

From "five angry women" to "kick ass community": Gentrification and environmental activism in Brooklyn and beyond

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SCHOLARONE™ Manuscripts From "five angry women" to "kick ass community": Gentrification and environmental activism in Brooklyn and beyond

Abstract: In this article, we argue for new conceptual framework to evaluate the range of environmental activism in already-gentrifying neighborhoods, and to recognize the agency and resilience of long-term residents. Our category of gentrifer-enhanced environmental activism is meant to account for attempts to forge coalitions (however uneasy they may turn out to be) between long-term residents and gentrifiers. This includes attempts by long-term residents to mitigate environmental gentrification by "schooling" gentrifiers in communities' longstanding concerns and needs, framing these concerns as common cause rather than allowing for the takeover of local environmental politics often associated with environmental gentrification. We use the example of the fight to clean up Newtown Creek in Greenpoint, Brooklyn as a case study in how environmental veterans made strategic alliances with gentrifiers who brought new resources to the area in order to achieve the political pressure for change, and promote more just sustainabilities.

On February 8, 2007, then-New York State Attorney General Andrew Cuomo (now governor) announced "a landmark legal action against the ExxonMobil Corporation ... to force the cleanup of a 17-million-gallon oil spill in Greenpoint [Brooklyn], and to restore Newtown Creek, the contaminated waterway separating Queens from Brooklyn" (New York State Attorney General, 2007). This announcement marked the beginning of a new era of state intervention surrounding this toxic legacy, following decades of lax enforcement and inattention to community activists. While long-time resident activists have been campaigning for cleanup since the 1970s, national media attention and the State's stepped-up enforcement occurred only as Greenpoint and surrounding neighborhoods were experiencing rapid gentrification. In the words of one longtime resident activist quoted at the time, "I've lived in Greenpoint with Exxon's oil since the early 1970s. ... And this is the first time that someone is actually going to clean up Newtown Creek for the community" (New York State Attorney General, 2007).

This coincidence of environmental enforcement and gentrification in Greenpoint corresponds to an environmental turn in the urban geography and gentrification literatures, evidenced by the coining of terms like "environmental gentrification" (Banzhaf and Walsh, 2006) and "ecological gentrification" (Dooling, 2009). This turn reflects broader concerns about the neoliberalization of environmental governance, and many examples of sustainability initiatives that reflect developer and gentrifier interests and ignore environmental justice concerns, resulting in residential and recreational displacement of marginalized communities (e.g. Checker, 2011; Dooling, 2009; Quastel, 2009). On the surface, the Attorney General's announcement may seem to be just another example of environmental gentrification, yet our research identified a more complex intersection of gentrification and environmental activism in Greenpoint. We argue that there is a need for a new typology of gentrification and environmental change that includes the possibility for gentrifier-enhanced activism that mobilizes gentrifiers to invigorate pre-existing, community-led environmental activism.

While this case identifies benefits to the pragmatic cultivation of elite alliances, including gentrifiers, it should not be read as another argument in favor of social mixing policies or "positive gentrification" (see Slater's 2006 critique of this line of research). We would argue that there is no such thing, since displacement is inherent to the process (Marcuse, 1999). Indeed, one of the reasons this case can be considered a success for long-time residents is that this part of Greenpoint has been able to maintain much of its industrial, working-class, immigrant identity while moving closer to cleanup. Important concerns about displacement remain, but this case does reflect a need for a new conceptual framework to evaluate the range of environmental activism in already-

gentrifying neighborhoods, one that recognizes the agency and resilience of long-term residents even in the face of gentrification.

In order to gain a better understanding of who was involved in the cleanup efforts, and what was turning the public and state's attention to Greenpoint after so many decades, we attended community meetings and conducted 24 semi-structured interviews with long-term and more recent community residents and activists, public officials, industrial advocates, and urban planners from 2008 to 2012. Each interviewee was identified either through background research on press coverage and public documents about the case, or through contacts made at community events. We asked each interviewee about their history of involvement with the issue, their perceptions about how cleanup advocacy and the reception of government officials and Exxon Mobil representatives had changed over time, and their vision for the future of Newtown Creek and the surrounding neighborhood.¹

The paper proceeds as follows. First, we lay out a typology of intersections between environmental cleanup and gentrification. Then, we describe the history of contamination, gentrification, and cleanup advocacy in Greenpoint and Newtown Creek. Based on our interviews and insights from social movement theory, we identify the issue framings, resources, and political opportunity structures that account for activists' recent success in securing cleanup agreements and compensation from ExxonMobil, and reviving state oversight of the process. Finally, we conclude with the practical and conceptual lessons learned from this case.

