Future Focused Planning?
The role of environmentalism and sustainability in the redevelopment of post-Katrina New Orleans

THESIS

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Abstract

After Hurricane Katrina, neighborhoods in New Orleans were threatened with a building moratorium unless they could prove their "viability." To do so, it would be necessary for them to attract residents and investments. Two neighborhoods, the Lower Ninth Ward and Broadmoor, formulated their own definitions of sustainability and attempted to use the quality as a marketing strategy. This was very successful for Broadmoor, but not for the Lower Ninth Ward. This paper will examine the reasons for this dichotomy by exploring the nature of sustainability as a development strategy, how sustainability is defined and who it benefits, and the community characteristics needed for it to be effective. Additionally, the thesis will present a review of the literature on urban sustainability and urban growth coalitions.

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Chapter 1: Introduction

Hurricane Katrina made landfall in southern Louisiana on August 29, 2005, leaving eighty percent of the city underwater for weeks (Campanella 2008). Hurricane Katrina, as countless books and articles have stated, was not a *natural* disaster. Poor construction decisions on the part of the past city officials and a long history of segregation and discrimination were far more responsible for the horrifying effects of the storm than its physical strength alone. When it was founded, all of the land in New Orleans was above sea level, but the upstream damming of the Mississippi River and the flood protection systems in the city have prevented the regular depositing of sediment in the city. Because of this, the city settles an average of eight millimeters every year, and now 51% lies at or above sea level, and 49% below (Dixon et al. 2006).

The levees did not take the unique geological situation of the city into account either, leading to the breaching that resulted in the flooding of New Orleans (Kayen, Collins and Gibbons 2006). Once water was inside the city, the hurricane's effects became racially differentiated. Simply, the vast majority of people living in low elevation areas were black and poor (Cutter 2006, Smith 2006, Grey 2007). People in those areas likely had not been able to evacuate. As countless media outlets showed, their experiences after the storm were horrifying (Brookings 2005). Stranded on roofs, forced to live in the Superdome, and branded "refugees" in their own country, survivors of the storm faced

traumas that continue to have an effect of their mental health (Ford 2013, Major 2013). The destruction of low-lying areas of the city, including the neighborhoods of the Lower Ninth Ward[1] and Broadmoor (to be discussed at length in this thesis), set the stage for the planning process that occurred in the following months.

The idea of a "blank slate" on which to re-design the city proved irresistible to many city officials and planners, who began to flock to town with ideas for how to improve New Orleans. The Bring New Orleans Back Commission (BNOBC) was a committee created by Mayor Ray Nagin, populated with what organizers described as a "self-appointed elite" (Hill 2013). Working in partnership with the Urban Land Institute (the research arm of the National Association of Realtors) (ULI 2013), the BNOBC wrote a plan for the rebuilding of a "sustainable, environmentally safe" New Orleans (BNOBC 2006). The plan proposed rezoning the city and creating parks, water catchment areas or canals and open spaces in flooded areas, unless neighborhoods could prove their viability (Dircke, Aerts, and Molenaar 2010, Dutch Dialogues 2006). Viability was defined as the return of at least 50% of residents returning or committing to return to the neighborhood (Truitt 2012). The areas affected by this plan are shown by green dots on a map in the BNOBC plan (see Figure 1). When made public, residents whose houses fell in those areas were furious. Negative reactions to the report were immediate and strong, and neighborhoods immediately began to contest it (Major 2013). Emotions ran high, and meetings held by the BNOBC after the plan was announced were widely attended and full of angry

[1] Those knowledgeable about New Orleans should note that I am using the distinction of "Lower Ninth Ward" to describe all areas below the Industrial Canal, not simply the area above St. Claude Avenue.

residents (McNamara 2013). Joseph Canizaro, chairman of the BNOBC and a trustee of the ULI, recalled the first meeting (2013).

> The first thing [that happened] after we made the presentation was that an African American [man] got up and he said "Joe Canizaro, I don't know you, but I hate you!"

The BNOBC plan was abandoned a few months later because of that kind of resident anger. Mayor Ray Nagin, up for reelection and realizing that his constituents would

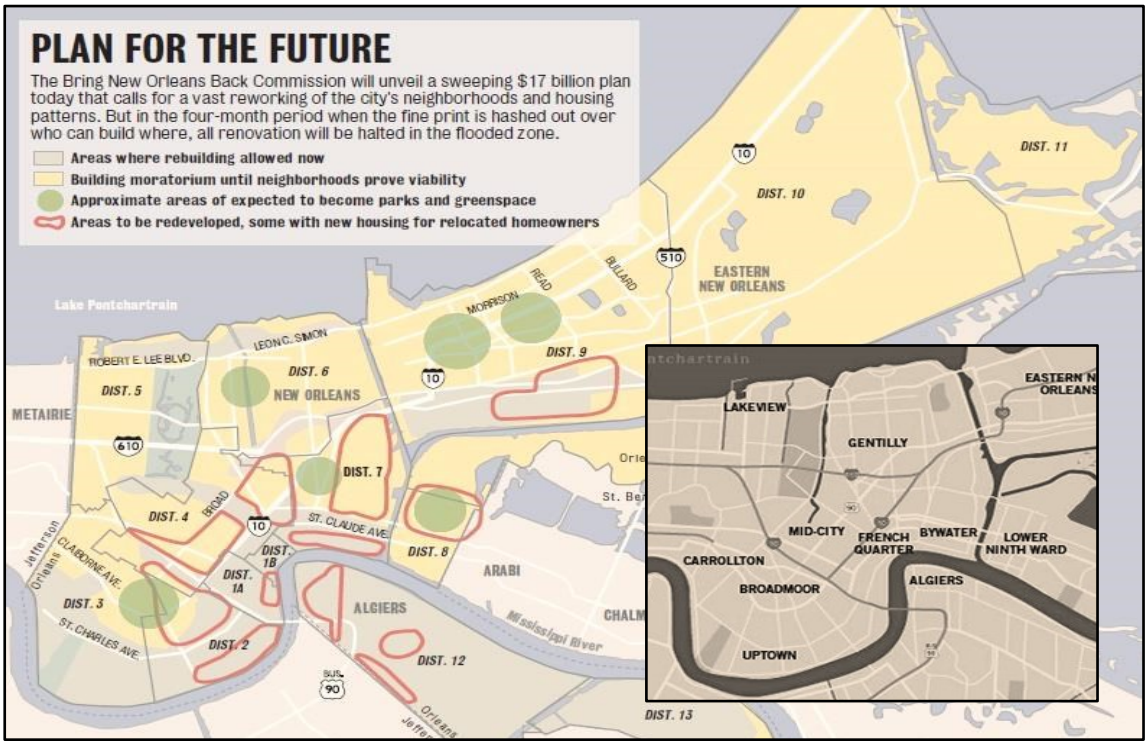

Figure 1: The Green Dot Plan as it was published in the New Orleans *Times Picayune,* with a subset showing Broadmoor and the Lower Ninth Ward in relation

surely vote against him if he continued to support the plan, decided that the city would simply be rebuilt based on the demands of "the market" (Ford 2010). Despite the abandonment of this plan, the initial idea that neighborhoods would have to actively prove their viability persisted for some months; long enough that residents, neighborhood

associations and outside groups began to work on plans to do exactly that. By the time the "viability" strategy was abandoned, those plans were already in motion, and groups were going ahead with the marketing of their neighborhoods, attempting to attract at least 50% of residents to return.

I will examine two neighborhoods in New Orleans: Broadmoor and the Lower Ninth Ward. Both neighborhoods fell under a green dot in the original BNOBC plan. In both cases there were plans to prove their viability in case the ultimatum set by the city remained. Both plans proposed to make the neighborhood more sustainable in some way. In the case of Broadmoor, residents of the neighborhood came up with the plan themselves, and they were able to find a great deal of outside support. Residents believe that their post-hurricane experience has been a positive one. The Lower Ninth Ward, on the other hand, was the subject of plans developed by outside groups to do the same thing. However, the Lower Ninth Ward was far less successful in gaining funding and residents than Broadmoor, and residents have very negative things to say about their post-hurricane experience.

I will explore the reasons behind the difference. This thesis is based primarily on two months of fieldwork conducted in New Orleans during the summer of 2013. During that time, I conducted 25 open-ended interviews with residents and attended several community meetings in both neighborhoods. I will also draw on the literature surrounding the politics of nature-society interaction and examine how sustainability can be used as a city development strategy.

