CONFRONTING THE 'TRIPLE BOTTOM' LIE: A FRAMEWORK OF

CONSIDERATIONS TO PRIORITIZE SOCIAL EQUITY IN ENVIRONMENTAL

INITIATIVES

by

TIMOTHY NICHOLAS MOSS

(Under the Direction of R. Alfred Vick)

ABSTRACT

Green infrastructure projects have been touted as a sustainable solution to address urban issues related to environmental, economic and social concerns. However, many have ultimately resulted in environmental gentrification. Oftentimes in these scenarios, social equity is completely omitted in pursuit of economic agendas that utilize an environmental language. Through an exploration of the underlying mechanisms of gentrification, and the current environmental 'trend', this thesis provides a framework of considerations to more holistically analyze the intent and impact of green infrastructure projects.

INDEX WORDS: environmental gentrification, green infrastructure, sustainability, social equity

CONFRONTING THE 'TRIPLE BOTTOM' LIE: A FRAMEWORK OF

CONSIDERATIONS TO PRIORITIZE SOCIAL EQUITY IN ENVIRONMENTAL

INITIATIVES

by

TIMOTHY NICHOLAS MOSS

BA, University of Georgia, 2004

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial

Fulfillment of the Requirements for the Degree

MASTER OF LANDSCAPE ARCHITECTURE

ATHENS, GEORGIA

2021

CONFRONTING THE 'TRIPLE BOTTOM' LIE: A FRAMEWORK OF

CONSIDERATIONS TO PRIORITIZE SOCIAL EQUITY IN ENVIRONMENTAL

INITIATIVES

by

TIMOTHY NICHOLAS MOSS

Major Professor: R. Alfred Vick
Committee: Katherine Melcher
                     Nik Heynen
                     Elizabeth Beak

Electronic Version Approved:

Ron Walcott
Vice Provost for Graduate Education and Dean of the Graduate School
The University of Georgia
May 2021

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

The United Nations (2019) has written that "slightly more than half of the world's population is currently living in urban areas, a share that is expected to rise to 60 per cent by 2030 and 66.4 per cent by 2050" (31). In considering what qualifies as an urban area, the definition varies throughout the world. In particular, the same report notes that the global population may have been at 85 per cent in 2015 based on "a globally harmonized definition of urban areas that combines demographic characteristics and density grids" (31). Regardless of the actual percentage, it is apparent that our populations will continue to concentrate in cities and the urban environment around the world.

The challenges related to climate change are, and will continue to be, an issue that cities around the world will be required to address (Elmqvist 2018; Baró et al. 2019; Meerow and Newell 2017). Planning and designing for sustainability and resilience are methods that many of these locations are utilizing to address these challenges. A major strategy for enhancing the sustainability and resilience of cities and communities has been the expansion of green infrastructure (Lennon and Scott 2014). Green infrastructure has been defined as a "strategically planned and designed network of natural and semi-natural areas, integrated with other environmental features and managed to conserve biodiversity and to deliver a wide range of ecosystem services" (Benedict and McMahon 2002; Haase et al. 2017, 42). In the context of the city, this can include any kind of

vegetative cover such as parks, forest, public green space, private gardens, and rooftop gardens.

Despite a rhetoric that purported social equity as a key principle within this sustainable approach, critics have suggested that it is often ignored in favor of environmental and economic sustainability (Immergluck and Balan 2018). Growth in urban inequality has continued, and as a result, greening and green infrastructure projects have often resulted in consequences such as environmental gentrification, which have negatively affected lower socioeconomic and minority groups. Over the last decades, research has sought to define the process of an environmentally-driven gentrification, to understand its underlying dynamics, and to address the ways in which it is resisted.

This thesis research began with an inquiry into environmental gentrification and the factors that produce it. It has been suggested that projects' scale could foster or deter the processes associated with environmental gentrification and that a "Just Green Enough" (JGE) approach that implements small scale green infrastructure projects is a strategy to avoid environmental gentrification (Wolch, Byrne and Newell 2014). With this in mind, this research originally asked the question: if a "JGE" approach and a large-scale approach are presented as opposing approaches to green infrastructure projects, then what exactly exists in between the two? Is it possible to provide high-quality, formalized projects that are more than a 'Just Green Enough' approach, but that do not carry the negative consequences that are associated with large-scale green infrastructure projects? Calling into question a 'JGE' approach, recent research findings have suggested that park function and location, not park size, are stronger predictors of gentrification (Rigolon and Nemeth 2020).

In recent history, several prominent large-scale green infrastructure projects have been completed throughout North America. The Highline in New York City may be the most well-known and the gold standard by which other cities compare their own initiatives, but projects like the Beltline in Atlanta are touted for similar successes. As someone from the Metro-Atlanta area, I was familiar with the BeltLine and the issues that have accompanied its creation. Environmental gentrification is one of those issues. In order to gain a greater understanding of the Atlanta BeltLine project, it is useful to consult the original document that served as the genesis for the project.

