, and they run adjacent to some of Atlanta's wealthiest neighborhoods. These streets are not absent of residents, however, and some host active neighborhood associations and community organizations. Explaining these streets of abundant abandoned and burned out homes, numerous unenforced code violations, and uncollected trash accumulating by the side of the road requires an excavation of the uneven geographies of wealth and power that contribute to these deleterious environmental conditions. In this paper, we use an environmental justice approach to highlight the multiple inequities that the residents of these streets experience and argue that distributive and procedural environmental injustices of urban dereliction need to be considered. To accomplish this, we draw from social and environmental justice literature to conceptualize dereliction as an environmental phenomenon that has both an empirical, distributive element, which can be observed and evaluated, and a critical procedural dimension, which offers a window onto the role of residents and community organizations and their ability to effect environmental conditions. We suggest that conceptualizing dereliction in the broader context of environmental justice both adds theoretical richness to the study of dereliction and provides an opening for environmental justice work to be more robust in its consideration of the multifaceted social and structural conditions that produce and reinforce uneven geographies. Further, incorporating procedural (in)capability in an environmental justice approach enhances the theoretical power of environmental justice work to uncover the complexities of environmental conditions, including, but also beyond, the geographies of urban dereliction.

Dereliction in Atlanta

With a population of nearly 446,000 residents, a mixed sociodemographic profile, and a distinctly uneven landscape of wealth and poverty, Atlanta, Georgia, provides a compelling backdrop for an examination of urban dereliction. Over half the city's population is African American, and almost one-fourth of the city's population lives below the poverty line (U.S. Census Bureau, 2008). Further,

Atlanta's housing vacancy has consistently been on the rise in recent years, increasing from 10% in 2000 to 20.9% by 2008 (U.S. Census Bureau, 2008). Like many other major cities, Atlanta experienced tremendous cycles of investment and disinvestment over the twentieth century, culminating in a landscape of wealthy neighborhoods alongside areas that have suffered intense devalorization (see Smith, 1996). The re-creation of this varied urban geography continues today, and the study of inner city flows of investment and the mechanisms that influence those flows is more important than ever as capital "returns" from the suburbs.² Gentrification has become an important focus of study within the city in response to this influx of capital and the consequent displacement of minority and lowincome populations through a variety of social mechanisms (see Keating, 2001; Hankins, 2007; Martin, 2007). This new geography of capital investment in Atlanta has created a situation in which the state, at a variety of scales, has engendered particular kinds of economic investment in regions of the city that appeal to upperand middle-income residents, while ignoring the needs of mostly African-American, poor residents (see Wilson, 2006). While scholars, city leaders, and policymakers have touted the transformation of some of Atlanta's most intensely neglected areas in recent decades (e.g., Dorman, 2008), extensive swaths of the city remain derelict. This dereliction is growing increasingly common in many other urban areas in the United States due to rising foreclosure rates (e.g. Buffalo, NY [Orey, 2008], Las Vegas, NV [Powers, 2009]) and declining state budgets, making Atlanta a useful case for the study of urban neglect.

Defining Urban Neglect

Policymakers and scholars have struggled with just how to define abandoned areas within the urban environment; terms such as "derelict areas" were used as early as the 1920s (Linehan, 2000), and such areas were classified as "blight" in the 1960s (Greenberg and Schneider, 1996). Dereliction was conceptualized as a causal element in economic collapse, so that a "derelict" area had no hope for economic revival without external intervention (Linehan, 2000). The basis for this interpretation of dereliction is quite literal and formed largely from an economic viewpoint: businesses have abandoned areas, and as a result the areas decline. Likewise, from a social perspective the "broken windows" theory of neighborhood disorder suggests that once an area is perceived to be neglected, the intensity of blight increases (Wilson and Kelling, 1982).

From the 1960s onwards, scholars and policymakers used the term "blight" to refer to regions that suffered from the presence of abandoned houses and factories, inadequate street lighting, open ditches and uncollected litter (Greenberg and Schneider, 1996). Research on urban blight and its causes associated it with social

² Over the past two decades, the per capita income in the city of Atlanta has moved from being below the metropolitan average to being 28% higher as of 2004 (Lucy and Phillips 2006; Dewan 2006).

disorder and lack of neighborhood control, and such areas were seen as heavily influential over the behaviors of their residents (Gallagher, 1993). Following this, behavioral geographers sought to understand the interaction between neighborhood characteristics and behavior (Saarinen, 1976; Gallagher, 1993). In their more recent study, Greenberg and Schneider (1996) extend this approach by examining neighborhood perceptions of environmentally-devastated neighborhoods in urban areas of the northeastern United States. "Blight" is still commonly used among urban planners and city officials. This descriptor, however, draws on an ecological metaphor and in effect naturalizes the deleterious conditions in the built environment, diminishing thereby the effects of social processes and power relations. We prefer to use the term "dereliction," because it shifts the cause and perception of these conditions back into the control of people, particularly powerholding individuals and institutions, and enables, a more effective approach to the complex set of agents that actively produce and reproduce such landscapes.