Complicating environmental gentrification

This research lies at the intersection of work on urban political ecology (UPE). gentrification, and social movements for sustainability. UPE offers a framework for the critical analysis of environmental programs and policies that, while often promoted as serving a universal good, come with uneven costs and benefits (Keil 2003 and 2005; Heynen et al. 2006; Quastel 2009). UPE addresses "complex processes of urban political ecological struggles" and highlights how they "privilege some forms of class- and racedefined settlement over others" (Keil 2005, p. 642). One important line of UPE research consists of problematizing over-simplified narratives of urban sustainability such as the glorifying of "Green Manhattan" (Keil, 2005, p. 642). For instance, work on the "greening [of] the (entrepreneurial) city" (Jonas and While 2007, p. 152) and concepts such as the "urban sustainability fix" frame sustainability and environmental politics within broader processes of neoliberalization and capital accumulation (Checker 2011; Dale and Newman 2009, Dooling 2009; Raco 2005; While, et al 2004). They reveal how environmental imaginations are constrained by attempts to generate "economicecological win-win situations" (Keil and Boudreau, 2006), where the wins are classspecific, meant to tie environmental cleanup and amenities to increased competitiveness in attracting the well-educated and mobile "creative class".

Following from the broader literature on gentrification, in which a debate between production and more demand-oriented theories of gentrification has raged for decades (e.g. Smith, 1996 versus Ley, 1996; see Slater, 2004 for a review), the environmental gentrification literature also includes supply side (market-led) and demand side (gentrifier-led) versions. As detailed in Table 1, supply side environmental gentrification focuses on the creation of "green" spaces to attract the creative class referenced above,

and is derived from "Marxist-inspired accounts" focused on "landlords and capital" (Quastel, 2009, 699). Developer or government-driven initiatives may include LEED-certified condominiums and community gardens (Quastel, 2009; Checker, 2011), with green space and environmental cleanup serving to close the rent gap (the difference between actual and potential ground rent). In terms of outcomes, there are many examples of both social exclusion from these new spaces, as well as concerns about subpar cleanup standards resulting from the privileging of developers' interests. On the demand side, "consumption accounts" of gentrification look "at the lifestyles and values of gentrifiers" (Quastel 2009, p. 699), and some document post-gentrification shifts in environmental values and increases in the political salience of neighborhood demands for improved amenities, cleanup, and other environmental "goods" (e.g. Checker, 2011).

[Insert Table 1 here]

In both the supply and demand side cases, the outcomes are environmental improvements for the benefit of gentrifiers, with direct negative impacts on pre-existing, often already-marginalized communities (see Pearsall, 2009, 2010). There has been some discussion within the UPE and environmental gentrification literatures of community activism against these processes. In general, these counter-movements consist of local environmental justice organizations providing a voice for "just sustainability" to counter developer and gentrifier perspectives (e.g. Checker, 2011 re: NYC, and Keil and Boudreau, 2006 re: Toronto). In some cases their efforts are characterized as a series of on-going defensive moves and compromises necessarily limited by the technocratic decision-making framework guiding the planning process in the first place (Checker, 2011, p. 222). In other cases, the assessment is more optimistic. For instance, in their

comparative study of Los Angeles and Toronto, Desfor and Keil (2004, p. 214) argue that civil society groups "have been found to have a potential to shift debates on ecological modernization to the terrain of what we have called social ecology and urban ecology" (Desfor and Keil, 2004, p. 214). Yet, in both cases the successes were won by countering gentrifiers' voices rather than cultivating cross-class alliances, which we argue is central to this Greenpoint case.

In light of this, we propose a third category to the typology of intersections between gentrification and environmental change; gentrifier-enhanced environmental activism (see Table 1). This category combines the potential for alternative outcomes discussed above with the direct but not exclusive involvement of gentrifiers in the process. In contrast to the two categories of environmental gentrification, gentrifierenhanced activism consists of mobilizing gentrifiers for the benefit of pre-existing community priorities and attempts are made to mitigate the potential acceleration and expansion of gentrification processes. We admit that this is dangerous territory, and, as noted above, we want to be clear about the distinctions between this type of activism and the gentrification literature on social mixing and "positive gentrification". Whereas that literature makes a normative argument in favor of policies that encourage gentrification as it is purported to increase social capital and political action for improved neighborhood conditions (see Lees 2008 for a critical discussion), our aim is to provide a framework for capturing strategic alliances cultivated by environmental justice movements within already-gentrifying neighborhoods. We make the caveat, however, that there is significant slipperiness between the categories of demand side environmental gentrification and gentrifier-enhanced activism. While our evidence supports the

continued centrality of long-time resident activists and the active cultivation and implementation of an alternative sustainability ethic in Greenpoint, the future could see gentrifier voices taking over and/or priorities shifting (see Authors, forthcoming). Our purpose in proposing this alternative category is to remove the aura of inevitability pervasive in much of the literature on sustainability and urban redevelopment, and to highlight the power, sophistication, and resilience of long-term neighborhood activists.

While the environmental gentrification literature provides compelling explanations for the privileging of gentrifiers' class interests and environmental values in contemporary urban sustainability policies, it does not provide the analytical tools for explaining successful gentrifier-enhanced environmental activism. We propose incorporating two concepts from the social mobilization and social movement literature: "bracing social capital" and "ecologies of agents". Rydin and Holman (2011) have added the concept of "bracing social capital" to the traditional social capital typology of "bridging" and "bonding" networks – i.e. extensive networks that span different social groups and intensive networks that forge stronger within-group relationships. They define bracing social capital as "a kind of social capital that is primarily concerned to strengthen links across and between scales and sectors but only operates within a limited set of actors" (Rydin and Holman, 2011, p. 123). They use the metaphor of "social scaffolding" and specify that this type of social capital is often necessary for addressing a locationspecific policy problem through the strategic development of common norms (Rydin and Holman, 2011, p. 123).