Ryan Gravel's (1999) Master's thesis, which was the original proposal for the BeltLine, made several important points throughout the paper. The first was in relation to the mistakes that could be made with the BeltLine's creation. Gravel worried that the project might be reduced to a "historic trolley tour" with inadequate speeds and stops to fulfill its potential as an alternative mode of transportation in a city notorious for its traffic issues. Almost more presciently though, he wrote that "it could become something so bold and intrusive that it not only severely disrupts neighborhoods along its route, but also overpowers the subtle qualities that make it profound as a space that offers important information about Atlanta's history and urban form" (20). Given the transformations that many neighborhoods along the BeltLine have experienced, it would appear that this concern has been realized0. The second was in relation to phasing of the project. In considering how it should be conducted, Gravel expressed concerns of historical equity, in addition to considerations of economic feasibility. He recognized that construction priorities in already gentrified, middle class neighborhoods "might exacerbate historical discrimination in public transportation against African American neighborhoods" (Gravel

1999, 73). For this reason, suggestions were made for a more racially and economically

diverse area that also had a "tremendous" amount of redevelopable territory. The last

point made was in relation to his awareness of gentrification. When speaking of equity,

Gravel notes already gentrified areas. The area that he suggests for development

possesses "significant infill development potential and gentrification pressures" (76). In

fact, "southeast line neighborhoods like Cabbagetown, Reynoldstown, Grant Park,

Ormewood Park, Peoplestown and West End are currently in varying stages of early

gentrification" (76). Since the creation of the BeltLine, these neighborhoods have all

gentrified. Given this discussion of gentrification, what is the relationship between green

infrastructure and environmental gentrification? Prior to the BeltLine project's

construction, or even its announcement, many of the neighborhoods the trail would cut

through were already gentrifying. Did this mean that the large-scale green infrastructure

projects were not responsible for environmental gentrification?

    Anguelovski et al. (2018) suggest the idea that all gentrification trends are

essentially the same. As they state:

> When a place that had been perceived as undesirable by those in the
>
> middle or higher end of the housing market becomes attractive for any
>
> number of reasons (e.g. global real estate pressures, reduction in crime,
>
> physical upgrades, proximity to cultural centers or jobs), affluent or
>
> middle-class buyers and investors may begin to see opportunity in that
>
> place. (460)

Regardless of the 'gentrification trend', "promoting the displacement of the

disadvantaged is, today, without doubt, technically considered professionally undesirable,

but planners are not held accountable for doing so" (Marcuse 2015; 1268). How can we as planners, landscape architects, architects, etc. (allied design professionals) be held accountable for our own work? With this thought in mind, the following research asks: What questions should landscape architects (and other design professionals) ask (and answer) in an attempt to avoid environmental gentrification in the projects they engage in?

Centered on a thorough literature review of environmental gentrification and its associated terminology, including eco-, ecological, and green gentrification, this thesis is a qualitative analysis of recurring themes and trends within the scholarship. In addition to utilizing the UGA Libraries Multi-Search tool, Google Scholars and its "cited by" option allowed for an in-depth exploration of the topic. The websites of various non-profit and municipal organizations were also consulted for information and insight. Previous quantitative analysis, literature reviews, and case studies provided many of the insights explored in this thesis. Interviews were conducted with relevant leadership of several local projects, which serve as the basis of the case studies discussed later in the work. Through an exploration of environmental gentrification, and gentrification more broadly, the indicators and vulnerabilities associated with the process, and ways in which to resist, as well as lessons learned from case studies, I create a framework of considerations that are intended to establish a more holistic perspective for engaging with, and protecting, the most vulnerable communities.

Before continuing with the literature review, it is important to acknowledge several points. The first is that when discussing social equity, we are most often having discussions regarding racial equity. Similarly, environmental justice is often directly

reflecting racial justice issues. Second, this research focuses primarily on environmental gentrification and social equity. Although it essential to understand the underlying mechanisms of gentrification, the following research most thoroughly explores the relationship between green infrastructure and environmental gentrification and considerations of social equity. Oftentimes, this has included concepts and ideas taken from other research topics including environmental justice and community design/community-based design/participatory design. These fields, for decades, have echoed similar calls for equity and empowerment that are presented within this work. Many of the questions explored in this thesis reflect this similarity, but do so as a response to information provided, or perhaps lacking, within the environmental gentrification literature. Building on the work of decades of scholarship and activism, this research continues to press for greater scrutiny within the design professions to ensure, among other concerns, greater social equity.

CHAPTER 2

LITERATURE REVIEW

In attempting to explore environmental gentrification, it is essential to explore the roots of gentrification. The original concept and coining of the term "gentrification" can be traced to the work of British sociologist, Ruth Glass. As Glass (1964) observed, gentrification was the process whereby working-class residents of London neighborhoods were displaced by "invading" middle-class residents. Once initiated, the process continued until all or nearly all the working-class residents were displaced. In addition to causing the displacement of the former residents, Glass noted how the process had changed the whole social character of the district, as well.

Since Ruth's publication, other scholars have contributed to broaden the definition and its context. Quastel explains that "gentrification research classically has examined the processes by which working-class residential neighborhoods become inhabited and transformed by middle-class and wealthy home buyers and renters, and by landlords and professional developers who get those markets" (Smith 1982; 2009, 698). As a result of this process, the city can be thought of as a site of decay and regeneration, of "winners" and "losers" through various capital accumulation strategies, and the transformations created by new values systems and generational change.