Dereliction and its causes can take a variety of forms that are not captured by narrowly defined economic approaches (Jakle and Wilson, 1992). City services, individuals, and neighborhood organizations make choices that intentionally and unintentionally shape neighborhoods for better or worse. In other words, neighborhood dereliction is (or may be) a consequence of choices made in a broad and diverse political context by local and regional decision-makers. These non-economic forces contributing to abandonment are rarely studied as primary causal elements of dereliction, but rather they are often seen as reactions to the flow of capital; once capital—in the form of business investment and the residential investments of privileged classes—leaves an area, residents and other organizations follow (see Prentice, 1976; Stegman and Rasmussen, 1980; Bartelt, 1997). Scholars, however, have begun to explore the impact of broader power networks in affecting this flow of capital.

As Weber (2002, 5) observes, "within each locale, a lattice of state and nonstate institutions—thick and hierarchal in some places, thin and ephemeral in others—influence value in the built environment." In places that have been neglected by private flows of capital, questions remain about the role and efficacy of state and nonprofit actors. As such, any account of the potential for social and environmental justice in an area should consider the structural conditions underlying the dynamics of private capital investment as well as the roles of the state and civil society.

Jackle and Wilson's (1992) work on the disuse of the built environment in the United States provides a good example of this multi-faceted approach in the context of urban dereliction, what they refer to as "urban neglect." "...Neglect," they argue "is driven by the complex interconnections of uneven development, a supportive legal system, and basic cultural values that legitimize its perpetration" (xvii-xviii). They note, following Smith (1982), that capitalist accumulation

requires the differentiation of geographical spaces. They also identify the role of cultural values that celebrate individualism and materialism, thereby suggesting activities in daily life contribute to derelict landscapes.

This approach to understanding the broader social dynamics that produce particular urban landscapes benefits from the insights of urban political ecology literature (see Kiehl, 2003; 2005; Swyngedouw and Heynen, 2003). Urban political ecology focuses on the dialectical relationship between the environment and urbanization and how "socio-environmental changes result in the continuous production of new 'natures', of new urban social and physical environmental conditions..." that "...occur in the realms of power in which social actors strive to defend and create their own environments in a context of class, ethnic, racialized and/or gender conflicts and power struggles (Swyngedouw and Heynen, 2003, 900). The city's "nature" is understood as a hybrid construction of the social and the natural, and the goal of urban political ecology research, therefore, is to expose the processes that produce such hybrids in an attempt to ameliorate the geographic unevenness of contemporary urbanization.

In this paper, we draw from the insights of urban political ecology, in terms of focusing our attention on the broader social, political, and economic contexts in which dereliction is produced. We also draw from the environmental justice approach to conceptualize dereliction as an environmental phenomenon that has both an empirical, distributive element, which can be observed and evaluated, and a critical procedural dimension, which consists of the potential for residents and community organizations to change their environmental conditions.

Environmental Justice

Environmental justice is defined by the United States Environmental Protection Agency (EPA) as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (EPA, 2008). This definition allows a great deal of freedom in how scholars, policymakers, and other actors view inequality within a given region. This definition, however, requires an interrogation of what "fair treatment and meaningful involvement" is, and of how to identify cases where these goals are not met (Pulido, 2000).

The identification of environmental injustice has frequently focused on unveiling racial bias in the spatial arrangement of both negative environmental factors, such as pollutants (see Pastor Jr. et al., 2005, Chakraborty, 2001), and positive environmental amenities, such as trees and parks (see Heynen, 2003; Wolch et al., 2005; Boone et al., 2009). In both of these approaches, researchers have found patterns suggesting those identified as white are frequently exposed to fewer pollutants or have greater access to public amenities (Pastor Jr. et al., 2005;

Chakraborty, 2001; Heynen, 2003; Wolch et al., 2005; Heynen et al., 2006). Pulido (2000) identifies patterns of racialized environmental spatial patterns in southern California, and suggests that in instances of environmental injustice, one should seek to identify white privilege, or "the hegemonic structures, practices, and ideologies that reproduce whites' privileged status" (Pulido, 2000, 15) in order to assess the role that racism and race may have played. This concept of white privilege has many analytical benefits: it can be used to identify cases of racism where critiques of intentionality might otherwise be in question, and it insists the researcher focus on the underlying "structures, practices, and ideologies" that serve to create such privileges.