Rydin and Holman's (2011) discussion of bracing social capital's ability to overcome stakeholders' (including government, civil society and economic actors') lack

of individual capacities mirrors Evans' (2001, p. 222) discussion of the "ecologies of agents" needed to develop and implement urban livability (read: sustainability) policies. In his comparative analysis of urban sustainability movements, Evans (2001, p. 222) argues "that any analysis of livability should begin by looking at communities, NGOs, political parties, and 'the variegated collection of organizations that constitute the state'", and "that all of these [are] likely to be imperfect agents of livability and therefore it [is] necessary to think ... in terms of 'ecologies of agents' rather than single actors". In the case of Greenpoint, long-time resident activists cultivated new allies (including outside NGOs and gentrifiers) in order to overcome long-term problems mobilizing both fellow residents and unresponsive state agencies. Overall, our category of gentrifer-enhanced environmental activism is meant to account for attempts to forge coalitions (however uneasy they turn out to be), and can include attempts to mitigate environmental gentrification by "schooling" gentrifiers in communities' longstanding concerns and needs, framing them as common cause rather than allowing the takeover of local environmental politics associated with demand side environmental gentrification.

Greenpoint and Newtown Creek

Greenpoint is defined by its industrial history. Bordered by Newtown Creek to the north and east, and the East River to the west, it was easily accessible from Manhattan by boat, and by the 1840s had become a center for shipbuilding. In 1921, the Merchant's Association of New York reported that Newtown Creek was the largest manufacturing center in the world and listed the variety of industrial activities that went on there:

sugar refineries, fiber mills, mineral and vegetable oil refineries, copper smelting works, chemical plants, and lumber, coal, and brick yards. There are also located here steel fabricators, airplane manufacturers, foundries, forge and machine shops, stamping and sheet metal working concerns, tanneries, button and waist manufacturers, paint and varnish manufacturers, and many others. (Merchant's Association of New York, 1921, p. 13).

Of the residential population that worked these jobs:

Practically the entire population of these sections may be described as of the "working class". They are not, however, the poor and the indigent, but are for the most part thrifty laboring people. They live in clean, light, two and three story brick or wooden houses and are not crowded together in dark, unhealthy tenements (Merchant's Association of New York, 1921, p. 17).

70% were reported to be foreign-born or of foreign parentage, with the Irish predominating in Greenpoint (Merchant's Association of New York, 1921, p. 18). Greenpoint has continued to serve as a port of entry for the white working class. While the Irish were the largest group through the 1920s, after World War II, Greenpoint became a Polish enclave (Susser, 1982), with an additional wave of immigrants who fled martial law in Poland in the 1980s (de Sena, 2009).

While industrial activity fueled the economic growth of Greenpoint, it left a toxic legacy for neighborhood residents, and others. The *New York Times* described the Creek in 1881 as "the worst smelling district in the world." This was the result not just of the "fat boiling and oil distilling" that went on there (*New York Times*, 1881), but also of the fact that New York City began dumping raw sewage directly into the water in 1856 (New York State Department of Health, 2012). This was the beginning of the use of the creek as what Newtown Creek Alliance historian Mitch Waxman calls a 'municipal sacrifice zone.' When much of the area's industry moved out in the 1950s, toxic uses moved in. The creek is now lined with 19 waster-transfer stations and 23 combined sewer outflows

that disgorge into the water (Stern, 2012). Greenpoint is also home to a wastewater treatment plant and a Department of Environmental Protection sludge tank.

But the environmental disaster for which Greenpoint and Newtown Creek are now most famous is an oil plume that dates back at least to 1950, when a sewer explosion revealed huge quantities of oil poisoning the water and leaching into the soil (Stern, 2012), the legacy of the 50 oil refineries that had lined the creek. Primary responsibility was assigned to Mobil, the successor to Standard Oil, since merged into Exxon Mobil. The full extent of the spill was not realized until 1978, when a Coast Guard patrol saw an oil slick on the creek. An estimated 17 million gallons of oil spilled into the creek and surrounding neighborhood over the previous century (see Figure 1).

[Insert Figure 1 here]

Despite its toxic legacy, Greenpoint has been a target for gentrification since the early 1980s, when the Greenpoint Historic District was declared. As in other industrial neighborhoods (Zukin, 1989), the supply of loft spaces in Greenpoint has also provided fuel for gentrification. Though Greenpoint is relatively isolated compared with other gentrifying neighborhoods in Brooklyn, it has spectacular water views, access to Manhattan, some historic architecture, is comparatively affordable, and is bordered on the south by Williamsburg, the epicenter of gentrification in Brooklyn.

This geographic desirability is reflected in the sales price for homes in Greenpoint. The realty site Trulia reports the median sales price for homes in Greenpoint form March to May 2012 was \$585,000. The average sale price of \$529 per square foot is 60.79% higher than the average for homes in Brooklyn (Trulia.com, 2012). A two-bedroom apartment will rent for well over \$2000 (Trulia.com). As a result, 2010 census

data show that 37.6% of renters in Greenpoint are paying more than 35% of household income on rent. The data reflect significant changes in key indicators of gentrification like educational attainment. According to 2000 census data, 22.9% of Greenpoint residents had a college degree. By 2010, this was up to 39.2%. Similar changes are reflected in employment data. While in 2000 only 9.84% worked in management, business, and financial operations, in 2010, 35.5% of the population was involved in the management sector. Income has also climbed, from \$36,316 in 2000 to \$51,478 in 2010 (factfinder2.census.gov).