Occasionally, discussions of gentrification have separated the process from displacement. For this reason, several scholars have sought to clarify what is meant by the term, gentrification. Miller (2106) and Marcuse (2015) share similarities in their

definitions and provide clarity in how gentrification should be considered. Miller (2016, 286) defines gentrification as "a process that includes the following four elements: the reinvestment of capital, the social upgrading of locale by incoming high-income groups, landscape change, and direct or indirect displacement of low-income groups." In his discussion of gentrification, Marcuse (2015, 1264) explains that the term "as it is often used confuses four distinct processes: demographic displacement, physical upgrading, economic upgrading, and social upgrading." For his purposes, he returns to what he terms the 'original' meaning of "displacement of a lower-income population by a higher-income one through some combination of three forms of upgrading: economic upgrading – uppricing, physical upgrading – redevelopment, and social upgrading – upscaling" (1264). As Johnson et al. (2017, 19) bluntly state, "gentrification is urban revitalization driven by profit that results in the displacement of historically marginalized working-class communities and communities of color." For the purposes of this thesis, understanding gentrification as a process that includes displacement is central to how the concept is addressed.

Also relevant to the discussion of the underlying processes of gentrification, and subsequently environmental gentrification, is the concept of gentrification occurring in waves. Gentrification, as it is understood in the contemporary setting, has significantly changed over the course of decades (Lees 2000). Hackworth and Smith (2001) sought to chronicle and theorize on the changing role of the state in the process. Each phase can be thought of as a wave. During the first wave, gentrification can be thought of as being sporadic, highly localized, and significantly funded by the public sector. "Governments were aggressive in helping gentrification because the prospect of inner-city investment

(without state insurance of some form) was still very risky" (Hackworth and Smith 2001, 466). With the second wave came a surge and expansion of the process into central city neighborhoods. Local state efforts sought to prod the private market rather than orchestrate the gentrification themselves. The process was integrated "into a wider range of economic and cultural processes at the global and national scales." (467) According to Hackworth and Smith, the third wave became distinct for four reasons. First, gentrification continued to expand, both in and beyond the inner city. Second, larger developers became involved in the process. Third, effective resistance to the process has declined. Lastly, the state became much more involved in the process than it had previously been during the second wave. It included "large-scale capital developments (with infrastructures of marketers and public relations), government policies, and public-private partnerships" (Quastel, 2009, 698) as key drivers.

As Georgia State University Sociology Professor Deirdre Oakley (Johnson et al. 2017, 37) explains:

> City governments ultimately have a "vested interest" in gentrification. The reason is simple: higher property values lead to higher taxes, and higher taxes mean more revenue. More revenue allows city governments to spend more cash on its citizens. More spending can be good overall – it helps make projects like the BeltLine and Atlanta Streetcar possible – but it can also accelerate gentrification.

In establishing what the role of the state is and why municipalities would be motivated to engage in the gentrification process, scholars have made clear many of the underlying dynamics behind gentrification.

Also critical to understanding gentrification is Smith's rent gap theory (1979, 1982, 1987, 1996). Numerous scholars exploring issues related to environmental gentrification cite Smith's concept in helping to explain how and why gentrification occurs (Quastel 2009; Eckerd 2011; Curran and Hamilton 2012; Pearsall 2013; Goodling 2015; Marcuse 2015; Anguelovski et al. 2018; Kim 2018). The "rent gap" is "the disparity between the potential ground rent level and the actual ground rent capitalized under the present land use" (Smith 1979, 545). The "rent gap" theory explains gentrification (capital revaluation in Smith's discussion) as the result of two primary factors – the depreciation and deterioration of older built structures and the increase in the potential income returns from the land on which they were built. "When the potential income return from land rents exceeds the perception of risk by investors, neighborhoods become likely candidates for redevelopment" (Richardson, Mitchell and Franco 2019). As neighborhood housing stock grows older and its tenants poorer, "the chasm widens between what locals can accomplish and the potential returns for capital-intensive development, until profit can be rendered through gentrification" (Quastel 2009, 706).

Although the original theory touched on ideas of physical deterioration, depreciation and the potential in land value appreciation, the concept can be thought of more generally in the contemporary setting. Goodling, Green and McClintock (2015) note that:

> There is always some physical location that is underdeveloped and/or devalued relative to others. It is here, when the gap between actual and potential market value is wide enough that redevelopment and

rehabilitation into new land uses becomes a profitable prospect, and

capital begins to flow back. (509)

In her case study of the Elysian Valley community, Kim (2018, 185) noted that "the

promise of over a billion dollars of public investment dedicated to restoring the L.A.

River appears to increase the rent gap of riverside land, prompting developers to buy up

properties in order to capitalize on this future value (Smith 1996)." As interest and

property purchases increase, a "rent gap" is eventually achieved, at which point the

existing lower-income residents are displaced due to increases in rental and sale prices,

increases in taxes, sociocultural transitions, etc.

Bryson (2013, 583) notes similar processes with respect to environmentally

contaminated spaces when he explains that "contaminated land lowers value on

potentially valuable land, thus creating a rent gap for investors to attempt to capture later

in the gentrification process." In this scenario, brownfield redevelopment projects are

initiated in an attempt to capture the resulting increase in the low value of

environmentally contaminated land, since the conversion into green space is one of the

most effective ways to maximize the investment. This "environmental" rent gap is

central to the process of environmental gentrification (Bryson 2013; Pearsall and

Anguelovski 2016). Building on Smith's rent gap (1987) and expanding on Bryson's

(2013) concept of environmental rent gap, Anguelovski et al. (2019) propose the concept

of 'green gaps' to "describe how municipalities, investors, and privileged residents find

new potential 'green rents' from greening projects, couching them under discourses of

win-win benefits and public goods for all" (1066). In the green gap theory pollution and

contamination have the potential to depress property values, and the green gap is created

through the "perceived benefits and accrued values of clean-up and green intervention" (1072).

What are the indicators of gentrification?