Selected elements of Bullard (2000) and Pulido (2000) help to construct a broader approach for the conceptualization of both environmental injustice and racism—a framework that is not explicitly concerned with racialized privilege but still serves to mitigate issues relating to intentionality in social hierarchies. Bullard (2000) argues that within the environmental justice framework, discrimination can be tested for based on effect rather than intent. That is, regions can be surveyed for their apparent inequitable environmental qualities, regardless of what factors contributed to their creation. Pulido (2000) expands upon this, noting that because discrimination can be the product of unconscious decisions made by hundreds of individuals (at any number of scales), attempts to analyze a location or event based on the identification of specific instances of discrimination are too simplistic and ultimately misleading. In this light, an environmental justice approach informed by these arguments would focus on the landscapes or spatial distributions of environmental inequities, with less concern for proving individual cases of intent. Such distributional mappings have proven to be very useful in the legal arena, and distributional claims have played an important part in successful efforts to prevent locally inequitable sitings of polluting facilities (Kurtz, 2005; Ratick 1988). However, some instances of environmental neglect that are difficult to distributionally analyze (e.g., bug infestation brought on by property dereliction [Cenziper 2008a, 2008b; Garrison and Christensen 2009]) reveal the need for another approach. Lake (1996), Kurtz (2005), and Pulido (1996) suggest that an emphasis on procedural inequities—the inability of individuals to enact positive or prevent negative change in their local environment—offers a way of moving beyond this challenge.

Lake (1996, 162) calls for careful consideration of environmental equity, which he argues must include attention to procedural justice "if the environmental justice movement is to accomplish more than a merely cosmetic change in the distribution of environmental problems across communities." He suggests that local communities must be able to exert some ability to control not just the distribution of environmental problems but the *production* of environmental problems. Drawing from Young (1990), who argues that any conceptualization of justice must consider the broader structures, institutional arrangements, and, very

basically, the fact of what there is to distribute in the first place, Lake (1996) suggests that "procedural equity entails full democratic participation not only in decisions affecting distributive outcomes but also, and more importantly, in the gamut of prior decisions affecting the production of costs and benefits to be distributed." In light of this argument, we see an expanded environmental justice framework that considers process equity in the production of environmental problems as the most promising approach for environmental justice.

We believe that an environmental justice approach based on this notion of procedural justice enhances the study of derelict landscapes by making it possible to reveal the complexity of how environmental problems are produced. Physical dereliction is not only a negative environmental factor (which can be assessed based on spatial distributions) but also comes about as a result of procedural (in)justice: the (in)capacity of citizens and organizations to effect change in their physical environment and to be involved in the very decision-making of how cities manage (or even produce) urban neglect.

Considering urban dereliction as an environmental problematic is not new per se. For example, Greenberg and Schneider (1996) suggest that much environmental policy in the 1990s was concerned exclusively with the physical landscape of environmental hazards, but that such policy efforts ignored the social and economic implications of environmental projects, such as hazardous-waste remediation (which could then lead to abandoned industrial properties and subsequent depressed property values). In an effort to draw attention to the complexity of environmental problems in "multiple-hazard places" in inner cities, they conducted a study of perceptions of residents in neighborhoods with "severe crime, physical blight, and pollution" (Greenberg and Schneider,1996, xiii) in rustbelt regions of urban New Jersey and Pennsylvania. Concerned with residents' perceptions of neighborhood quality, the authors identified blight and crime as the most significant indicators of poor-quality neighborhoods. Their rich case study reveals the cognition that individual residents have of both real and perceived hazards found in their neighborhoods. Based on their findings, they encourage academics and policymakers to consider the wider social picture of urban environmental issues, emphasizing that attention paid to the procedural dimensions of environmental dereliction and hazards in New Jersey and Pennsylvania neighborhoods would enhance understandings of and ameliorative policies towards such environmental problems.

Our use of an environmental justice framework to understand the phenomenon of dereliction brings together the mutually constitutive elements of distributional and procedural justice. This application of environmental justice to dereliction draws heavily on Lake's (1996) and Pulido's (1996) conceptualization of environmental justice that promotes an understanding of underlying power

structures of environmental inequities, rather than an exclusive focus on the identification of distribution of inequities themselves.

Procedural Injustice and Dereliction

Within an environmental justice framework, procedural injustice exists in the inability of certain groups to enact positive change (or prevent negative change) in their neighborhood environment.³ A very basic manifestation of this inability appears in the form of trash on streets and properties falling into disrepair in areas that have legal protection from such maladies. That is, most municipal codes require that property owners properly dispose of litter, and that minimum safety requirements are met in terms of the upkeep and safety of residential and commercial properties. Furthermore, trash collection and code enforcement are generally the responsibility of the city government. As such, procedural injustice is evident where residents are unable to improve their neighborhood environment because they lack the resources to effectively pressure the city government to equitably and adequately enforce codes and provide services. For example, in his work with a Puerto Rican activist group in New York City, Gandy (2007, 736) finds support for this claim:

One of the first activities of the newly formed Young Lords (a Puerto Rican activist group) was to find out what issues were of greatest concern to the Puerto Rican community. To the evident surprise of some Lords activists, the more immediate preoccupation turned out to be the filthy state of the streets in the barrio. Piles of garbage were being routinely ignored by the city's sanitation department, in stark contrast to the pristine sidewalks of affluent districts in downtown Manhattan. For the residents of the barrio, uncollected garbage had become a poignant symbol of the indignity of poverty, political invisibility and municipal neglect.