Yet, gentrification has not meant the complete effacement of the area's industrial legacy or working class population. Indeed, the Newtown Creek waterfront retains protected industrial zoning (as a designated Significant Maritime Industrial Area and through the North Brooklyn Industrial Business Zone), and although the importance of manufacturing has declined somewhat over this period, it is still a significant sector of the economy in Greenpoint. Census data for 2010 show 10.3% of the population involved in production, transportation, and material moving operations (down from 15.2% in 2000). So while industry is not the economic driver it was, Greenpoint's industrial identity is still a significant part of the neighborhood, particularly in the northern reaches nearest to Newtown Creek where the industrial zoning provides a buffer of sorts against the waterfront condo-driven gentrification that has consumed neighboring Williamsburg (Curran 2004 and 2007).

Yet, some argue this industrial identity may be part of the draw of the place, a signifier of distinction. Journalist Andrew Blackwell suggests that areas like Newtown Creek hold aesthetic appeal, arguing, 'A place like Newtown Creek isn't a product. It's

supposedly a place that no one wants to go That makes it more wild, makes people feel like they're discovering something about the world' (quoted in Stern, 2012). The gentrification of Greenpoint is clearly still in progress, then, although it has proceeded unevenly, and it remains to be seen if the cleanup of the Creek will exacerbate its progression or not.

From 'five angry women' to 'kick ass neighborhood': environmental activism in Greenpoint

Concerns about the oil plume have been percolating throughout Greenpoint since at least 1978 when the Coast Guard discovered the oil (see Table 2). As Prudhomme (2011) explains,

Sister Francis [a local nun] began to ask people in the neighborhood if they knew anything about the mysterious oil. She was surprised to learn that almost every resident had a story about the black mayonnaise. "Toxic fumes stained their clothes drying on the line outside," she recalled. "It gave people headaches. It made children agitated. The people hated it, but they learned to live with it. They didn't want to cause any trouble."

Despite the general lack of political activism of the community, a small, committed group of activists has been working on the issue with the help of some local politicians. These same activists have remained central to the fight for cleanup. Rami Metal, Greenpoint and Williamsburg liaison for then-City Council member David Yassky, explained,

There are some neighborhoods that have been particularly dumped upon, environmentally, by the city, and Greenpoint is one of them. ... It's basically up to the neighborhoods to fight for themselves and that's what we see a lot in Greenpoint and Williamsburg. ... Laura Hoffman, I don't know what group she is, I think she's all the groups. It's her job. It's her life. Christine Holowacz, she's fantastic, you know. That woman is pretty amazing. The neighborhood is pretty well taken care of in terms of the

people on the ground there, and they are very lucky to have them (interview, June 2009).

Basil Seggos, Riverkeeper's chief investigator at the time of the rediscovery of the spill in 2002, referred to this activist cohort as the "five angry women". He explains,

[I]t's literally just one, two, three, four, five angry women, fighting all these things like incinerators and sewage plants and having to get these things done ...these things weren't necessarily making local or national news, but here you have a little band of individuals who knew how to get results ...We tapped into an aggressive network of activists ... These are environmental veterans (interview, June 2009).

Even with this cohort of environmental veterans, the oil cleanup had been languishing for decades, despite a 1990 consent decree between Exxon Mobil and New York State, with neither the company nor the New York State Department of Environmental Conservation (DEC) giving any indication of having their feet held to the fire (Feuer, 2007). The 2007 lawsuit launched by the Attorney General was preceded by a 2004 lawsuit by Riverkeeper, as well as a series of resident lawsuits against Exxon Mobil seeking monetary compensation and health monitoring. The Creek was declared a federal Superfund site in 2010, and 2010 also saw a settlement between New York State, Riverkeeper, and Exxon Mobil in which Exxon Mobil promised a comprehensive cleanup, \$25 million for penalties and local environmental improvements, and \$19.5 million for environmental projects to benefit the Greenpoint community (New York State Attorney General, 2010; see Table 2). The question is, why now?

[Insert Table 2 here]

One of the "five angry women", Christine Holowacz, argues that

up until 2000, it was a community of a lot of immigrants and people who were blue collar workers and even low income, and so it was easy for the agencies to throw things at them... There's no one to really fight for them. They don't vote ... People were working really hard, you know, to buy

their home and to stay in their home without really realizing what was happening to them ...I really feel that many things are probably happening because of gentrification ... I think that if we were all still the old timers, I don't think we would have gotten the [Attorney General's] lawsuit. ... I mean, there was dumping since 1950-something, how all of a sudden we got united, we have all of these groups coming in, and why? Because there were more people coming in ... different people, different factions. More votes coming in, more money. You will see when you look at the next census, this is going to be a different neighborhood. And therefore, people demand different things (interview, December 2008).