Despite numerous studies and various indicators, there is little consensus over which indicators best represent gentrification (Anguelovski et al. 2018; Pearsall and Eller 2020). Although there is not universal agreement on how to identify gentrification and the associated effects, most scholars agree that the primary dynamics are closely tied to the process that was first described by Ruth Glass in the 1960s (Anguelovski et al. 2018). Glass' observations noted "a new urban gentry contributing to change in the physical and cultural character of working-class quarters, including area businesses, consumption habits, and internal relationships" (Anguelovski et al. 2018, 460). Despite arguments in which measures are analyzed, there is consensus that it must be across multiple variables, rather than just a single factor to avoid oversimplification of issues. Studies conducted by the Furman Center (2016) would suggest the importance of analysis at the hyper-local scale to determine whether neighborhoods are actually gentrifying. In a similar context, research conducted by Pearsall and Eller (2020) highlight the importance of analyzing indicators that are most reflective of the local study area.

Common indicators have included changes in: median household income (Freeman 2006; Pearsall 2010; Furman Center 2016; Connelly 2018; Rigolon and Németh 2018; Pearsall and Eller 2020; Rice et al. 2020), race (Eckerd 2011; Furman Center 2016; Connelly 2018; Rigolon and Németh 2018; Pearsall and Eller 2020; Rice et al. 2020), ethnicity (Furman Center 2016; Anguelovski et al. 2018; Rice et al. 2020), age (Anguelovski et al. 2018), level of education (Eckerd 2011; Anguelovski et al. 2018;

Connelly 2018; Rigolon and Németh 2018; Pearsall and Eller 2020; Rice et al. 2020), poverty rate (Anguelovski et al. 2018; Pearsall and Eller 2020), professional status (Eckerd 2011), homeownership rate (Anguelovski et al. 2018; Pearsall and Eller 2020), housing values (Freeman 2006; Pearsall 2010; Anguelovski et al. 2018; Rice et al. 2020), and rent (Freeman 2006; Pearsall 2010; Furman Center 2016; Connelly 2018; Rigolon and Németh 2018). In their research, Anguelovski et al. (2018) also determined that less common indicators could include changes in housing construction, home mortgage lending, social media usage, and number of new businesses such as coffee shops. An important point brought up by the Furman Center (2016) research also relates to how to identify gentrification. In examining the sub-borough areas, issues arose with identifying which actually gentrified. Some gentrification occurred in small sections within the sub-borough areas but were not reflective of the entire area. Although some gentrified, they were missed because the areas were "higher income" and likely did not show a change in rent above the median because of the variety of population within the sub-borough areas.

Predicting vulnerability:

In addition to indicators used to study whether gentrification has occurred, researchers have also determined a number of factors that may predict vulnerability to gentrification, as well. These indicators tend to reflect the vulnerabilities of the residents, as well as the characteristics of the neighborhoods themselves. It is important to consider that the prospect of a project may be enough to initiate rounds of speculation and subsequent gentrification (Immergluck 2009; Pearsall 2010). In his study of the Atlanta Beltline project, Immergluck (2009) specifically explored the announcement effects on property values of the large, multipurpose (re)development initiative. He observed that

early, initial coverage of the planning process matched with the period of rapid appreciation from the time of announcement of the project to the formal policy adoption of tax increment financing (TIF). In researching brownfield redevelopment initiatives, Pearsall similarly observed that "making – and, in many instances, the promise of making – these neighborhoods cleaner and safer places to live produced a rapid increase in the value of nearby real estate" (2010, 878). For this reason, it is crucial to examine potential vulnerabilities of communities before projects are announced, let alone initiated.

Although discussing them in relation to natural disasters, Dooling 2012 noted the following as indicators of vulnerability to displacement: poverty, low household income, unstable employment, renter status, lack of assets, lack of access to services, and strength of social networks. Bates (2013) determined that areas were vulnerable to displacement when they had higher-than average populations of renters and communities of color, few college degrees, and lower incomes. In terms of neighborhood character and location, several indicators of vulnerability have emerged among various research and analysis. Proximity appears to be a strong indicator of vulnerability to displacement (Immergluck 2009; Eckerd 2011; Sandberg 2014; Chapple and Zuk 2016; Gould and Lewis 2017; Immergluck and Balan 2018; Rigolon and Németh 2018; 2020; Pearsall and Eller 2020). This includes proximity to downtown (Sandberg 2014; Rigolon and Németh 2020), the central business district (Eckerd 2011), transportation (Eckerd 2011; Chapple and Zuk 2016; Gould and Lewis 2017; Rigolon and Németh 2020), large-scale projects (Immergluck 2009; Immergluck and Balan 2018), and higher priced/gentrified areas (Chapple and Zuk 2016; Pearsall and Eller 2020). Historic architecture also served as an indicator (Eckerd 2011; Chapple and Zuk 2016; Gould and Lewis 2017)

Environmental Gentrification:

Although other authors had alluded to gentrification driven, or perhaps guided, by ecological considerations (Robert Keil 2003 discusses ecological modernization), an environmentally centered term of gentrification is not addressed until scholarship published in the early 2000s. Terms have included environmental gentrification (Sieg et al. 2004; Banzhaf and Walsh 2008; Checker 2011; Curran and Hamilton 2012), ecological gentrification (Dooling 2009; 2012; Anguelovski et al. 2018; Harper 2020), eco-gentrification (Quastel 2009; Cucca 2012), green gentrification (Gould and Lewis 2017; Anguelovski et al. 2018; Anguelovski et al. 2019), and carbon gentrification (Rice et al. 2020). Although each definition relates in some manner to environmental considerations and their relationship to gentrification, each author's word choice reflects an intentional decision made to reflect different perspectives related to the process.