While in this case the Young Lords found that garbage was an issue of utmost importance to the barrio's residents despite other issues in the community, this is not always the case in other neighborhoods and cities, with housing and other basic needs often receiving greater attention from neighborhood activists (see McMinn, 1997). In such places, affordable housing or crime may consume the finite resources (e.g. time, money) of activist groups before they are able to effectively pressure local public officials on the issue of physical dereliction. Or, more fundamentally, procedural justice involves the ability of citizen groups to be engaged in broader institutional structures of economic and environmental decision making. In our research, we identified pockets of dereliction in Atlanta, and

³ More broadly, however, procedural injustice relates to the access that individuals or groups have to political power, regardless of outcome.

through qualitative assessment of landscapes and a subsequent survey and interviews, we illustrate distributive and procedural injustices across the city.

Assessing Dereliction in Atlanta

We employed a four-step process to explore dereliction in Atlanta. First, nine students drawn from a research-oriented class were introduced to various derelict landscapes through a field activity in which we explored five streets located in a census block group in the southeast section of the city. Through both focused discussion and the analysis of student-researchers' field questionnaires, we identified elements in the physical landscape that signal dereliction, including the percentage of abandoned homes, the percentage of trash cover on the sides of each road (roughly estimated), the number of tires, and the number of impromptu dumps (large quantities of illegally dumped garbage in a single place) on the street. In field surveys, students identified these elements of dereliction for each street they visited. These field questionnaires asked students to indicate how they would rate each street using a dereliction scale which was later generalized in terms of low, medium, and high values in order to better reveal distinct differences (see Table 1) (Hill and Polsky, 2007).

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Score	Roadside Trash	Abandoned Houses
10	Greater than 90%	Greater than 50%
9	74.99% to 90%	Many (30% to 50%)
8	60% to 74.99%	Some (<30%)
7	50% to 59.9%	Some (<20%)
6	40% to 49.9%	Few (<15 %)
5	30% to 39.9%	Few (<15 %)
4	20% to 29.9%	Very few (<10 %)
3	10% to 19.9%	Very few (<10 %)
2	5% to 9.9%	Very few (<10 %)
1	Less than 4.9%	None
0	None	None
Note: All	l numbers are malleable on th	e basis of qualitative observations.

After we established a basic dereliction rubric, the second step in this study involved the application of the dereliction scale to the streets of Atlanta. Student researchers fanned out across the city to photograph and assign dereliction ratings to five streets from within each of 45 census block groups⁵ (streets were selected to

⁴ In order to analyze this data, we performed a Spearman rank correlation (Spearman's rank correlation was used due to the non-normal nature of variables), comparing each variable to the ratings of each street given on the questionnaires that each student filled out alongside a series of discussions with participants. This analysis proved fruitful: in the initial study, roadside trash was shown to be the most important factor in the determination of score both in discussion and statistically, with a Spearman rank correlation of .851 (Sig. at .01). Similarly, the percentage of abandoned houses was noted as being extremely important for determination of score, again confirmed statistically and through discussion (Spearman rank correlation of .727, Sig. at .01).

⁵ Utilizing stratified random sampling, 45 census block groups were selected from within the city of Atlanta's boundaries, utilizing a nearest neighbor analysis to verify a dispersed point pattern (the final z score reported was 4.82, indicating a dispersed point pattern [sig level .01, see Figure 1]).

maximize spatial dispersion within each census block group in order to avoid issues of autocorrelation) (see Figure 1). In order to ensure rigor in gauging dereliction, groups of research participants triangulated the dereliction assessment of each street through group discussion and analysis of still photographs. The researchers then assigned a final dereliction score to each street. Next, we weighted each street's score by street length (streets have a larger or smaller impact based on their proportion to the total street length in a given census block group) to create a census block group-level dataset that enabled the creation of a relatively fine-grained picture of the spatial distribution of dereliction throughout the Atlanta area (see Figure 1).