Research Agenda

In this thesis, I will start out by establishing a framework for understanding the use of sustainability in the post-Katrina rebuilding process in two neighborhoods in New Orleans.

1. It is necessary to define what exactly is meant by "sustainability." It is a term without a specific definition, or rather with so many specific definitions that it means all things to all people. What does "sustainability" mean to these two neighborhoods in New Orleans and how has that idea developed? To understand this particular interpretation of sustainability, we must examine the politics of nature-society interaction.

2. This idea of sustainability has been used by neighborhoods/non-profits to promote the rebuilding of certain areas after Hurricane Katrina. To what degree is sustainability an effective development strategy and what conditions are needed for that to be the case? Sustainability as a development strategy will address those issues.

Chapter 2: Literature Review

The Politics of Nature-Society Interaction

What is "Sustainability"?

Though sustainability is a term that can be manipulated to mean all things to all people, it is necessary to give a background on the development of the term and its different meanings. The widespread use of the word is commonly traced back to a 1987 report of the United Nations World Commission on Environment and Development. This report, commonly known as the Brundtland Report, defined the term *sustainable development as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UNWCED 1987). Drawing upon that definition, sustainability is popularly described as a set of practices that take into account environment, society and economy (Greenwood and Holt 2010). This definition can be expressed in two competing ways, which show differing interpretations of the relationship between environment, society and economy. The first interpretation sees sustainability as a Venn diagram-esque intersection of the three, each of which exist separately, and sustainability lies in the intersection. The second interpretation is different and, arguably, more accurate. In it, the three components of sustainability are concentric

circles. This acknowledges the fact that the economic cannot exist outside of the social, and that neither can exist outside of the environment.

Thus, sustainability as implemented in the city requires that multiple issues be addressed. Following Greenwood and Holt (2010), cities seeking to implement sustainable development at the urban scale must consider their natural resources, economic growth and the quality of life of their residents. Natural resources must be recognized as a type of capital that is irreplaceable and unique. For example, a river, once dammed or put into culverts under the ground, cannot be restored to its natural state. Because these natural resources are not traditionally traded goods, their destruction is seen in the economy as a spillover cost rather than a direct cost. As such, the regulation of natural resources and the protection of the environment cannot be left to "the market." Issues such as land use (particularly important in the below-sea-level city of New Orleans) must be regulated by the city government for a city to be sustainable.

However, it is also important to understand the idea of environment/nature as the all-encompassing sphere that contains the social and economic spheres (Jarvis, Pratt and Wu, 2002). Nature is not an uncontested concept. The political ecology literature has been an attempt to focus on the construction of nature, both in terms of how nature and society are connected to each other and in terms of how ideas about nature are constructed. Here I will very briefly examine two differing views of how nature and society are connected: metabolism a la Karl Marx and assemblages a la Bruno Latour. Most important, and

common in both ways of thinking, is the idea that society and nature are co-constitutive elements, not separate entities in a binary relationship.

In both views, cities are always created from a mix of social and environmental forces. The "socionature" of the city is simply a single instance in a network of linked social, natural, economic and political forces, in which social and natural forces are locked in a dialectical relationship with one another. A materialist approach to cities cannot deny the importance of "socionatures"—they are intimately connected to the economic production that is involved in the city. Because of the economic aspect of the production of socionatures, capitalists are able to control and exploit the natural world in the same way that they control the economic sector (Swyngedouw and Heynen 2003).

However, given the extensive and globally connected nature of these social and natural forces, it is impossible to examine a single expression of socionature without also examining the broader network in which that socionature exists. This leads to the idea of cities as a network of social and environmental flows, a la Latour. Many thinkers believe that the relationship between nature and society is far more complex than a simple cycle of natural resources—production—exchange (Swyngedouw 2006). The metabolism of natural resources introduces them into society, but does not remove them from their environmental origins, nor does society exist separately from nature. Through this view, cities are then described as nodes in a wider network of flows of natural, social and economic phenomena (Haraway1991, Kaika 2005).

Sustainability, though, is not always interpreted via its traditional definition of equal nature-economy-social priorities in development. Rather, "sustainable," along with words like "green" and "eco-friendly," is often tacked to anything with even a vague connection to environmentalism. Look, for example, at the vast number of "sustainability" or "green" initiatives at universities around the country that address only changing the heating systems of particular buildings or recycling campaigns; not, therefore, the whole range of issues necessitated for true sustainable development. Interpretation of sustainability is an essential part of its reception on the part of a community and must be considered while making policy (Lombardi et al., 2011).

Sustainability is commonly used as a political buzzword, lending a progressive cachet that serves to motivate populations either for or against particular projects. While writing this thesis, I also participated in the writing of a long term plan for the Mississippi Gulf Coast. Though the plan was funded by a Department of Housing and Development *Sustainable* Communities Grant, we were warned by the coordinator of the project to never, ever use the word "sustainability" during our community outreach efforts. It was believed that the use of the word "sustainability" would deter residents, the vast majority of whom were avowedly conservative, from participating. Conservative US states that have attempted to (or successfully) banned Agenda 21, the UN's voluntary set of guidelines for sustainable development, include Missouri, Oklahoma and Kansas (Celock 2013).

At the opposite end of the political spectrum, the use of the word *sustainability,* is often beneficial for politicians or city leaders seeking to gain popular support, as it conveys an aura of desirable forms of development. Jamieson discusses the difference between "strong" and "weak" sustainability, with the first focusing on the importance of preserving natural capital and the latter focusing simply on making sure that "wellbeing does not decline through time" (1998). The concept of weak sustainability is then defined for a particular situation, ensuring that the idea of "wellbeing" is relevant to whatever group of people it applies to. Jamieson goes on to point out that many actions that may be best for natural resources are ignored in this conception of sustainability if the actions would be frustrating to residents.

This reinforces the idea that "sustainability" or an expressed goal to create a "sustainable" city or neighborhood is not always indicative of the intent to create a system of development that equally acknowledges the economic, social and natural aspects of human wellbeing. Rather, it is often transformed into a practically meaningless buzzword, synonymous with the ideas of "greening" the practices of a city or company. Companies, for example, often commit to "sustainable" business practices that are carefully designed to simultaneously allow them to maintain the vast majority of their business practices, but also make a few high-profile changes that lend them the aura of being on "the right side" of a moral issue (Milne, Tregidga and Walton 2009). This commitment to a vague idea of sustainability is not just a matter of the actions of city governments or corporations.

Individual actions are important as well. Though individuals do not enact systematic change, they may often seek to alter their practices to conform to their ideals or ethics. Ideals of sustainability are no different (Hobson 2006). Thus, individual actions and consumption decisions are just as important in the practices of sustainability at the city level as institutional actions. A consumer who wants to buy "green" products either due to their values or because they feel it offers them social status is just as important a part of sustainability at the city level as any kind of regulation (Winge 2008). Thus, city sustainability may not only be expressed by regulations or design changes, but may also be manifested by the consumption patterns of individuals. Within those design changes and changes in regulation on the city scale, though, the actual "sustainability" that is achieved may be questionable.

Sustainability as a Development Strategy

Commodification of Sustainability

For people who are concerned about sustainability and able to afford more expensive products, so-called sustainable products are appealing expressions of social distinction. As urbanization of the US population has increased, nature is commonly seen as a luxury for the rich. This is something that can be seen in the desire for nature commodified—golf courses, yachts, or country homes (Castree 2003, Bhatti and Church 2001). This commodification of nature is not related at all to "strong" sustainability. It offers no solutions for the equal consideration of nature along with social and economic issues. However, it does offer an insight into motivations behind the discourse of sustainability

that is sometimes used by cities. In this version of sustainability, solutions are mainly aesthetic rather than systematic, offering situational solutions to neighborhoods. Adding a bike lane on a single street may convey the illusion of sustainability, but in all likelihood it will have no effect on the carbon output of the neighborhood. These specific "sustainable" additions to cities, regardless of their environmental effects, will be beneficial for marketing a city. Within cities and their housing markets, nature is a way to distinguish one place from another, via trees, bike paths, and other "natural" amenities that are popular both aesthetically and because they are seen as being beneficial to the natural world (Heynen and Perkins 2007).