A lawyer for one of the citizen suits reiterates that

with the gentrification of Greenpoint you had more of a vocal population, ... a better educated population, people who said I don't want this in my backyard, I don't want to live on it, and that's what happened (interview, December 2008).

In other words, the cleanup efforts are getting attention not because the city or a group of developers took on the task as a way to bring newcomers to the area (i.e. supply side environmental gentrification), but because newcomers already in the area discovered, after the fact, that they had moved to a contaminated site. And unlike their old timer counterparts, they question the government (and large, public corporations like Exxon Mobil). Where there was once a handful of activists, there now may be hundreds (interview with State Assemblyman Joe Lentol, July 2009). In the words of longtime resident activist Laura Hoffman: "It's really becoming like a kick-ass community; we've been winning a lot of battles" (interview, December 2008). Yet, as we explained above, this is not a clearcut case of demand side environmental gentrification either. Indeed, as we explain below, most incomers to the area had to be "schooled" about the oil spill issue even if they had been active in other battles for green space and neighborhood amentities.

Framing, resources, and political opportunities

In the following sections we use insights from social movement theory to detail how this cross-class coalition came together and gained the political traction missing in previous decades of activism on this issue. Social movement theory has coalesced around three key concepts, namely, issue framings, resource mobilization, and political opportunities (e.g. Jenkins, 1983; McAdam et al., 1996; Martin, 2003). Using these concepts to analyze our interview material, we identified several characteristics of the recent cleanup activism that we believe were critical to its success (see Table 3 below), and that facilitated the development of the "bracing social capital" and diverse "ecology of agents" discussed above.

[Insert Table 3 here]

Framing

Framing devices serve to define problems, assign blame, and promote specific solutions (Benford and Snow, 2000). Recent work by geographers has emphasized the potential of place-framing as catalyst for, and shaper of, social movements. Martin (2003, p. 733), for example, argues that place-frames help define "a collective identity in terms of the common place that people – mostly neighborhood residents – share", and "the scope and scale of the shared neighborhood of collective concern". In many ways, the new gentrifiers are accidental environmental activists because many moved to the area not knowing its full industrial history and toxic legacies. Thus, they have relied on the institutional knowledge of longtime resident activists. These activists recognize that part of their job now is to educate newcomers. So, for Laura Hoffman,

I think that the gentrification turns out to be a good thing in terms of new stuff, getting things like parks, the decorative part of the picture, but the problem is in terms of the environmental things, they're coming into the neighborhood not knowing a lot of stuff, and while it's being prettied up,

many of the same environmental offenders are still here and unless there's different groups that are able to get across to newcomers what is really there, they don't know (interview, December 2008).

One of the interesting phenomena in this case is that the newcomers who joined the movement were not necessarily living on top of the plume or directly adjacent to Newtown Creek. Rather, the boundaries of the potential contamination, and hence the potential risks, are seen as fuzzy and unknowable. Since the oil is largely underground and migration of the contamination has occurred over time, it is easy for any boundary claims to be called into question. Two of the lawyers representing citizens in a civil suit against ExxonMobil argued that they found evidence in the millions of pages of documents from Exxon Mobil that the contamination had not been fully mapped (interview, December 2008), and Riverkeeper conducted some of their own soil tests that countered claims from Exxon Mobil and the State (interview, June 2009). Finally, a 2007 report from the Environmental Protection Agency (EPA) explained that the oil continues to migrate in some directions underground and to seep into Newtown Creek, and that "it's unclear whether the water supply has been affected by the spill"; therefore, "a reevaluation is warranted" (Gothamist, 2007).

By throwing the boundaries of the contamination into question, the campaign broadened their mobilization area, drawing specifically on newcomers from other parts of Greenpoint and neighboring Williamsburg. The potential health risks were thought to have particularly engaged the 'stroller set' looking to leave their Williamsburg lofts and settle in the more family-oriented Greenpoint but unsure about the health risks that might pose, as well as those who bought into the neighborhood at premium prices and felt duped by not knowing about the contamination. There is also a significant environmental

justice element to the movement that can be traced to the educational and professional backgrounds of several of the new activists most directly involved. Many come from professional backgrounds in public health, local government (at least 3 cleanup advocates we interviewed worked for ex-City Councilman David Yassky), and non-profit organizations. According to a lawyer involved in one of the civil suits, some of the younger and more educated people involved in the case (those who would likely be termed gentrifiers) are most concerned with the social justice aspects of the issue. He explains that some of them definitely became plaintiffs without necessarily expecting remuneration for their property value loss but in order to add to the pressure on Exxon to be more responsible (interview, December 2008).²

Resources

In terms of the resources deployed by social movements, it is helpful to distinguish "tangible assets such as money, facilities, and means of communication from the intangible or 'human' assets that form the central basis for movements. Intangible assets include ... specialized resources such as organizing and legal skills" (Jenkins, 1983, 533). The professional backgrounds of the newcomers to Greenpoint provided important new intangible assets. Evan Thies, environmental chair of Community Board 1, commented,

North Brooklyn has a lot of freelancers and it has a lot of people who are artistically inclined, or professionally artistic, and they can contribute all sorts of things, whether it's like, you know, a fundraising concert or a graphic designer who does a website and our flyers, these are very valuable tools. I do a new media kind of thing and that's how I try to help out. It's just by teaching people how to talk to reporters, or how to distill whatever argument they're making to something that's easily communicated. So, I think in that way, we're becoming more savvy and

you're seeing the neighborhood get a lot more credit than it had (phone interview, December 2009).