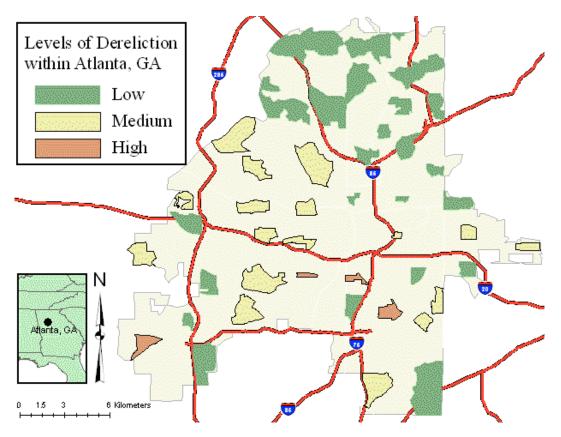


Figure 1: Spatial arrangement of census block groups used for the collection of data, classified by level of dereliction.

The third step in the study involved a survey (see Appendix A) with the aim of evaluating the capabilities of residents of different parts of the city to address dereliction, focusing primarily on their involvement in and connection to local neighborhood organizations and their familiarity with and access to local and citywide political figures. We distributed the survey to all households within a

stratified random sample of the assessed streets.⁶ The survey included questions about a variety of socio-economic factors⁷ as well as respondents' experiences with interacting with the state and other organizations, primarily at the city and more local levels (e.g., neighborhood organizations, homeowners' associations, church groups). Radio response questions (questions in which only one option can be selected) were used to determine important issues to the residents and how well these issues have been addressed by both local and city organizations.⁸ Further, research participants responded by means of checkboxes to indicate the most pressing neighborhood issues. In addition, we asked residents their degree of familiarity with city government, specifically the mayor, city council, and school board. Residents were also asked to indicate if they had served in an organization, and if so in what capacity (leadership or otherwise), and for how many hours per week. We then generalized the returned survey data to the street level, and tabulated it alongside previously-collected information on dereliction. Lastly, six student-researchers and the faculty member conducted interviews with residents of medium- and low-dereliction areas. The survey itself solicited invitations to research participants to be interviewed, and otherwise, student-researchers invited members of community-organizations (e.g., neighborhood associations and neighborhood planning units) in the study area to be interviewed. In total, eight community leaders agreed to be interviewed by the researchers.

Results and Discussion

One of the most evident features of this study is that Atlanta has a starkly uneven landscape of dereliction. This inequitable distribution provides a basis from which to examine the elements of that dereliction and how they reflect both distributional and procedural injustices. In our study, one of the most visible forms of dereliction was the status of the housing stock, especially the large number of houses subjected to such long-term abandonment that they have become dilapidated (see Figure 2). Additionally, the great quantities of trash that lined the sides of the roads and frequently constituted large (illegal) dumps revealed clear evidence of distributional environmental injustice, especially when compared to some of the pristine landscapes we observed in other areas of the city (see Figure 3). Further, we saw evidence of injustice (both distributional and procedural) stemming from the longevity of some of these illegal dumps: two separate locations saw dumps go uncollected for the entire duration of the study period, spanning spring 2007 to spring 2008.

⁶ Addresses for households along these streets were collected from both the Fulton County and Dekalb County tax assessor offices (the two counties into which the city's boundaries extend).

⁷ Socio-economic questions asked regarded sex, age, home-ownership status, access to the internet, income, ethnicity, education, household size, and voting activity.

⁸ Issues listed on the survey include Litter, Crime, Loitering, Schools, Tax Issues, Green Space/Preservation issues, Pothole/Road Conditions, Infill Development, and an open ended "Other" option.







High Dereliction



Medium Dereliction



Low Dereliction

Figure 2: A selection of housing imagery from various census block groups. The label below each image indicates the level of dereliction in the census block from which the house came.

The presence of illegal dumps paired with high numbers of abandoned houses and dilapidation reveals not only distributional injustice but raises questions about procedural injustice as well. Illegal dumps (and more frequently, large quantities of roadside trash) provide evidence of a denial of services to the residents by the city, through a lack of frequent garbage collection and/or a lack of code enforcement. This neglect by the city suggests that the procedural capabilities of the residents in these derelict areas are insufficient to ameliorate the situation. That is, resident groups are not able to place pressure on Atlanta's government to allocate the necessary capital to ensure these areas are serviced.



Figure 3: An illegal dump found in one of the census block groups with the highest classification of dereliction.