Thus, for some cities, sustainability becomes a commodity to be advertised rather than a systematic change to be implemented via city regulation. The idea of sustainability is commodified in two ways: through the housing market and through various "eco-friendly" businesses. In its commodified form, sustainability in the city is largely the province of the affluent and well-educated (Parr 2009). Differentials in knowledge about threats such as climate combined with an expressed concern with more "immediate" problems on the part of poorer residents (Ford 2013) lead to a large divide in who actively engages in the sustainability discourse in the city and who does not (Rhodes 2010). The former clearly overlap with those designated as "the creative class," as per Richard Florida or "bohemian bourgeoisies (BoBos)" as per David Brooks. These are the exact people who are concerned with sustainability and "living green," given not only a respect for nature but also a large desire for a particular sort of social recognition (Brooks 2000, Florida 2012). Examples of the increase in upper class interest in sustainability can

be seen not only in the proliferation of "green" businesses, but also in such recent phenomena as celebrities choosing to walk the red carpet in eco-fashion, projecting the idea of sustainability as a symbol of education and taste (Winge 2008), or in the rise of eco-tourism. Commodified sustainability can be seen in the housing market, therefore, both via the form of the houses themselves and via a collective space of consumption, as well as in the case of eco-friendly businesses.

Why is it important to understand what sustainability means in the case of New Orleans? Simply, we cannot understand the city without understanding the natural world of which it is a part. New Orleans' current defining factor is its potentially grim future: of all the cities in the world, it is one of the ones most at risk as climate change continues to raise sea levels and make hurricanes stronger (US EPA 2012, Nicholls et al. 2007). To make matters worse, New Orleans is sinking as flood protection systems and wetlands destruction lead to the compression of the ground the city is built upon (Dixon et al. 2006). This vulnerability is not evenly distributed. Rather the city is a classic instance of environmental injustice, defined as the disproportionate effect of environmental hazards upon poor people or people of color (Cook and Swyngedouw 2012, Pearsall 2013). It is well documented that there is a higher risk of flooding in neighborhoods populated by people of color (a full discussion of this topic can be found in Barry 1998, Smith 2006, Cutter 2006 and Graham 2007). Black and poor residents have consistently been more threatened with flooding since the founding of the city, and have often been the victims of the environmental effects of development projects within the city such as the building of canals.

However, environmental injustice is never discussed in relation to sustainability in the neighborhoods I studied, and the city's elevation is substantially addressed in discussions of sustainability only in the Lower Ninth Ward. The commonly discussed discourses about nature in New Orleans have been extraordinarily flawed ever since the city's founding. Ideas about the best way for the city to interact with the environment have always been mediated by the demands of capitalist-driven development. In the past, the desire to extract as much rent as possible from the land has been the primary motivating factor behind the city's relationship with the its natural environment and the construction of ideas about the correct way to interact with it (Baxter 2014). When the city was originally founded, all buildings were located above sea level. However, as the population grew, it became profitable for the city to expand its footprint.

The number of free people of color (freed slaves, Creole people of mixed race, etc.) in the city grew, and, being primarily less wealthy, they began to settle in less desirable, lower lying areas (Campanella 2008). With the abolition of slavery the formalization of discrimination via the implementation of formalized Jim Crow laws, black residents were forced to settle in low lying areas (Fussell 2008). Though some white residents still remained below sea level, the distribution of disaster risk was still extremely racialized when Hurricane Katrina hit. Despite the fact that Hurricane Katrina was a major environmental disaster, living in harmony with nature was not a topic discussed after the storm. All decisions about nature-society interaction in the city's past have been colored by the desire to make money on valuable land, and the current focus on sustainability in two of the city's neighborhoods does not seem to represent a departure from those

priorities. Neighborhood discussions include the possibility of future flooding, but there is no discussion of moving, just of elevating houses.

In both neighborhoods, sustainability is discussed as some combination of the following things:

1. Green building techniques for housing and other buildings
2. Alternative transportation options
3. Alternative energy sources
4. Presence of businesses that purport to have environmentally friendly products.

The Politics of Sustainability as a Development Strategy

It is important to discuss how exactly sustainability is defined in New Orleans and for whom because the question is inherently a political one. City policy in general is still focused on facilitating the extraction of as much rent as possible from land; the city is not discussing future flood protection for the entire city, mutually beneficial human/ecological interaction, or the elimination of environmental injustice. There is a false idea that sustainability is apolitical because of its status as something "scientific" (shown in Vallance and Perkins, 2011). Science has traditionally been seen as something outside the bounds of morality—what Harvey refers to as the "ethical neutrality assumption" (1974). This discourse of impartiality has lent an air of infallibility to decisions and policies based on science. From Gro Harlem Brundtland's original *Our Common World* report in 1987 onward, there has been a common discourse (at least on the left) that the need for sustainability is based on impeccable data and therefore

strategies for achieving it should not be questioned. This is true on the city level as well as at broader scales of governance (Braun 2005).

However, each city's definition of sustainability is inherently partial and mediated by their particular social and economic structure, as well as by each of the many actors involved in city governance (Liverman 2004, Bryant 1998). In the case of New Orleans, factors that might otherwise be included in a sustainability analysis are ignored: elevation of neighborhood, for example, is not addressed at all, since both neighborhoods lie below sea level. Discussing this fact would be counterproductive to using sustainability as a development strategy. Additionally, the definitions of sustainability for both neighborhoods do not include any discussion about environmental injustice, despite the fact that the Lower Ninth Ward is a classic case of black residents being marginalized into environmentally unsafe areas.

Rather, sustainability in this case is used just as a marketing strategy, not to significantly change the essential characteristics of the neighborhoods. Gotham and Lewis (2014) point out that in New Orleans, the use of explicit sustainable design in the Lower Ninth Ward obscures many of the environmental injustice issues. Castree points out that "claims about nature—and actions based upon those claims—can serve as instruments of power" (2003). How sustainability is defined is surely an example of this. Those who get to choose what sustainability means for a neighborhood have tremendous power over that space. For this reason, the process is highly political. Sustainability is defined in whatever way is most advantageous to those who have the power to do so.

To prove their resiliency as per the original demands of the BNOBC plan, both the Lower Ninth Ward and Broadmoor used strategies to transform themselves into sustainable places. What, though, lies behind the choice of sustainability in particular as a defining factor for a neighborhood, and why was it believed that the idea of sustainability would be effective in attracting funding and residents? In the case of New Orleans, the idea of sustainability could be used as a defining factor precisely because the past environmental policies of the city have been so lacking. The idea of a neighborhood that recognized its potential danger from flooding and climate change made it very distinct from the rest of the city and consequently worthy of attention from investors.

In both neighborhoods, the promotion of sustainability is similar to the work of a local growth coalition. Traditionally, a local growth coalition is made up of powerful citizens and industries of a city: business leaders, local utility companies, banks, etc., all of which experience a problem of local dependence and as such resort to localism or "boosterism" to facilitate local economic development. In other words, economic development and investment must come to them. Companies seeking to invest in a new location will carefully consider all aspects of a decision, and cities or regions will compete with each other to gain the investment. This competition is undertaken through their local growth coalitions. Normally, the locating of a new firm's investment in a particular locality is appealing to both the local state and to other industrial leaders for various reasons, including increased tax revenues and the political advantage of having "brought new jobs" to an area (Cox and Mair 1988, Harvey 1989).

Molotch (1976) expands the list of people concerned with encouraging local growth. He includes landowners, those who have a financial interest in a piece of land not owned by them, or those who have a financial interest in the future growth of a conglomeration of land. Community is thus defined as "an aggregate of land-based interests," with each parcel of land (potentially) representing a different interest. Those empowered to act within the local community, therefore, are those who have an interest in bettering their financial situation as related to the land they own. He goes so far as to say that the landowners in a community become its politicians. The local state in a community will hence seek to make the area attractive to industry that will improve their own land prospects.

In addition to making their areas competitive, local growth coalitions will often attempt to cultivate a feeling of uniqueness and superiority among residents to encourage "boosterism." Residents are therefore subject to propaganda that will hopefully lead them to believe that their city is unique and better than others and, more importantly, that it must remain so. The "sufficient" number here means an adequate number of voters and politically active residents for the city and the local growth coalition to continue their policies unopposed either via protesting or contrary voting. Maintenance of the city's uniqueness and superiority can then be used to justify the implementation of otherwise unpopular policies and business practices, or to bring more residents into the fold of city superiority (Boyle 1997).