In discussing the willingness to pay for spatially differentiated improvements in air quality, Sieg et al. (2004) noted that wealthy households will move to communities with previously low levels of public goods as a result of large policy changes that produce environmental improvements. As they observed, "this environmental gentrification leads to significant price increases in communities with large improvements in air quality and price decreases in communities with small air quality improvements" (1074). Using an analytical model, Banzhaf and Walsh (2008) tested and confirmed the link between changes in environmental quality and local changes in community demographics, thus reinforcing the idea of environmental gentrification.

Whereas the aforementioned scholarship demonstrated an almost incidental relationship between environmental quality and gentrification, Dooling's (2009) research

highlights the intentional use of an ecological rationality and an espoused environmental ethic as a mechanism to foster gentrification. Dooling's term, ecological gentrification, is defined as "the implementation of an environmental planning agenda related to public greens spaces that leads to the displacement or exclusion of the most economically vulnerable human population – homeless people – while espousing an environmental ethic" (630). The term is intended to highlight the contradictions that emerge between a purported 'environmental rationality' and the associated environmental ethics, and the "production of injustices for politically and economically vulnerable people" (630). Dooling notes the work of Slater (2006), which identified a shift in the analytic perception of gentrification as the displacement of the economically vulnerable to a welcomed tool used in the process of revitalization. For Dooling, ecological gentrification is intended to challenge the notions of how green space is defined, used and valued. In particular, "ecological gentrification problematizes conventional planning approaches to using public green spaces as tools facilitating social reform and public health objectives, and as tools promoting economic development for the benefit of private-property owners" (631).

Shortly after Dooling's (2009) publication, Quastel presented eco-gentrification as an ecologically minded gentrification utilized by the private sector. Unlike Dooling's work, which focuses on issues related to concepts of home, homelessness and public green space, Quastel's (2009) focuses more broadly on "ecological aspects of, or the role in gentrification of, discourses, social movements, and state policies of the environment" (694). For Quastel, the term eco-gentrification is reflective of how "gentrification draws on and thereby reflects a growing ability by real estate developers and their target

consumers to use discourses and policies of the environment" (695). With her use of the term, environmental gentrification, Checker (2011) shifts the concept from an incidental relationship to one that reflects intent similar to those put forth by Dooling (2009) and Quastel (2009). As she explains, "environmental gentrification describes the convergence of urban redevelopment, ecologically-minded initiatives and environmental justice activism in an era of advanced capitalism" (Checker 2011, 212). The term is intended to more appropriately reflect the political, economic and social contexts of the contemporary process. Curran and Hamilton (2012) use the term environmental gentrification to describe a situation in "which environmental improvements result in the displacement of working-class residents as cleanup and reuse of undesirable land uses make a neighborhood more attractive and drive up real estate prices" (1027). In a later publication, Dooling (2012) more broadly defines ecological gentrification as "the uneven distribution of benefits associated with a planning effort driven by ecological agendas or environmental ethics" (104). She continues by explaining that "it seeks to associate displacement of people (as a process typically associated with economic development and neighborhood change) with environmental changes stemming from formalized planning efforts, where the changes are assumed to be and referred to as universally beneficial" (104). Gould and Lewis (2017) frame the process of greening initiatives followed by gentrification as green gentrification. As they explain, it is "to represent how green initiatives cause and/or enhance gentrification" (2). Despite numerous terms related to the environment and gentrification, i.e. environmental gentrification, ecological gentrification, etc., Gould and Lewis explain that their choice to use the phrase green gentrification is meant to "align with what the agents of these urban

processes claim to be doing for cities: 'greening'" (12). In their research, Rice et al.

(2020) highlight a particular focus on what they call a "form of ecological gentrification

associated with ideas of 'low-carbon' or 'climate-friendly' neighborhoods" (145). They

note that although ecological gentrification has been more widely studied in connection

with other forms (parks, green space, brownfield remediation, etc.), it appears that there

are also "unique features in both the drivers and outcomes of neighborhood change that

accompany a focus on climate-change mitigation through urban design." (145)   Building

on earlier literature, Rice et al. (2020) call for a change in thinking of ecological

gentrification as something that occurs beyond what might be thought of as "traditional"

green urban ecological interventions. This extended focus should seek to include

interventions that are thought of with the "gray" ecologies of urban density and

sustainability (alternative transit, mixed-use density, energy efficiency, etc.) Particularly,

they explain that "urban carbon politics produce a distinct form of gentrification, as

middle- and upper-income residents reject classic forms of suburbanization in favor of

residential choices that afford them access to low-carbon infrastructure and mixed-use

urban density" (148). They warn that this type of eco-gentrification is distinct and

concerning, because, unlike other projects that focus on specific sites or projects, carbon

politics are something that touches on almost all aspects of urban design and urban living.

Based on their research, Rice et al. found a "clear and direct relationship between

gentrification, the desires of some urban residents for (what they understand as) low-

carbon living, and municipal efforts to address climate change" (150). This carbon

gentrification is defined as "middle- and upper-income residents' preference for

neighborhoods that offer the opportunity to walk, bike and ride transit in a mixed-use,

dense urban environment, as a means to lower their carbon footprint, which are often, but not always, centrally located in urban areas, leading to a rise in housing prices in those areas" (150). Starting with Dooling's (2009) term, ecological gentrification, scholars have utilized terminology intended to highlight the use of environmental language to foster gentrification processes.