In addition to illegal dumps and roadside trash, housing abandonment (and dilapidation) in the city provides an additional indicator of inhibited procedural capability. First, and most evident, by abandoning an area, the actor, usually private, who once occupied that space, and who was a potential agent for change through either formal voting procedures or informal neighborhood activism, has moved elsewhere. Secondly, built structures that are falling into disrepair (and becoming environmental hazards in their own right) are indicative of a failure of the city to enforce building laws on the owners of those properties. This observation is further underscored by Bennett (2008a, D1), who reported in the Atlanta Journal-Constitution, the city's major newspaper, that the Bureau of Code Compliance in Atlanta's City Hall has "a backlog of thousands of uninvestigated cases" of abandoned and dilapidated homes. The number of cases has averaged around 12,000 per year for 2007 and 2008, up from approximately 7,000 per year in 2006 (Bennett, 2008b). This neglect reflects the inadequate institutional capacity of the city to enforce all codes, and suggests that some form of decision must be made insofar as what codes are enforced, where they are enforced and for whom they are enforced (such issues are not unique to physical waste, as the regulation of hazardous waste poses similar challenges [see Margai, 2001]). This augments the importance of procedural capability of residents, as areas with more procedural capability are more able to influence the distribution of limited resources, such as code-enforcement services, by the state (city government, in this case). The

Table 2: Descriptive demographics from each dereliction category.

Dereliction Level	<u>Low</u>	<u>Medium</u>	<u>High</u>
# Of Surveys Received	334	53	24
Ethnicity			
African American	18.9%	43.4%	70.8%
White	74.6%	52.8%	20.8%
Other	4.8%	3.8%	4.2%
No Response	1.8%	0.0%	4.2%
Age			
Under 18	22.6%	16.7%	11.6%
Between 18 and 65	61.9%	70.8%	72.1%
Over 65	15.5%	12.5%	16.3%
Average respondent age	49.2	49.3	52.0
Average household size	2.3	2.3	2.1
Sex			
Male	42.2%	52.8%	33.3%
Female	52.4%	43.4%	58.3%
Other	5.4%	3.8%	8.3%
Own/Rent			
Own	95.5%	92.5%	83.3%
Rent	2.4%	7.5%	8.3%
Other	2.1%	0.0%	8.3%
Average length lived at location	15.0	16.4	16.3
Education Level			
Some high school	0.6%	1.9%	0.0%
High school diploma	4.8%	5.7%	25.0%
Some college	9.0%	18.9%	20.8%
BA/BS	38.3%	37.7%	25.0%
MA / MS or higher	46.1%	34.0%	20.8%
Estimated Annual Household Income			
Less than 10,000	0.9%	3.8%	4.2%
10,000 to 24,999	1.2%	5.7%	25.0%
25,000 to 39,999	6.6%	11.3%	20.8%
40,000 to 59,999	8.4%	3.8%	20.8%
60,000 to 74,999	6.3%	15.1%	8.3%
75,000 to 99,999	11.7%	17.0%	0.0%
100,000 to 149,999	18.9%	13.2%	12.5%
150,000 or more	40.7%	28.3%	4.2%

inability of groups to place appropriate pressures on government to provide even the most basic of services or, alternatively, enforce the law indicates a lack of procedural capability of such groups to influence their environment, and thus reveals a case of environmental injustice.

Results from our mail survey further suggest that evidence of physical dereliction can be used as a gauge of procedural (in)capabilities. We sent surveys to residents on 116 streets in the 45 census block groups. In all, 3,597 surveys were mailed, 589 of which were returned unopened by the post office⁹ and 411 were returned completed, giving an overall 14% return rate for surveys received by city residents.¹⁰ Table 2 (above) summarizes the characteristics of the respondents.

Stratified by low, medium, and high dereliction areas, the demographic descriptors of the respondents reveal a great deal about the relationship between dereliction and the demographic characteristics of the respondents. In high dereliction areas, African Americans made up 71% of the respondents, compared to 19% in low dereliction areas. This relationship was inversed with those that identified as white, with 75% residing in low dereliction areas and 21% in high dereliction census block groups. Lower ownership rates (83%) were reported in high dereliction areas, as opposed to higher rates (96%) in low dereliction areas. Additionally, respondents in low-dereliction areas reported both higher levels of education and income than respondents from high-dereliction areas.

In the surveys, we asked respondents to identify the biggest problems in their neighborhoods (see Table 3). Overall results from the mail survey suggest that, following Greenberg and Schneider (1996), residents in high dereliction areas identify hazards such as litter and crime as important problems in their neighborhoods, and that many seek to change these deleterious conditions. The most frequently identified problem in high dereliction areas, identified by three-fourths of respondents, was crime. In comparison, this problem was cited by slightly less than half of respondents in low-dereliction areas. Litter was identified as a problem among 71% of respondents in high-dereliction areas, compared to 20% in low-dereliction areas. The presence of potholes was listed as a problem by 36% of respondents in low-dereliction areas, 43% in medium-dereliction areas, and

⁹ We attribute the high percentage of returned surveys to inadequacies of the various tax assessment databases in identifying both correct street numbers and current residency status. Of the returned surveys, 430 (73%) were returned due to addressing errors in the database (e.g., street numbers that do not exist) and 62 of them (11%) were returned with an indication that the unit in question was vacant. The remaining returns were primarily due to individuals moving to new locations.