In the case of New Orleans, I am discussing the neighborhood level, rather than the city or regional one. However, I argue that there is a pseudo-local growth coalition that has formed at the neighborhood level in both Broadmoor and the Lower Ninth Ward. The neighborhoods are not attempting to attract outside investment of the traditional kind, such as branches of companies, but rather to prove their viability. Since viability was originally defined as the return (or commitment to return) of at least half of residents, the coalitions in both neighborhoods (made up in Broadmoor of residents and in the Lower Ninth Ward by nonprofits) needed to attract residents who would "invest" in the area. Residents would not invest in the traditional sense of a corporation, but rather would "invest" in their home. Thus, following the idea of the local growth coalition, the neighborhoods had to compete with other, potentially more appealing areas for their residents to live. Though there is not a formal local government for the neighborhood, the Broadmoor Improvement Association is somewhat governmental in that it collects fees from residents who wish to be affiliated with it, and spends that money on projects for the neighborhood.

Thus, sustainability appears as a method of achieving neighborhood distinction. By focusing on ideas of sustainability, the neighborhoods sought to send a message. In Broadmoor and the Lower Ninth Ward, the message was that the neighborhood would be improved as a place to live because of various "sustainable" measures in the area—bike paths, green buildings, etc. This was intended to attract residents to below-sea-level areas and encourage the construction of new buildings in both places that would be appropriate for their environmental conditions, in contrast to the buildings common before the storm.

Eco-Friendly Businesses

The commodification of sustainability is another factor that used to distinguish cities and neighborhoods when they market themselves. Cities and individual neighborhoods commonly promote their various positive qualities in an attempt to gain new businesses and residents, primarily by doing something that sets them apart. Eco-friendly businesses are one way to provide a unique and appealing culture to an area that will be successful in attracting and retaining certain kinds of residents.

The use of sustainability as a marketing strategy for businesses can be seen at every scale. The "green-washing" of multinational corporations is a common phenomenon. When corporations green-wash, they make advertising claims that exaggerate (or totally fabricate) facts about such topics as the environmental benefits of their products or their sustainability efforts. This occurs because these claims help corporations gain customers (Dahl 2010, Delmas and Burbano 2011). Designations such as Green Seal, a group that audits products and recognizes "green" products, are popular among corporations ranging from Dial Soap to Office Max. This is not an example of companies complying with regulations intended to protect the environment. Rather, eco-friendly businesses use the idea of "green" to capture the disposable income of consumers (Parr 2009).

Businesses at a smaller scale also engage in marketing themselves as sustainable or environmentally friendly. Notable cases include the restaurants that serve only locally sourced food and coffee shops that boast the organic and fair trade nature of their coffee beans. Both boast the cachet of sustainability and are related to the "eco chic" movement

of the past decade, a deliberate advertisement of "being green" in fashion, food and general living (Kolk 2003). There are countless books written on the subject, with titles like "Toolbox for Sustainable City Living" (Kellogg and Pettigrew 2008) and "Eco Chic Home: Rethink, Reuse and Remake Your Way to Sustainable Style" (Anderson 2010). Eco-friendly products range from sustainably harvested bamboo iPhone cases from a site called eartheasy.com to lunch bags with designs in low-impact ink on organic cotton from something called ecobags.com, all, of course, boasting significantly higher prices than their non "eco" counterparts.

The Housing Market

The interest on the part of richer residents creates a situation in which so-called sustainable housing (houses that have solar panels, for example) are very appealing to those who can afford them (Allen 2011). The marketing of "sustainable" housing as a strategy by real estate companies only began in earnest in the 1990s, as the ideas of sustainability and environmentalism have become widely accepted (Kriese and Schulz 2010). Wealthy tenants and homebuyers are interested in sustainability primarily because it offers them a way to cultivate an elite image, and a way to boost their image among their peers (Falkenbach, Lindholm and Schleich 2010).

There is a "possessive ethic" on the part of middle- and upper-class residents, who recognize and value the distinctive qualities of various neighborhoods and consequently wish to be part of them. Their relative wealth allows them to buy a place in an "interesting" or "unique" area (Savage 2010). These people are able to instantly buy their

way into the distinctive characteristics of an area and/or home (Butler 2007). Sustainability is one of these distinctive characteristics, something that can be and is marketed as interesting and unique. Thus, real estate interests are able to leverage this desire for uniqueness to sell a certain ideal, and sustainability is one of these ideals.

It is not just housing itself that makes a neighborhood seem sustainable and appealing. Collective spaces of consumption, such as community centers, bike paths and parks, have an appeal that can draw in new residents (Preteceille 1986). These spaces of collective consumption are examples of an obviously expressed sustainability. They also serve to make a neighborhood even more of a status symbol for residents, by playing off the idea that nature and sustainability are assets and practices for the wealthy. If the house and the neighborhood serve as expressions of "norms of conduct, a set of values…and a common outlook towards life," (Pratt 1981), then the neighborhood that shows its sustainable nature is one that will attract others who seek to express their interest in sustainability as well. Theoretically, then, it is an appealing quality that can be turned to attracting new, rich residents to neighborhoods, as well as retaining those who already live in a place. In the case of New Orleans, this played out to varying degrees of success after the hurricane.

Chapter 3: The Case of New Orleans after Hurricane Katrina

At the beginning of this thesis, I explained the destruction of New Orleans and the city's attempt to create a plan that would rebuild the city. Before I spoke with anyone in New Orleans, it was obvious that the BNOBC plan had myriad flaws, most significantly the effective expulsion of black residents and the appropriation of their land that the proposed building moratorium would have caused (Logan 2006 a&b).However, interviews made clear that the problems with the original BNOBC plan were so great that they became embarrassing for the organizations affiliated with it. The Urban Land Institute, the main research body contributing to the plan, has attempted to remove all record of the BNOBC plan from their website. I spoke with several members of the committee, most memorably the chair of the BNOBC and the president of ULI, Joseph Canizaro. We met in his office as president of New Orleans First Bank and Trust, where he insisted (loudly and multiple times) that the BNOBC plan had no intention of taking over anyone's land (2013).

> People sometimes have their own reactions to what they both hear and read. They didn't listen carefully [to our recommendations]!

The meeting was attended by the Bank's legal counsel (also a member of ULI), who listened carefully to our conversation and would occasionally insert commentary, such as reminding me that all negative reporting by the Times-Picayune on the subject had been

"absurd." Additionally, he told me I had to turn off my recorder when I asked Mr. Canizaro to explain what was wrong with the plan. There was no need for that—he would say no more than to insist it had been a poor presentation of good ideas. The plan presentation, available online, contains the names of people affiliated with ULI but not the name of the organization itself. The plan itself, along the executive summaries, has been completely removed from affiliated organizations' websites. Links included in other articles for accessing them simply redirect to the main ULI or BNOBC websites. Besides the presentation of the plan, information is only available from articles and summaries written by others.

However, despite the incredibly negative reaction to the plan, it is clear that the idea of sustainability in the redevelopment of the city was a popular one that was adopted by individual neighborhoods in their own plans. The idea of neighborhoods needing to prove their "viability" to avoid being demolished was abandoned a few months after it was proposed. However, the urgency of that proposition catalyzed movements for the redevelopment of both Broadmoor and the Lower Ninth Ward that continued after the abandonment of the BNOBC plan (Krupa 2010).

Sustainability in Broadmoor

In Broadmoor, mobilization after the announcement of the BNOBC plan was almost instantaneous. Residents of the neighborhood thought that they needed to regain 50% of their population as per the BNOBC plan, and so they began to work to make sure residents would come back (or new residents would move in) as quickly as possible. The

neighborhood was at an advantage in that it had a developed network of residents who had been involved in the Broadmoor Improvement Association (BIA), a neighborhood group incorporated as a 501(c)3 in 1970 (BIA 2013a). Thus, residents, even those who had yet to return to New Orleans, were able to easily communicate with each other and develop a strategy to resist the planned demolition of their neighborhood. Without any large buildings restored sufficiently enough to have meetings in, the members of the neighborhood congregated outside under a large event tent to plan their response to the city. In interviews, residents expressed their anger and frustration with the city's plan. They seemed to find it offensive that they were being lumped in with neighborhoods like the Lower Ninth Ward in the building moratorium. They coined the slogan "Broadmoor Lives!" the group decided that it would resist the plan to eliminate their neighborhood by "beating the city at their own game" (Wooten 2012) and showing that they were as viable as ever. One resident described the strong emotions aroused by the city's plan: a feeling of common persecution and a consequent unity (Carroll 2013).