The 'Triple Bottom Line' and other sustainability considerations:

Environmental, economic and social issues have factored into many of the definitions regarding sustainable development, particularly the Brundtland Commission report provided by the United Nations World Commission on Environment and Development in 1987 which has influenced much of the ensuing scholarship (Finn and McCormick 2011). The "triple bottom line" (Elkington 1994) concept posits that the achievement of urban sustainability is dependent on addressing the trio of environmental, social equity and economic development concerns. However, Saha and Paterson's (2008) analysis of sustainable urban development policies revealed in their survey of 216 American cities that "narrow environmental concerns continue[d] to be the focus of most municipal sustainability efforts, with economic development the second-tier concern and social equity a distant third-tier concern" (Finn and McCormick 2011, 398). Additionally, Gunder's (2006) work suggests that given the all-encompassing nature of sustainability's conceptualization:

> Much of the policy focus on heretofore core urban equity concerns has been abandoned in favour of policies promoting specific spatial development patterns (e.g. urban densification, brownfield redevelopment) or infrastructure investments (e.g. mas transit) that have much more

19

powerful utility for capital and elite citizens than for marginalized

populations generally. (Finn and McCormick 2011, 398)

These analyses of sustainability and the often touted "triple bottom line" approach

highlight how the social component is failed in pursuit of environmental and economic

goals. Rather than through the use of this conceptually balanced approach, sustainability

can only be achieved by focusing on social justice and economic equity (Marcuse 1998;

Agyeman and Evans 2004; Gunder 2006; Finn and McCormick 2011).

As Quastel (2009) states in his exploration of eco-gentrification, understanding

concepts related to political ecologies helps to inform how a language surrounding the

sustainable and environmentally focused has been co-opted by developers and other

private entities, often in coordination with public organizations, to further agendas that

result in environmental gentrification. He explains that "interpreting the political

ecologies of gentrification involves recognizing the ways in which material relations and

uneven resource consumption, concepts of nature, and the politics of environmental

management are worked into or involve gentrification processes" (Quastel 2009, 697).

Sustainability policies have become worked into, and help facilitate in novel ways, the

capitalist growth dynamics of cities (Quastel, Moos and Lynch 2012). Often termed as

"sustainability fixes", these policies focus on cleanup efforts that allow cities to brand

themselves as "clean and livable" in an attempt by municipalities to balance

environmental pressures with finding new forms of urban growth. As a result, "the

material conditions that comprise urban environments are controlled, manipulated and

serve the interests of the elite at the expense of the marginalized populations" (Heynen,

Kaika and Swyngedouw 2006, 6). With respect to sustainability initiatives, this means

that "moving dirt, protecting urban ecosystems, or otherwise manipulating physical nature are political ecological acts that can transform the power dynamics within a city. Thus, by manipulating it, powerful groups can use the natural environment as a tool in the gentrification process" (Bryson 2013, 579-80).

This co-opting of the natural environment to be used as a tool in the gentrification process has been discussed extensively by those exploring the process of environmental gentrification (Dooling 2009; Quastel 2009; Checker 2011; Cucca 2012; Bryson 2013; Loughran 2014; Pearsall and Anguelovski 2016; Harper 2020; Rice et al. 2020). This often revolves around a language of sustainability. Part of the danger of the term, sustainability, is that it serves as a catch-all for any number of ideas and processes (Baker 2006; Cucca 2012). Cucca (2012, 1) notes that "sustainability is far from being an effective paradigm, being too broad, vague and economically-centered, and with no specific environmental or social dimensions clearly set out." Beyond this vagueness, it has been accused of promoting "a sort of green competitiveness in the market economy, also known as 'green growth'" (Cucca 2012, 2). There is a danger implicit in policies which have theoretical underpinnings in the approach to sustainability, "but which in practice are simply sustaining a green economic growth, with the paradoxical risk of fostering greater inequality among social groups" (2). Additionally, the 'apolitical' nature of actions taken on behalf of the environment makes the term more difficult to contest (Dooling 2009; Checker 2011; Pearsall and Anguelovski 2016; Anguelovski, Connolly, and Brand 2018; Anguelovski et al. 2018; Kim 2018). Through its use of sustainable language, also utilized by environmental justice activists, environmental gentrification creates an appearance of politically neutral planning that is "consensual as

well as ecologically and socially sensitive" and yet in practice "it subordinates equity to profit-minded development" (Checker 2011, 212). Checker argues that:

> Environmental gentrification entails specific kinds of compromises and co-optations that in turn indicate a significant shift in the terrain of local politics … residents were encouraged to accommodate a technocratic compromise that shunned politics as unseemly and counter-productive, and that sought instead only to engage 'community' at the level of governance. At that level, technocratic issues, such as where to put green space and what to do about parking, could be delinked from the questions of social justice to which they were once attached. A rubric of sustainability then becomes part of a post-political project that sidelines questions of real political inclusion and justice in the name of technocratic, community base deliberation. (225)

Municipalities often implement a language in their sustainability plans which "invokes the metaphor that a 'rising tide lifts all boats,' yet there is a trend of inequality that marginalizes and displaces vulnerable communities to make way for 'smart growth,' 'green space,' and other environmental amenities" (Pearsall and Anguelovski 2016, 8). Harper (2020) addresses the idea that the signifier of 'Nature' by itself does not exist and only is understood by its relationship to other signifiers. As the author explains, "the implications of the emptiness of Nature in the context of ecological gentrification is that, whilst Nature is often seen as a source of Truth, or of meaning, it is essentially meaningless and produced by the society which invokes its concept" (60). As a

consequence of this emptiness, the use of Nature as a project's justification becomes seemingly incontestable.