¹⁰ The average return rates themselves provided an interesting insight into the relationship between procedural capability and dereliction, as a weak but significant (-.358, significant at the .01 level) negative correlation existed between return rates and dereliction scores, indicating that areas with lower return rates have higher levels of dereliction. Greenberg and Schneider (1996) highlight various aspects of such populations, such as primary household languages other than English, which may further explain not just low return rates, but also why these areas have more limited capabilities to leverage pressure on the state.

47% in high-dereliction areas. Thus, residents in high-dereliction areas recognize as a significant problem the abandonment of or failure to maintain the physical landscape.

Table 3: The biggest problems identified in neighborhoods, generalized by dereliction score.

Biggest Problems (Totals)	Low	<u>Medium</u>	<u>High</u>
Litter	18.6%	39.6%	66.7%
Crime	47.6%	43.4%	87.5%
Loitering	11.1%	15.1%	54.2%
Schools	21.9%	18.9%	41.7%
Tax Issues	56.0%	47.2%	29.2%
Green Space	20.7%	35.9%	16.7%
Potholes	34.1%	45.3%	41.7%
Infill Development	21.9%	15.1%	8.3%
Other	8.7%	9.4%	4.2%

The degree of citizen activism, as indicated by our respondents, was uneven across the study area. The percentage of respondents from high dereliction areas reported spending more time in local organizations and exhibited higher voting rates in city and local elections than respondents from low-dereliction areas (see Table 4). While our uneven response rate across dereliction categories certainly shapes this difference in reported activism, preliminary interviews with residents and community activists of some of the medium- and high-derelict areas reveal active (but declining) neighborhood associations. One interview participant whose property abutted the city's now-closed landfill claimed that she had long been part of the neighborhood organization, which in some cases worked successfully with the city to ameliorate odor and water-contamination issues associated with the nearby landfill. At the same time, she pointed out that the city did little to enforce property code violations, and that abandoned homes and uncollected trash were increasing problems in her southeast region of the city. She stated that the neighborhood organization had organized trash clean-up efforts but that many of the problems could be eliminated with consistent garbage-collection. For this resident, the risks associated with contaminated water and intense odor received the attention of the city government and its resources. Other indicators of dereliction, such as potholes in the roads and uncollected garbage, however, have largely gone ignored by the city's code-enforcement and waste management departments.¹¹

¹¹ This interview participant also reported on the social and economic changes occurring in her neighborhood. Neighbors on both sides of her house had tried to sell their homes in the early 2000s, at the height of Atlanta's real estate boom, and yet they could not sell their homes without substantial losses, as property values in that neighborhood declined "since the Olympics, when they tried to move all of the public housing and low-income people out of the city" (B.K.). This resident stated that her whole neighborhood had undergone a change and

Other interview participants also pointed out their struggles to get the city's attention.

Table 4: Voting patterns and organizational involvement, generalized by dereliction score.

Voting Information	Low	<u>Medium</u>	<u>High</u>
Registered voter %	95.8%	94.3%	95.8%
% Voted in city election past two years	80.8%	83.0%	87.5%
% Voted in county election past two years	79.0%	81.1%	87.5%
Organization Participation			
Average time spent in organizations*	2.2	2.2	2.5

^{*}Generalized by Street, Ordinal (1-4), 1 being the least time, 4 being the most time spent in community organizations.

One resident of Edgewood, on the city's east side, argued that the neighborhood association tried to put pressure on the city government but received little response: "...When I came into the neighborhood [seven years ago], even the physical structure of things like replacing water meters, getting stop signs: you cannot call the city to get basic services" (G.N.). This activist went on to say that "a lot of issues with sewer overflows and backups...[the] city council helps forward phone calls" (G.N.). He added that he did not think the wealthy neighborhood of Buckhead had the same problems: "I firmly believe that the people that pay more get a little more response" (G.N.).

Another community activist in the nearby neighborhood of Ormewood Park, an area containing a census block we rated as having a medium level of dereliction, pointed out her neighborhood's issues with code violations:

There has been a vacant home on my street for three years now... It is neglected, with trees growing out of the roof. [The city council representative] called/wrote [the code enforcement office] all the time. The house is a hazard...it is more than unsightly. If kids went in, they could get trapped or hurt. There are rat issues. It used to smell because of the rats. Finally the city bulldozed the lawn (S.U.).

This resident indicated that she is pleased with aspects of the city's response to neighborhood requests, but that the most effective response came from the city councilwoman's involvement in neighborhood issues. A community leader from the nearby neighborhood of Grant Park, a gentrifying neighborhood to the west of Ormewood Park, stated that most of the participation in the monthly neighborhood association meetings is from the middle-class white gentrifiers, not the long-time, African-American residents. This suggests that certain actors (white, middle-class)

in the neighborhood have a stronger voice in the kinds of demands made of the city government.