One of Riverkeeper's most successful media outreach strategies was to take people out onto Newtown Creek in their patrol boat. In an interview on National Public Radio (NPR), Basil Seggos of Riverkeeper argued, "Once we show people the problem ... we find that there's a great deal of traction. And that's - I don't care if it's a local activist or a federal politician, it's the same reaction" (http://www.npr.org/templates/story/story.php?storyId=87426288). Other innovative awareness-raising strategies include HabitatMap (habitatmap.org), an "online mapping and social networking platform" that includes maps of DEC remediation sites (including the Greenpoint oil spill) and, in partnership with the Creek Speak Health and Harm Narratives Project (see Weiss and Heimbinder, 2011), documents residents' experiences of contamination and health problems, complete with an interactive map and audio recordings.

Together these and other projects helped to publicize the contamination and highlight alternative narratives about the neighborhood. And the contrast between the gentrification and contamination narratives seems to have provided a hook for media coverage of the issue. Phil DePaolo recalls that before gentrification, "we couldn't get an editor to touch [the issue] with a twenty foot pole ...Now it's a money neighborhood, there has been a lot of press about the history of the environmental issues in Greenpoint" (interview, December 2008). According to Seggos,

The fact that it happened in an urban area, industrialized area, working class, dirty, 'dirty river' already anyway, the fact that the river was kind of walled off from the community so that even now with all the interest in it, it's hard to get down to it, all these things contributed to this sort of

apathy. ... People just saw a hundred years of industrialization on the Creek and figured that was the status quo (interview, June 2009).

In other words, it was only after gentrification started in surrounding areas that the contamination started to seem out of place.

In addition to scientific expertise and media relations, Riverkeeper, in conjunction with their collaborators from Pace University's law school, brought critical legal skills to the movement, enabling the cleanup advocacy in a new venue: the courts. Moreover, they consciously transferred some of these skills to the community and the long-time resident activists to facilitate future organizing on this issue and others. As Seggos explains,

I think there's no question that activism has improved tenfold ... They know what a civil suit is now, they know what these laws are, they know what a watchdog means, they know they have a phone number. They can call Riverkeeper and get help with certain things. The [Newtown Creek] Alliance is going after its nonprofit status, you know, it'll be around for a long time. People that are in the community are staffing it, staffing the Alliance and they're the ones that are kind of driving this forward (interview, June 2009).

While the resources brought to the fight by outside NGOs and gentrifiers were crucial, so were the assets of long-term activists. Foremost among these is a moral authority that the gentrifiers lack, as expressed by two representatives of the Borough President's office:

R1: if their last name ends with a cisw ..., the fewer vowels the better.³ R2: Of course this is a sweeping generalization and we help everyone, but you know there are some old-time folks who have done a yeoman's job. ... R1: ... they do their homework, they do the research on the ground. We are very lucky that there are people like this in our city ... who are willing to take on and fight back and say that this is our neighborhood get us to understand that we work for them (interview, December 2008).

This moral authority, built on decades of activism around other local environmental concerns (see Gandy 2002), lent the legitimacy necessary for the movement to succeed in both popular and political circles.

Political Opportunity Structures

Some of our interviewees argued that the environmental activism in Greenpoint was succeeding now because environmentalism in general was an idea whose time had come. Yet, action on this specific issue required specific changes in the political climate. As Miller (2000, p. 145) explains, "[s]ocial movements ... operate within a variety of political structures, which vary from place to place and by geographic scale. Moreover, these structures are dynamic; the opportunities they afford shift geographically and temporally as power relations within local states and the central state change". The efforts of long-term activists and their local representatives fell on deaf ears until new administrations were in place in both Albany and Washington. Our interviewees noted a significant shift in their access to bureaucrats at the state and federal levels following the shift from the Pataki to Spitzer administrations at the state level (2007) and from the Bush to Obama administrations at the federal level (2009).

Representatives from the Brooklyn borough President's office described a shift in the State's Department of Environmental Conservation responsiveness with the change in administrations:

under the Pataki era we basically had to ... file freedom of information act [requests] for the most mundane information. ... [A]t least now I will get phone calls, there is an attempt at outreach. ... [W]ith that the ice age is slowly melting (interview, December 2008).

The Attorney General's championing of the issue and lawsuit provides another example of a critical elite ally. A 2007 article about then-Attorney General Cuomo's efforts "to reestablish himself" makes note of his aggressive pursuit of several high-profile cases, including the lawsuit against Exxon Mobil over the Greenpoint oil spill (Cooper, 2007). This highlights the synergies between increased media attention generated by gentrification and gentrifier's media savvy, and the political opportunities created by changes in political administrations. Finally, the Superfund designation was only considered a possibility once the Obama administration took office, despite long-term lobbying by local representatives. Indeed, during our first round of interviews (just after the 2008 election), most interviewees were still skeptical about the likelihood of a Superfund designation.