> It was like the city was saying to us [the residents of Broadmoor], "Fuck you!" And basically we came together and we said "No, fuck *you.*"

Broadmoor's residents knew that for their neighborhood to be successful in rebuilding, they would need outside help. The city had demonstrated that it did not want to support them unless they could prove themselves, and even well-insured residents could not make sure that the whole neighborhood would be able to rebuild. The BIA realized that to attract any support, they would need to market themselves as a unique place worthy of

investment. In other words, they had to demonstrate why they were more deserving of help than any of the other neighborhoods of the city that had been practically destroyed.

With an already-existing community organization and a high concentration of professional people able to successfully network with funding organizations, they began to do just that. Residents decided that their unique neighborhood quality would be sustainability. In the wake of the storm, the need for sustainability would be easy to sell. The neighborhood had flooded and was at risk to do so again, so well-designed infrastructure was necessary. The whole city was at risk for climate change, so lessening waste and energy use were smart design choices for future construction. In the wake of a storm that had left the city a "blank slate" for new design, it would be easy to remake the neighborhood in this image. After carefully constructing this narrative for its own recovery, the BIA began to look for outside partners to help rebuild.

Universities interested in making Hurricane Katrina a service learning experience for their students began to take a major interest in the city. With an existing and functional community organization, Broadmoor was appealing for universities which wanted to work closely with an area. Broadmoor quickly entered into a partnership with the Harvard Kennedy School in 2006. The university hoped to use the neighborhood to develop an understanding of disaster recovery (Farrell 2008), and dedicated time to help the area recover. Harvard professors taught classes about the neighborhood and had students participate in fieldwork in it. By July 2006, the partnership had completed "The Redevelopment Plan for Broadmoor," a fully developed planning document that created a

plan for the neighborhood to move forward in requesting funds and assistance from the city and from outside (2006).

That plan, along with plans submitted for the US Green Building Council 2010 Natural Talent Design Competition, laid out the focus areas for the BIA, and incorporated sustainability in several ways. Broadmoor was able to convince the US Green Building Council to base its 2010 Natural Talent Design Competition on the neighborhood, which resulted in the building of four winning designs for LEED Platinum houses on vacant lots in the neighborhood (Casey 2010). The priorities laid out by the neighborhood were as follows, and they demonstrate the way the idea of sustainability was cemented into the neighborhood's narrative of recovery.

There was significant discussion within the plan on the need for better drainage and storm water management within the neighborhood. The plan called for the city to complete new infrastructure projects to mitigate future flooding. Neighborhood projects, however, were also encouraged to have permeable surfaces where possible to reduce the need for other drainage projects. Additionally, the low elevation of the neighborhood was taken into account. Residents are encouraged to raise their houses if their first floors are below sea level, using funds from the city that the BIA and local legal experts were able to help them secure.

The raising of houses was, however, sporadic within the neighborhood. In interviews, residents who were enthusiastic about other sustainability projects in the neighborhood were reluctant to raise their homes. There was a definite awareness among all of them of

the danger of future hurricanes in the city, and future flooding associated with them. However, approximately half the residents I talked to said that raising their homes would be futile, because there was no way the city would survive another hurricane the magnitude of Katrina.

The initial partnership with Harvard and a plan that clarified the neighborhood's objectives meant that Broadmoor had the connections and the capacity to pursue other high-profile collaborations. First, the neighborhood was able to use its link with Harvard to become involved with the Clinton Global Initiative, which gave $5 million in operational funding to the BIA to implement the Broadmoor Plan (Seidman 2013). Additionally, this endorsement by Harvard and the Clinton Global Initiative connected them to a whole network of potential funders for neighborhood sustainability projects. Rebuilding the community center was the priority for the BIA, and with the help of the Clinton Global Initiative, they received a two million dollar grant from the Carnegie Corporation to build a new, green library/community center, the Rosa F. Keller building.

Residents made it very clear that their planning and fundraising was just for Broadmoor, not for the rest of the city. They jealously defended their funding from what they viewed as potential scavengers. When the New Orleans Public Library wanted the money spread around to repairs in other parts of the system, the residents reacted with disgust. One community member recalled a feeling of being cheated by the city (Winkler-Schmidt 2013).

> The city wanted to take that money and spend it elsewhere when *we* had actually secured it to be millions of dollars for *this* area! It was a fight.

Once they were sure the money was secure, BIA hired the city's leading green architect to create the building. The library/community center is raised above base flood elevation, has unique storm water catchment systems, and was designed for passive heating and cooling (Hill 2012). When I spoke with him, the architect of project proudly described the building as a "complementarity of unapologetic state-of-the-art-ness with respectful renovation" (Smith 2013).

Figure 2: The official architecture photo of the Rosa F. Keller Library and Community Center, Broadmoor's star "green" building.

Second, the BIA created and incorporated a new 501(c)3, the Broadmoor Development Corporation, to address housing issues (Carroll 2013). The desire for neighborhood sustainability goes beyond large scale building projects. The Broadmoor Development Corporation established a tree committee to deal with tree and vegetation issues outside of the slow and often corrupt purview of the city. They also constantly worked to

renovate properties in the area to use less energy and to be storm and flood resilient, as well as to meet the Enterprise Green Community and LEED Platinum standards for buildings (BDC 2013).

Additionally, the BDC created a drainage committee to make sure that the city was constantly being pressured to implement and maintain drainage projects. The committee lobbied the city and received the project. Residents now proudly describe the large underground culvert that runs under a central road in the neighborhood (Winkler-Schmidt 2013, Voigt 2013). During the completion of the drainage project, the neighborhood successfully applied for state discretionary funding for a widely used bike/walking trail that runs on top of the former construction site, which it argued would be helpful to their sustainability plan (BIA 2011). Broadmoor developed partnerships for education as well, and was able to incorporate sustainability into those relationships. Edison Learning, a private education company, gave a loan to the neighborhood school board to create a charter school where the local public school had once been and to ensure it was certified by the Louisiana Board of Education (Businesswire, 2008). The building for the charter school is a refurbished older school with LEED features, designed by Global Green (Global Green 2010).

Broadmoor has achieved its goal of proving its viability. The neighborhood has been able to gain back 74% of its pre-hurricane population, a level comparable to the city as a whole (GNODC 2013b). However, these residents are not all the same people who lived in the neighborhood before the storm. Since Hurricane Katrina, income in Broadmoor has

jumped 35%, from $47,629 to $64,247.[2] The new amenities are driving up home prices as well. Based on home real estate listings for the neighborhood, home prices have more than doubled since the hurricane (see Table 1).

Broadmoor has also fulfilled its desire to attract new businesses to the area, and many of those businesses are ones that have been attracted by the sustainable nature of the neighborhood. It contains and lies adjacent to a number of businesses that are members of the Life City Green Business Directory. Life City certifies businesses for being "green," advertises those businesses in an online "Impact Directory" and offers a "Green Card" that entitles buyers to certain discounts and specials. The certified businesses around Broadmoor include restaurants, gelato makers, bicycle shops, places to buy recycled Mardi Gras beads, sustainably minded art studios, yoga studios that claim not to use toxic chemicals to clean their mats, and many others. The advertising and sustainable education campaigns offered by Life City is just one more way that the Broadmoor neighborhood is successful in drawing residents and customers to itself.

Sustainability in the Lower Ninth Ward

The situation directly after the storm in the Lower Ninth Ward was completely different than that in Broadmoor. Residents were unable to return to their homes for weeks, because roads had been completely destroyed (Koeferal 2013). Before the hurricane, the neighborhood had a high concentration of poverty-level incomes. In 2000, the average income was $27,499, with 39.5% of household reporting an income of under $15,000.

[2] A measurement of income from 2000-2010, both expressed in 2010 dollar values.

Like Broadmoor, though, the Lower Ninth Ward's rebuilding process involved an attempt to make the neighborhood more sustainable. However, rather than the move towards sustainability being developed by a representative neighborhood group, their sustainability plans were instigated by groups from outside the city.