The (volunteer) zoning chair of a northwest neighborhood, who characterized her neighborhood as "a mainly poor, African-American community" pointed out that the cooperation from the city often only served the city's economic interests and not those of the neighborhood residents. She offered the example of a proposed bridge renovation by a large railroad company, which needed an expanded bridge to improve access to the city's largest rail yard:

The issue is that we wanted Norfolk Southern to address the sound and the vibrations and any other environmental issues such as smog. They would need to take care of any of these issues before they could have a plan for the new traffic. The other major issue is that we currently have large trucks driving to the rail yard on our residential streets, making noise and creating traffic. I proposed that they have their own internal route to get trucks into the rail yard and out of the rail yard and onto the major state roads and interstates. Instead of coming out onto our very narrow, easily damaged residential roads. And, so... we were defeated on all counts. They're not going to do anything except for replace that bridge, which will have no impact whatsoever on the neighborhood (C.S.).

This community leader is largely cynical about the ability of resident groups to influence policy and funding decisions that affect the physical qualities of her neighborhood.

Taken together, the survey and interviews with community leaders suggest that residents themselves are aware of—and unable to effect change in—a range of issues that result in stresses on the urban environment. Residents in mostly minority, low-income, medium- or high-dereliction areas, while active in a variety of civic groups, find themselves with inadequate response from the city in addressing environmental concerns, ranging from abandoned houses to trash collection. On the other hand, some neighborhoods, with active, mostly middle-class residents involved in civic associations, are able to navigate the required channels to get the city's attention. This unevenness in procedural capability is reflected in the degree of urban dereliction these neighborhoods experience.

Conclusions

The assessment of derelict landscapes within an environmental justice framework makes it possible to highlight instances of environmental injustice that have largely been invisible to the scholarly (and policy) community. Such neglected spaces provide compelling studies of environmental inequity, highlighting both a distributional unevenness of resources and a lack of procedural

power to enact change in local environments by the individuals and groups residing in them. However, the specific processes through which procedural capability operates must be more fully understood. While physical dereliction may serve as an indicator of the minimal capacity of groups of individuals to influence their surroundings, the particular ways in which these capabilities have been inhibited (through state intervention, lack of resources with which to mobilize, or other factors) is a key element in determining how procedural environmental injustices can be remedied. Future research, such as detailed ethnographies of neglected neighborhoods and careful analysis of decision-making processes that affect such neighborhoods, is warranted to expose the actors and institutions that create possibilities and barriers for environmentally just spaces. Additionally, more rigorous survey work (e.g., multi-lingual surveys, community focus groups) would be beneficial in providing a more representative response from residents. It is through this type of research that such forms of injustice can be both identified and addressed, bridging the gap between local ecologies and sociopolitical power.

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Appendix A: Survey Instrument

-1110	t street do you live on?				
How	long have you lived at this lo	cation	?		
OMMUNITY	rou □ Own □ Rent □ Ot	ther (e	explain:		
Sex:	☐ Male ☐ Female				
	12 - 12 - 12 - 12 - 12				
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	White		Asian	n	C 71 1
	Hispanic or Latino (of any rac Bi/Multi-racial			er Pac	ific Islander
	BI/Muin-raciai		Other		
Fetin	nated annual household incom	e	Less than \$10,000	п	\$10,000 to \$24,999
	nated annual nouschold moon.		\$25,000 to \$39,999		\$40,000 to \$59,999
. 7		_	*** *** ***		\$75,000 to \$99,999
			\$100,000 to 149,999		\$150,000 or more
High	nest level of education attained		Some high school		
TO:			High school diploma		
91			Some College		
			BA/BS		
			MA/MS or higher		
SURVE How What					
How	many people live in your hou			_	
How	many people in your house ar	re und	ler 18? betwee	n 18 a	nd 65? over 65? _
	t is your age?				
Wha					
	you a registered voter? 🗆 Yes	4	No		
Are:	The state of the s			37	
Are :	s, have you voted in a city elec	ction i	in the past two years?		
Are :	s, have you voted in a city elec e you voted in a local governm	ction i	in the past two years?		
Are y If ye Have	e you voted in a local governm	ction i	in the past two years?		
Are: If ye Have	e you voted in a local governm	ction i	in the past two years?	ears?	□ Yes □ No
Are : If ye Have How May	e you voted in a local government well do you know your or Ci	ction in ent el	in the past two years? □ lection in the past two ye uncil Scho	ears?	□ Yes □ No ard Member
Are If ye Have	e you voted in a local government well do you know your for Cino familiarity	ction in ment el	in the past two years? lection in the past two years? uncil School miliarity	ears?	□ Yes □ No oard Member miliarity
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