Overall, the shifts in political opportunities at the state and federal levels enabled the movement to "scale-up" their grievances. While other successful fights against incinerators and waste-treatment facilities could be addressed at the municipal level (see Gandy, 2002), this case required a scaling up because it turned on state and federal enforcement. As Herod and Wright (2002, p. 217) note, "political success or failure frequently turns upon the geographical scale at which actors can organize themselves". They caution, however, that scaling-up is no guarantee of success. In this case, the movement's success drew from the moral authority and institutional knowledge of long-time resident activists as well as elite allies within and outside Greenpoint. Moreover, Basil Seggos argues that the institution of a well-resourced, enduring community watchdog is essential to making sure that the settlement is actually followed through on:

this time people are watching and making sure that you have a polluter that's going to follow through on its obligations, ...which is a big change.

So whatever the federal government, state government, local government, whatever they do, whatever Riverkeeper does, I think you've got a community now that's going to drive this thing forward and ultimately that's, I think, what solves the problem (interview, June 2009).

Conclusions

As we've discussed above, this is not a story of "positive gentrification", but of strategic alliances to challenge further gentrification and to secure the environmental amenities and benefits that have increasingly been tied to high-income redevelopment in New York City and elsewhere. In this case study, a committed group of long-term residents and gentrifiers, along with Riverkeeper and elite allies at various government agencies and scales, compensated for each other's imperfections and created a successful "ecology of agents" (Evans 2001). While cleanup is nowhere near complete, there is evidence that a common set of norms and values that supports the maintenance of a working waterfront -- albeit a cleaner one – is being created throughout the neighborhood (see Authors, forthcoming).

This case study serves as an alternative narrative to the assumed inevitable pariring of environmental cleanup and accelerated gentrification in urban areas. Even when gentrification is under way, it is a process that is continually contested and remade. Environmental activists in Greenpoint saw the opportunity that the new population of gentrifiers provided to reframe the issue of cleanup, cultivated the resources gentrifiers could provide, and recognized the impact that gentrifiers could have on the political opportunity to achieve change. The formation of these strategic alliances can serve as a lesson to other urban neighborhoods looking to marshall resources and political capital to effect environmental change. Certain specifics of this case -- like protective industrial

zoning and well-timed changes in political administrations -- may not be easily replicated, but the lesson to be taken from Greenpoint is that long-term activists who gain legitimacy and expertise in place can "school" incoming residents so that they form a collective, more socially just view of what environmentalism and sustainability mean rather than being overtaken by new voices and priorities. While it is necessary to recognize and highlight the way in which environmental improvements have been used as the tip of the sword of gentrification, it is also important to highlight the agency of long-term activists fighting this process in ways that are evolving, creative, and effective.

¹ Citing the on-going settlement talks (the majority of our interviews were conducted before the settlement was announced), we were unable to secure interviews with representatives from Exxon Mobil, the State Attorney General's Office, or the DEC. Informants are cited by name only if permission was granted.

No direct quotes available because interview was not recorded; attributions based on extensive interview notes.

³ This is a reference to the dominant Polish immigrant population.

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Captions for Figures and Tables:

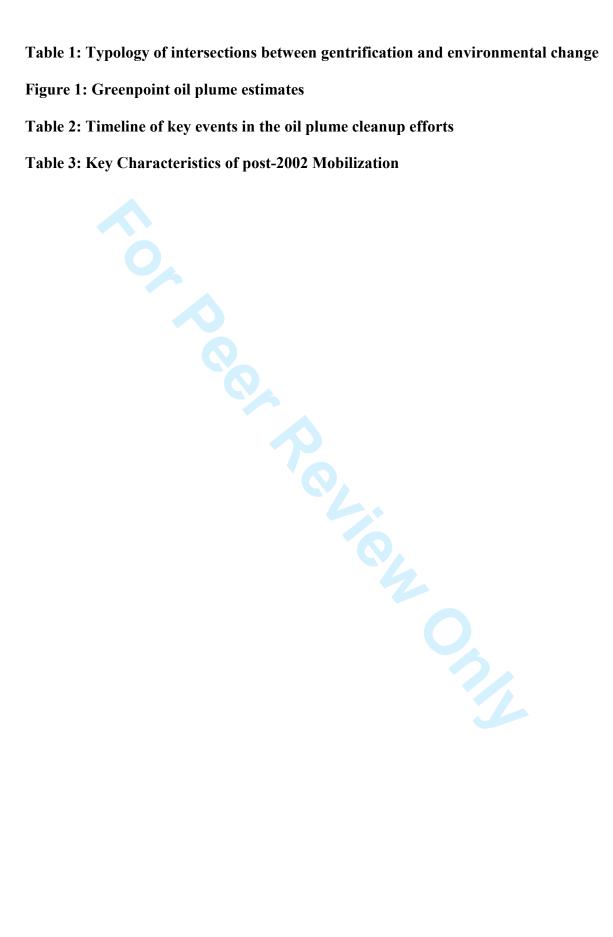


Table 1: Typology of intersections between gentrification and environmental change