The Make It Right Foundation (or MIR) was created in the months after the storm by the actor Brad Pitt, who leveraged his fame to collect donations and build national support for a project to build 150 homes in the area that would utilize recycled or renewable materials, be built appropriately for the climate of the area, and be above the base flood elevation of the neighborhood (Johnson 2011). MIR orchestrated a large art installation of 150 pink tents to attempt to bring national attention to the problem and to declare their intentions to build a house for each tent. The founders of the organization believed that the city's proposal not to rebuild the neighborhood was a further wrong in a neighborhood that had been subjected to racial, economic and environmental injustices since its beginning. By building these new homes, they wished to remedy that. They began to hold community meetings with the residents who were back in the Lower Ninth Ward, determined to begin building sustainable homes as soon as possible. When I spoke with him, the director of MIR recalled the urgency of getting residents resettled in the area before the city could halt their construction (Darden 2013).

> Once they've got that flag planted, you ain't gonna move them [the residents]. Politically, you cannot move them.

The foundation held a competition similar to Broadmoor's, in which they invited world class architects to design their buildings, all of which had to meet the standards of LEED

Platinum. After picking a series of designs and receiving a Neighborhood Stabilization Grant from HUD, MIR began building 150 homes, intended for families displaced by Katrina. But that original goal has not been successful. The organization's official policy,

Figure 3: One of the Make it Right Houses, distinctive because of its extremely high elevation.

rather, is that they will sell to any first responder (police, fire, or paramedic), someone with an immediate family member who lived in the Lower Ninth Ward before Katrina, or a teacher in the newly-privatized New Orleans Public Schools. Only 2/3 of the proposed homes have been built, but the organization has plans to continue building. Those 100 homes house 350 people, or .06% of the population.

A similar project also took place in the neighborhood, coordinated by the nonprofit Global Green. The organization is an affiliate of Green Cross International, and it seeks to promote a "value shift towards a sustainable and secure future" in its project areas (Global Green 2013). As part of that mission, Global Green has built four homes in the Holy Cross section of the Lower Ninth Ward, all of which also boast LEED Platinum certification, as well as rainwater recycling systems and solar panels. Additionally, they all lie above base flood elevation. Like Make It Right, the organization sells their homes

Figure 4: The Global Green houses, with solar panels and rain gardens.

only to locals, but uses a broad definition. In an interview, the director of the New Orleans office admitted that the organization has not been able to find any former Lower Ninth Ward residents to purchase their homes. All the residents who have moved into the homes are "*hurricane* first responders" (my emphasis) —people who came to the city after the hurricane to work for nonprofits or in the schools (Pyne 2013).

Global Green is also in the process of building an 18 unit apartment building with the same amenities, as well as a community center. Global Green has ambitious plans for the new center and apartments: all will have zero net emissions, have community meeting spaces and a climate action center, along with fresh food vendors. Of the 18 apartments proposed, six will be sold at market rate and the others will be subsidized for buyers with incomes lower than 60% of area median income. However, the project has not gained support from the city government, and it is currently stalled.

Global Green is having trouble getting their rental units approved by the appropriate parties in the city. Originally, the financing plan for the subsidized units included Low Income Housing Tax Credits, Community Development Block Grant money and private funds. Because of the inclusion of LIHTC money, the plan had to be approved by the Louisiana State Bond Commission. They gained approval from the Bond Commission, but the plan then had to be approved by Mayor Ray Nagin. However, Mayor Nagin left office before approving the plan, and it had to go back to the Bond Commission, which had several new members. According to Global Green's director, the new members had "an extreme sensitivity" to their construction costs: $329/square foot.

The Bond Commission reportedly told Global Green that residents would be better off building cheap new homes for themselves on vacant lots than moving into one of the overly expensive apartments (Webster 2013). Global Green defends its costs, citing the sustainability measures of the building and saying that they cannot build more cheaply

without creating a bigger building, which is prohibited by the area's status as a historic district. The Bond Commission still has not approved the plan, and so the sites intended for the Global Green apartment building and community center sit abandoned, with only foundations for the buildings constructed.

Despite what appears to be genuine dedication to sustainability on the part of project coordinators, the Lower Ninth Ward has not reached its original goal of proving its viability. In comparison to New Orleans' 70% population regain, Lower Ninth Ward only has 28% of its former population—barely over half of its 50% retention goal. Additionally, there clearly has not been an influx of new, richer residents. The income in the Lower Ninth Ward has declined 8%, from $37,595 to $34,728 (US Census). Strangely, though, housing prices have more than doubled since the hurricane as subsidized houses have been built by Make It Right and Global Green. This new construction, combined with the fact that approximately ¾ of the housing stock was lost during the hurricane, has led to a steep rise in housing prices that does not necessarily reflect any improving economic prospects among residents (see Table 1).

It is telling that there are no "green businesses" as certified by Life City in the Lower Ninth Ward. Businesses clearly saw a market for so-called sustainable products in the area around Broadmoor, given the concentration and variety of certified businesses there. However, the Lower Ninth Ward does not have a single certified business, likely because of residents' negative attitudes towards sustainability or their total lack of interest in it.

Table 1: Neighborhood and City Characteristics			
Area	**Income in 2000**	**Income in 2012**	**Change in Income**
New Orleans	$56,497	$59,423	5%
Broadmoor	$47,629	$64,247	35%
Lower Ninth Ward	$37,594	$34,728	-8%
Area	**Population in 2000**	**Population in 2010**	**Percent of Population Regained**
New Orleans	484,674	343,829	71%
Broadmoor	7,232	5,381	74%
Lower Ninth Ward	19,515	5,556	28%
Area	**Housing Median Value in 2000**	**Housing MV in 2012**	**Change in Value**
New Orleans	$87,300	$178,200	104%
Broadmoor	$101,366	$225,900	123%
Lower Ninth Ward	$60,914	$120,614	98%
All data from the US Census Bureau 2000 Census and 2012 American Community Survey			

Chapter 4: Community Values, Cultural Capital and Sustainability

Why is it that Broadmoor was able to successfully use sustainability as a strategy for rebuilding itself after Hurricane Katrina while the Lower Ninth Ward was not? The difference between the experiences of the two neighborhoods shows the high barriers to using sustainability as a marketing force or a development strategy. One major difference between the experiences of Broadmoor and the Lower Ninth Ward is in the types of non-economic capital that exist in the two neighborhoods. Specifically, residents in Broadmoor possess cultural capital and residents of the Lower Ninth Ward possess social capital. The second is that there was an embrace of sustainability in Broadmoor, while the idea was introduced and developed by outside groups rather than by residents in the Lower Ninth Ward.

Cultural capital, a la Bourdieu (1986), is defined as the resources, tangible and intangible, available to people who belong to certain institutions or groups. Cultural capital exists in three states. First is the *embodied* state, when an individual passively gains cultural capital simply by living in a certain environment. Second is the objectified state, where cultural capital is captured in material objects. Finally, cultural capital can exist in an institutionalized state, where it is recognizable in individuals by way of things like

diplomas or certificates. Thus, cultural capital can be gained through formal learning or more passively.

Cultural capital is able to be converted into monetary capital, and I argue that this is the case in the rebuilding of Broadmoor. The residents of Broadmoor had significant access to cultural capital. First, the BIA provided an easily accessible and previously established network for residents. Second, the need to rebuild after Hurricane Katrina was an experience suffered by all residents of Broadmoor, who were thereafter united against the BNOBC plan. Finally, a commitment to sustainability is certainly a shared norm, something that has been consciously leveraged by the BIA during the rebuilding process.

The neighborhood's cultural capital had noticeable effects on the morale of the residents directly after the storm, an intangible but important part of neighborhood rebuilding. In the Lower Ninth Ward, on the other hand, residents were highly discouraged due to significant trauma. Residents of Broadmoor and those who worked in the neighborhood directly after the storm have largely described the experience as an "exciting" one, a situation in which people struggled together to overcome a common enemy (the city's Green Dot Plan) and were successful in doing so (Smith 2013, Wooten 2012). As Richard Campanella, New Orleans resident and Tulane geographer wrote in his 2008 book:

> B*est of times?* In some strange ways, it was. Citizens were intensely engaged with each other toward overcoming tragedy and solving mutual problems.