Perspectives on urban greening and their almost irrefutable benefits can be thought of as the urban greening orthodoxy (Anguelovski, Connolly and Brand 2018). They define the 'urban greening orthodoxy' as "the academic and political discourses promoting the environmental, health, and socio-economic benefits of urban greening" (418). This orthodoxy has been shown to generate powerful and seemingly immutable justification for greening projects while minimizing the political consequences and the highly inequitable socio-spatial outcomes that they intensify. "Urban greening is often employed within the contemporary planning orthodoxy in a manner that favors large-scale, high profile, socially homogenous spaces rather than small-scale, heterogenous and neighborhood oriented spaces" (Connolly 2018; 65). When discussing [environmental] gentrification and its consequences, the effects are routinely referred to as 'unintended'. However, environmental gentrification is not simply an 'unintended consequence' of poor planning (Rigolon and Németh 2018). Instead, "public agencies with the support of the development community are deliberately establishing new green spaces in underserved areas with depressed property values in order to exploit rent gaps and attract well-heeled newcomers" (Rigolon and Németh 2018, 72). Urban sustainability planning and processes of city re-naturing are incorporated into public-private redevelopment strategies that intensify gentrification processes (Anguelovski et al. 2018). Green infrastructure serves as a catalyst for gentrification with the sustainability framework used to both facilitate and conceal this process. The call for more urban green space must be critically examined to avoid the consequences of green gentrification.

In addition to its perception as 'apolitical' and, therefore, uncontestable, the

language of sustainability is engineered to cater to specific wants and desires. The

language of a sustainable and 'green' lifestyle has been utilized to target a very specific

audience: higher-income residents (Gibbs and Krueger 2007; Quastel 2009; Checker

2011; Eckerd 2011; Cucca 2012; Quastel, Moos and Lynch 2012; Reichl 2016; Haase et

al. 2017; Anguelovski et al. 2018; Rice et al. 2020). Put bluntly, the language and

subsequent projects targets white, socially and economically-privileged residents and

tourists (Reichl 2016; Anguelovski et al. 2018). In rebranding themselves as climate

friendly, sustainable spaces, cities (and the developers who often lead these initiatives)

seek to appeal to affluent, eco-conscious in-movers and the wealth they bring with them.

Rice et al.'s (2020) interview with one housing-justice group member captured it best

when they said: "the climate friendly lifestyle [of Seattle] has very much 'been marketed

by big developers and people with a lot of capital … it's a marketing strategy and a

money-making strategy'" (158). Quastel, Moos and Lynch (2012) suggest that these

types of policies are part of entrepreneurial cities efforts to attract in-movers, in an

attempt to reap both environmental and growth benefits of a shift towards more

environmentally friendly "new economy" industries such as tech and other "creative

class" industries. In their study of "walkability", Quastel, Moos and Lynch (2012) posited

that the desires of the eco-conscious could be understood through the concept of

"positional goods." The concept of "positional goods", which states that consumers

items serve to display class rank and cultural "distinction", is utilized with relation to

gentrification to demonstrate how "middle- and upper-class homeowners make use of the

symbolic aspects of their homes to display their social status or to gain affiliation with the

cultural capital of artists or creative workers" (1059). A concept like walkability

becomes a new form of distinction and "walkable" neighborhoods "are approached as

new sites of consumption mediated by tropes of urban environmentalism that obscure the

underlying social dynamics of these areas" (1059).

Fighting environmental gentrification:

In seeking to address the concerns of potential environmental gentrification,

scholars, nonprofit organizations, and other activists have offered two crucial tools to

resist the process: policy and strength of the community. As Marcuse (2015) stated:

> Gentrification is a socially created problem, and the answer must be
>
> addressed in the first place by social policies. The problem should be
>
> tackled comprehensively through a city-wide housing plan established
>
> through democratic and participatory planning through binding guidelines
>
> aimed at creating an adequate supply of housing across all income ranges
>
> and prioritizing measures to provide decent and affordable housing for
>
> those who are not provided for in a profit-driven market. (1265)

Gould and Lewis (2017;15) echo a similar tone when they emphasize that "urban

greening creates environmental inequality unless equity oriented public policies

intervene, and increased inequality is incompatible with sustainable development."

Policies related to providing affordable housing and other forms of economic assistance

are crucial to fighting displacement (Newman and Wyly 2006; Immergluck 2009; Cucca

2012; Pearsall 2013; Wolch, Byrne and Newell 2014; Tretter 2015; Johnson et al. 2017;