Category	Description	Outcomes	Select references
Supply side	- creation of "green"	- conversion of	Checker 2011;
(market-led)	spaces (residential,	industrial brownfields	Quastel 2009; Keil
environmental	recreational, etc.) to	into commercial and	2007; Jonas and
gentrification	attract creative class	residential	While 2007;
	(a.k.a. "environmental	developments	Brownlow 2006;
	capital fix" or "urban	- new/transformed	Keil and Broudreau
	sustainability fix")	parks, community	2006; Desfor and
	- main agents are	gardens, and other	Keil 2004
	developers,	predominantly	
	development	recreational spaces	
	agencies, and various	- sub-par cleanups to	
	scales of government	fast track conversion/	
		redevelopment	
		- residential and	
		recreational	
		displacement of	
		marginalized	
		communities	
Demand side	- gentrifiers make	- new/transformed	Checker 2011;
(gentrifier-led)	politically	parks, community	Lees 2008;
environmental	salient/powerful	gardens, and other	Brownlow 2006;
gentrification	demands for	predominantly	Desfor and Keil
	improved amenities,	recreational spaces	2004
	clean-up, and other	- residential and	
	environmental	recreational	
	"goods"	displacement of	
	- main agents are	marginalized	
	gentrifiers	communities	
Gentrifier-	- neighborhood	- cleanup of	Rydin and Holman
enhanced	capacity enhanced by	longstanding	2004; Evans 2001*
environmental	gentrifier resources	contamination	
activism	and skills, but still	- new environmental	
	driven by longtime	amentities (parks,	
	residents	etc.) that serve pre-	
	- gentrifiers add to	existing (pre-	
	diverse "ecology of	gentrification) and	
	agents" (Evans 2001)	marginalized	
	and provide "bracing"	communities	
	social capital (Rydin		
	and Holman 2004)		
	needed to create		
	change, but are not		
	the exclusive agents		

of change	

^{*} Rydin and Holman (2004) and Evans (2001), among others, provide examples of the potential for diverse coaltions to mount successful sustainability movements, but they do not focus specifically on



Figure 1: Greenpoint oil plume estimates

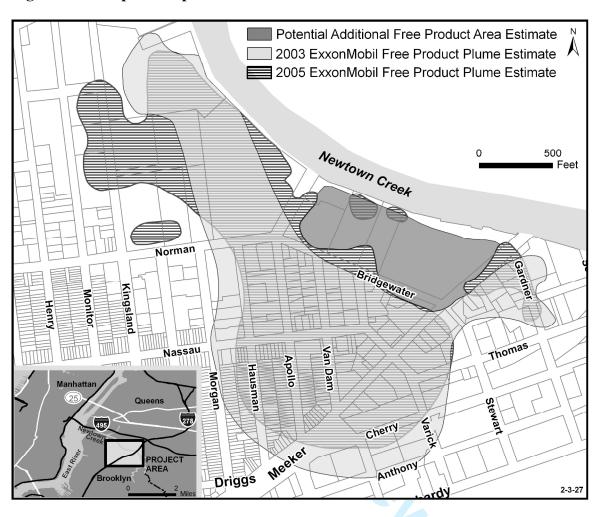


Table 2: Timeline of key events in the oil plume cleanup efforts

- 1978 Coast Guard identifies oil slick on Newtown Creek
- **1979** Coast Guard submits report describing a 17 million gallon, 55 acre oil plume but abdicates responsibility since it is underground, not on navigable waters
- **1990** New York State's Department of Environmental Conservation (DEC) enters into consent decree with Exxon
- Riverkeeper "rediscovers" the oil plume and the Newtown Creek Alliance is formed
- Riverkeeper files a citizen suit against Exxon Mobil citing the Clean Water Act and the Resource Conservation and Recovery Act
- **2005** Girardi & Keese (famous for their work on the Erin Brokovitch case) files lawsuit against ExxonMobil (and two other oil companies) "seeking monetary compensation and health monitoring" for resident plaintiffs
- Napoli Bern Ripka files suit against Exxon on behalf of additional resident plaintiffs for monetary compensation
- Attorney General Andrew Cuomo files suit against Exxon Mobil using the same federal statutes as the Riverkeeper suit
- **2010** Newtown Creek is declared a Superfund site and Exxon settles the cases with the Attorney General and Riverkeeper, pledging a reinvigorated cleanup and providing settlement money for the State and local community

Sources: MacDonald, 2007; Mother Jones, 2007; New York State Attorney General, 2010; Short, 2010.

Table 3: Key Characteristics of post-2002 Mobilization

Issue Framings	- collective risks: unknown plume boundaries and potential
	health and property value impacts
	- collective responsibility: cross-neighborhood and cross-class
	sense of community and environmental justice concerns
Resources	- legal, scientific, communication, and other professional
	expertise from Riverkeeper and other new activists/gentrifiers
	- long-time resident activists' historical alliances with local
	elected officials through activism around sewage treatment
	plant and other issues
Political Opportunity	- DEC: increased access to DEC staff and information with
Structures	post-Pataki Democratic administrations
	- New York State Attorney General: Spitzer's office started
	investigation and Cuomo became "political godfather" for the
	issue
	- EPA: with push from local congressional representatives and
	NY state senators, compiled data on the contamination and
	ultimately listed Newtown Creek as a Superfund site