Though he (foolishly) uses this description for the entire city, it is an accurate portrayal of the post-storm experiences of people in Broadmoor. The residents had a proven system of

redress for neighborhood problems to turn to (arguably an institutionalized form of cultural capital) that had proven effective in the past.

Implementing sustainability is undeniably something that requires a high level of cultural capital. Promoting sustainability largely requires complying with specific regulations and certifications: LEED, US Green Building Council certification, organic, etc. Additionally, in the case of these neighborhoods, it also required soliciting grants and support from prestigious outside entities. Both of these are activities that require a great deal of organization, formal education, and, less tangible but no less important, inter-personal connections. Formal education, in this case, does not only provides training necessary for difficult tasks such as writing proposals and negotiating the complex legal systems surrounding the process of getting aid after the storm. It also provides credentials necessary for gaining credibility in interpersonal relationships and in relationships between the BIA and outside universities and foundations.

Cultural capital being converted into monetary capital is clearly in evidence in the Broadmoor case. The BIA has been able to leverage a stunning amount of money for such a small nonprofit, as well as creating partnerships with prestigious institutions. Their website boasts an impressive post-Katrina record of bringing in $48 million in outside investments and mobilizing over 13,000 volunteers (2013). This is the result of connections that the neighborhood was able to build with institutions and the good press it gained through these initial interactions.

Upon talking to residents who worked with the BIA and have been very involved in the rebuilding of Broadmoor, it was clear that they were very practiced in "selling" the neighborhood to visitors. They obviously knew how to charm an audience, and how to manipulate information in a way that would make it sound appealing. People were polite, but our interactions were very professional, rather than personal. Residents wanted to discuss the buildings they had designed, or the work the community had done with Harvard on the plan for the area, or to brag about various facets of the neighborhood. I felt the neighborhood was being consciously promoted to me, as though there was an understanding among all the residents that they needed to only say positive things about the area and their post-hurricane experience to outsiders. By the time I left the city, it was clear how easily they were able to instill the idea that Broadmoor was the best neighborhood in New Orleans.

The residents of the Lower Ninth Ward also possessed a form of non-economic capital before the storm, but it was highly different from the cultural capital exhibited in Broadmoor after the storm. Rather, the Lower Ninth Ward exhibited social capital, or strong relationships maintained by recognition in a group of people (Bourdieu 1986). Groups that have social capital are often those that have experienced a "common fate" (Portes 1998), and the economic deprivation and relative ignorance by the city is just that. The neighborhood exhibits a strong "sense of place," where community ties are extremely important to the daily lives and survival of residents who are lacking in monetary wealth (Chamlee-Wright and Storr 2009, Fried 2000).

This led to an elevated sense of place (Massey 1993) related to the abnormally high levels of home ownership and generally longer lengths of residency in the Lower Ninth Ward. Home ownership in the neighborhood was significantly greater than in the rest of the city: In 2000, 59% of homes in the Lower Ninth Ward were owner occupied, compared to only 47% in New Orleans as a whole. Fifth four percent of residents had lived for at least ten years in their homes, compared to 35% in the city at large (GNOCDC 2009). This reluctance (or possible inability) to move also led to neighborhoods living near each other for a longer time, another thing that helped form strong community ties.

This social capital was evident in the types of conversations I had with residents. Rather than having impersonal talks, residents built personal relationships through our talks. They warned me that if I wanted to be respected in the neighborhood, I would have to act in a way that showed my "good home training": speak to everyone on the street, acknowledge everyone in a room when you enter it, never try to get right down to business in a conversation. Regardless of how I tried to start my interviews, residents in the Lower Ninth Ward consistently began our conversation with a detailed description of what they called their "Katrina Story." Whether I asked or not, I learned the exact details of the damage to their homes and their property loss. People described the deaths of friends, family and neighbors, the experience of being homeless after the storm, and their struggle to find employment again.

People did not treat me as someone to be wooed, and did not promote the neighborhood the way those in Broadmoor did. They knew the flaws of their neighborhood, and of the sustainability plans that had been pushed upon them, and did not hesitate to tell me about them. They were kind, open about their experiences and bluntly honest in their answers. Rather than meet in an office, a library, or some other professional and neutral location, they would often invite me to their favorite restaurants for our interviews and insist that I try certain dishes while we talked.

While Broadmoor's cultural capital was based primarily on a network of well-educated, well-off people who had the resources to build connections with the city government and outside institutions, the social capital of the Lower Ninth Ward was based on deep personal relationships less translatable into connections outside the area. The sense of community was based much more on ties made with neighbors, fellow attendees at religious services and other members of social organizations, such as social aid and pleasure clubs (Graham 2007). Once their fellow members and neighbors were forced to leave the neighborhood, the social capital of the area was destroyed. By definition, social capital is not able to survive after the dissolution of the group that it is based in. Once 72% of the Lower Ninth Ward residents were forced to move to other cities, social capital was greatly diminished.

Because of their lack of cultural capital, residents suffered during the rebuilding process. Between a lack of documents to prove ownership of inherited homes necessary for FEMA aid, discrimination by insurance companies and a lack of savings to invest in the

rebuilding of individual homes, neighborhood rebuilding on the house-by-house level was hindered and many residents became discouraged (Fullilove 2013). One resident told me that the post-storm experiences of her and her neighbors was a daily struggle for survival and something that imparted lasting trauma (Ford 2013):

> It [the rebuilding process] was heartbreaking. It almost destroyed me. [Now] when there's the threat of a hurricane on the Gulf, I go into a whole different thought process. I just get paranoid and anxious. The anniversary of Katrina coming up? That is really affecting me. It's always on my mind.

This helps explain why the idea of sustainability was something pushed from the outside, not an internal community value. Compared to the struggle to simply rebuild homes, the imposed-from-the-outside idea of sustainable development in the neighborhood was seen as a luxury. Some residents are apathetic about the sustainability plans in the area, and some are openly distrustful of the organization, believing that MIR will sell homes to anyone able to pay for them (Pepper 2013).

Developing sustainable houses and greenly built community centers was certainly not worth diverting attention from the fraught rebuilding process in the Lower Ninth Ward. Simply building new homes in the neighborhood was not enough for the Lower Ninth Ward to become a fully recognized sustainability neighborhood a la Broadmoor. In Broadmoor, sustainability is a marker of high class that is fully embraced and utilized to draw in new people. In the Lower Ninth Ward, though, residents recognized that sustainability as a development strategy was rendered irrelevant to their purpose because of their priorities. There is a small group of people interested in sustainability and

environmentalism in the Lower Ninth Ward, the Center for Sustainable Engagement and Development, but their work is not of great interest to many people in the community.

One of their board members admitted to me that even though he is proud of their work, it is difficult to engage community members in projects like restoring the bayous when people are still struggling with regaining their homes and basic community necessities (Malek-Wiley 2013). Even if it had been relevant, their lack of cultural capital would have still made such a strategy implausible. Without the presence of outside groups, the strategy would never have been considered by the neighborhood. Residents talked about these issues quite a bit in interviews.

> That whole national environmental movement around this [rebuilding], it hasn't been able to engage in conversations with everyday people. They don't think we have enough sense to understand it, we're not smart enough. People have such immediate struggles in this community, but you gotta find a way to integrate this into that (Major 2013).
>
> I think it [sustainability] just sounds good; it's a trendy thing to say. I just call it like I see it, girl. I have a plate, and I can only put so much on my plate (Ford 2013).
>
> It's [sustainability] not a priority on people's minds here … On a list of things [that people think about], it's probably number nine, if not number ten….I think there's fatigue from people. You get meeting-ed out (Pepper 2013).

The small amount of cultural capital that has been gained by the neighborhood after the storm can be seen in the Holy Cross Neighborhood Association, a group of residents meeting once a month to discuss the future of Holy Cross, a small part of the larger Lower Ninth Ward area that is more affluent than the rest. Meetings of the HCNA are focused on a controversial potential new housing development in the area (Goodyear

2014), and not at all on sustainability. However, when I attended a HCNA meeting, it was clear that the group of people coming to meetings is not demographically representative of the Lower Ninth Ward, but is rather far whiter and more educated than the rest. Thus, it is not an example of the acquisitioning of cultural capital by the Lower Ninth Ward as a whole, and it does not represent an increase in interest around sustainability.

Second, it is significant that the residents of Broadmoor came up with their sustainability plan internally while residents of the Lower Ninth Ward were simply subject to someone else's ideas. Broadmoor's residents were obviously excited about the idea of using this technique to revitalize their neighborhood, while Lower Ninth Ward residents were not united around the idea at all. Part of the reason for this is possibly the difference in who directly benefited from the plan. The MIR and Global Green projects were focused on building homes for a relatively small number of individuals. The number of houses they planned to build would have housed less than one percent of the neighborhood's pre-Katrina population.

Broadmoor, in contrast, stood to gain a great deal from the sustainability narrative: higher home prices, drawing new residents to the neighborhood and attracting "green" businesses. Interestingly, Broadmoor's definition of sustainability was much weaker than that of the Lower Ninth Ward. Broadmoor addressed the problem of storm water mitigation, made sure than certain buildings had lower environmental impacts and attracted green businesses. However, their plans did not comprehensively address the

environmental hazards faced by the area, which remains below sea level. The reluctance of many residents to raise their houses, and their resignation to the fact that their neighborhood will not survive another storm, makes it questionable whether a plan for the neighborhood could ever truly be qualified as "sustainable." Additionally, their definition made no mention of the social or economic parts of sustainable development, except to attract green businesses. Overall, it seems clear the aura of sustainability cultivated by the neighborhood is just a strategy for post-storm development.

The Lower Ninth Ward, on the other hand, had sustainability projects that addressed all aspects of sustainability. All houses (built and proposed) addressed the possibility of future flooding by being built above sea level and their materials are appropriate for the hot and highly humid climate of the city. Additionally, both MIR and Global Green make an effort to make houses affordable and accessible to former residents of the area. However, since there is no unified neighborhood interest in the idea of sustainability, it has not been a successful development strategy. According to Moore and Wilson (2009), values promoting sustainability are not well transmitted simply by the implementation of new codes and regulations, but rather by "collaborative and compelling stories about how the world might be better." These stories do not exist in the Lower Ninth Ward.

Chapter 5: Conclusions

Why has there been such differential success in applying the idea of sustainability to rebuilding neighborhoods after Katrina? In short, because the practice of urban sustainability in New Orleans is one that requires community commitment to sustainable values, the ability to navigate complex systems, and a high level of capital (both cultural and monetary) for the neighborhood. In Broadmoor, there has been a community embrace of sustainability. By using the idea of sustainability as a way to "save" the neighborhood from the threat of the Green Dot Plan, the BIA was able to ensure that residents would see sustainability as a positive quality for the neighborhood. Residents stood to benefit in several ways from it. There were physical amenities for the neighborhood, such as the community center, new school and new drainage systems. However, more importantly, the residents of Broadmoor stood to gain in social status and to increase the value of their homes. Thus, sustainability was a commodity for them. Residents can buy into the narrative of sustainability by buying a home in the neighborhood. The rise in area mean income since the storm clearly shows the influx of new, wealthier people.

Broadmoor's success is also related to the high education level and strong formalized community involvement of its residents before the storm. The area boasted lawyers, engineers, former city employees and educational officials among their residents, making it far easier for residents to find help with the difficult process of searching for aid. Additionally, the stable character of the community organization and the fact that the

community already had a plan for its own redevelopment made it an appealing site for volunteering and investing in new projects.

By contrast, the Lower Ninth Ward's sustainability projects came from outside groups who were not successful in fully involving residents and gaining their support. Quite simply, residents of the neighborhood saw (and still see) sustainability – at least as defined in Broadmoor – as a luxury. Residents of the Lower Ninth Ward were poor, did not have the necessary training to navigate the world of nonprofit tax law, and were limited by a lack of leisure time and the long time it took for them to be able to return home after the hurricane. Because of these factors, they were not able to invest in the narrative of sustainability as a development strategy.

Additionally, given the difficulty involved in rebuilding homes in the neighborhood, and the relative lack of formal education and knowledge about how to interact with foundations, universities and city government, residents were at a severe disadvantage in gaining resources for their redevelopment. Though the initial buildings by MIR and Global Green provided sustainable housing for some, residents were not able to continue the narrative of sustainability beyond those buildings because of this disadvantage in dealing with complex systems. The neighborhood was also lacking in money. Unlike the huge budget of grants and donations accrued by BIA, the Lower Ninth Ward only gained money for the building of specific houses for projects conceived by MIR and Global Green. There was not money for general sustainability projects that residents could have agreed on.

The case of these two neighborhoods sheds light on the classed nature of sustainability in general. The need for cultural capital, particularly related to making connections with businesses, educational institutions and foundations, is apparently very important in leveraging the idea of sustainability. This particular form of cultural capital is one that is not easily accessible to lower class people. Additionally, a large part of the idea of sustainability is based on regulations and certifications for buildings and businesses. Jumping through these hoops demands either a high level of formal education combined with a great deal of free time to navigate the process or access to an organization that will help you with the process. Again, these things are commonly unavailable to the less affluent.

This is an issue that will become even more important in the future, as cities continue to move towards making plans regarding their environmental impact, future resiliency and general sustainability. The way sustainability is currently conceived at the urban scale, as shown in this thesis, restricts it to upper class people. Without a plan for city sustainability that is deliberately designed by city government, fully funded, and does not require residents to opt in for them to be effective, poorer residents will be inherently disadvantaged and will not benefit from these programs. The issues of cultural capital and residential priorities must be considered by those who seek to implement urban sustainability, because these issues directly impact how those policies are received.

However, it is important to note that this case study leaves the question of race unanswered. The first is whether or not race has anything to do with the lack of interest in

sustainability overall. Guthman has theorized that spaces specializing in organic food, such as community gardens and farmers' markets, are "unbearably white" for people of color (2011), because of an overarching racial difference in what kinds of food are valued. This may be applicable to broader signifiers of sustainability as well. There is nothing about the ideas underlying sustainability that makes it inherently a white practice, and yet its participants are overwhelmingly white.

For several years, I have been deeply involved in the environmental movement. During that time, I have met hundreds of other people who identify as environmentalists or who are interested in sustainability. I have attended national environmentalist conferences like Energy Action Coalition's Powershift, attended UN climate change and sustainability negotiations with youth delegations and read the applications for said youth delegations. In all that time, I have encountered no more than a few dozen people of color. There are obviously cases in which poor communities and communities of color *do* mobilize around environmental issues. This commonly occurs when combating environmental justice issues, such as a concentration of pollutants near the homes of the poor (Swyngedouw and Heynen 2003). However, that kind of mobilization clearly does not translate into an interest in sustainability as a larger practice, either because members of those communities do not see it as beneficial to them or because they feel somehow excluded by the movement.

Additionally, it should be noted that New Orleans, with its lack of climate plan and disinterest in climate governance, is not necessarily representative of the attitude of most

cities towards sustainability. In many places, cities are leading the implementation of climate governance and sustainability policies in the absence of binding international agreements or comprehensive national policies. Groups such as the C40 Cities Climate Leadership Group and ICLEI Local Governments for Sustainability are made up of cities that regularly devise and publicize strategies for the reduction of greenhouse gases, the advancement of resiliency, and other issues. Perhaps because it is a fairly conservative city with a significant amount of fossil fuel money involved in lobbying politicians at the city and state levels (Sherry 2013), New Orleans is not involved in this movement. This thesis is not intended to say that urban climate governance and urban implementation of sustainability is not possible or effective in general. Simply, in New Orleans, the idea of sustainability has been used only at the neighborhood level, with varying definitions and with unequal success. For a complete discussion of urban climate governance and sustainability, see Bulkeley and Castan Broto (2013) and Whitehead (2013).

Sustainability and environmentalism are commonly discussed as neutral, scientific concepts, but this thesis has demonstrated that sustainability is not a politically neutral one. Sustainability is specifically defined in ways beneficial to those doing the defining, and this definition can be exclusionary. Additionally, the use of so-called sustainable development is not something that impacts people evenly, and should not be touted as a city planning strategy that is unquestionably beneficial. Furthermore, the political definition of sustainability means that planning that is labeled as such does not necessarily mean it equally considers the environmental, social and economic effects of decision-making. These issues will only grow more important as public interest in

sustainability increases. I hope that this thesis helps to shine light on the classed nature of sustainability and its unequal success as a development strategy in cities.

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