Gould and Lewis 2017; Chestnut and Krasny 2018; Immergluck and Balan 2018; Kern

2018; Trudeau 2018; Rigolon et al. 2020). In fact, prior to initiating any part of the

project process, substantial planning and policy attention are critical to avoiding the displacement of existing residents, particularly in lower-income neighborhoods (Immergluck 2009). There are numerous options to consider when attempting to provide for affordable housing. This includes: provision of sufficient affordable housing (Immergluck 2009; Cucca 2012; Wolch, Byrne and Newell 2014; Tretter 2015; Johnson et al. 2017; Chestnut and Krasny 2018; Immergluck and Balan 2018; Rigolon et al. 2020), housing assistance (Newman and Wyly 2006; Pearsall 2013), rent stabilization (Pearsall 2013; Wolch, Byrne and Newell 2014; Johnson et al. 2017), rent controls (Wolch, Byrne and Newell 2014; Johnson et al. 2017; Chestnut and Krasny 2018), community land trusts (Tretter 2015; Johnson et al. 2017; Chestnut and Krasny 2018; Trudeau 2018), tax assistance (Tretter 2015; Johnson et al. 2017) project subsidies (Johnson et al. 2017); set-asides for local ownership and employment (Wolch, Byrne and Newell 2014; Chestnut and Krasny 2018), inclusionary zoning (Tretter 2015; Chestnut and Krasny 2018), and shared equity housing (Wolch, Byrne and Newell 2014; Johnson et al. 2017). These are just a few of the many ways in which ensuring affordable housing is being addressed.

City policy can make a difference (Curran and Hamilton 2018). In recent times, municipal governments have recognized the role they can play in resisting gentrification and have taken measures to do so. In February 2020, Atlanta Mayor Keisha Lance Bottoms took measures that might be considered a course-correction when the city halted all building permits near a prominent park project over concerns that rapid gentrification was occurring. The Westside Park at Bellwood Quarry is recognized as a green space project that will ultimately become the city's largest park and that has already become an

economic driver. As Keenan (2020, online) notes, "in recent years, a Westside development boom has spurred concerns of gentrification and the effects it could have in communities that have historically been overlooked by real estate investors." According to a press release (Smith and Johnson 2020, online) from the Mayor's office, the Executive Order was to refuse to accept new applications "for rezonings, building permits for new construction, land disturbance permits, special use permits, special administrative permits, subdivisions, replattings, and lot consolidations for non-public projects in the neighborhoods surrounding Westside Park to address rapid gentrification occurring in the area." They emphasized that a key pillar of the administration's affordable housing plan is ensuring long-term residents aren't priced out of their communities. By issuing the moratorium, the city administration hoped to allow for an opportunity to analyze the current development trends and find a way to ensure that the trends would not further the displacement of long-term residents. Officials were expected to develop an "Equitable Development Framework" to address the displacement issues in the area.

In addition to exploring the ways in which policy can resist gentrification, "we must also attend to the mobilization and interaction of a wide range of stakeholders – residents, activists, advocates, allies, and non-human natures – to understand the unique socio-natures and political strategies that develop in different urban spaces" (Curran and Hamilton 2018, 34). In examining environmental justice campaigns, Pearsall and Anguelovski (2016) identified tactics employed by environmental justice activists include: "coalition building, collective neighborhood action, community organizing, and direct or confrontational tactics, such as lawsuits or direct denunciations" (9).

Additionally, they found alternative strategies, "such as leveraging environmental regulations and policies and taking an active role in neighborhood planning processes, collaborating with 'gentrifiers,' and advocating for complementary policy schemes" (2), could be used as mechanisms to resist gentrification.

Acknowledging the strength that the local community can have, Checker (2011) discussed the creation of the West Harlem Environmental Action Coalition (WE ACT), which is a grassroots organization that fought against environmental burdens and worked to create environmental amenities. The organization created campaigns focusing on community outreach and education, as well as state-level lobbying. They worked with experts to collaborate in the design of a "green" bus depot with a green roof, energy efficient infrastructure and recycled building materials. Funding for their efforts came from public and private organizations. They worked to ally with other community-based organizations focusing on housing, health and poverty issues. This enhanced level of organization allowed them to mobilize larger campaigns that, contrary to earlier lawsuits, were successful. For WE ACT, sustainability meant that the maximum levels of community participation occurred, that development was both environmentally and socially responsible, and that public space was truly public space.

In response to the processes of environmental gentrification, community activism and their counter-movements "consist of local environmental justice organizations providing a voice for 'just sustainability' to counter developer and gentrifier perspectives" (Hamilton and Curran 2013, 1561). Although many examples reference the success of groups against the goals of gentrifiers by "countering gentrifiers' voices rather than cultivating cross-class alliances" (1561), Hamilton and Curran argue for

gentrifier-enhanced activism. As they state, "gentrifier-enhanced 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" (1561). Again, distinguishing themselves from ideas of social mixing and 'positive gentrification', the authors stress that they are attempting to "provide a framework for capturing strategic alliances cultivated by environmental justice movements with already-gentrifying neighbourhoods" (1561).

Citing the example of Greenpoint, Brooklyn, New York City, Hamilton and Curran (2013) highlight the alliances that long-term residents cultivated with new allies "(including outside NGOs and gentrifiers) in order to overcome long-term problems mobilizing both fellow residents and unresponsive state agencies" (1562). Gentrifier-enhanced environmental activism is an attempt to account for attempts to forge coalitions. They highlight attempts to mitigate environmental gentrification "by 'schooling' gentrifiers in communities' longstanding concerns and needs, framing them as a common cause rather than allowing the takeover of local environmental politics associated with demand-side environmental gentrification" (1562).

As a point for considering how to combat environmental gentrification, the authors examine social movement theory. "Social movement theory has coalesced around three key concepts – namely, issue framings, resource mobilization and political opportunities" (1567). Framing devices have the potential to define problems, assign blame and promote specific solutions (Benford and Snow 2000; Hamilton and Curran 2013). Place-framing has the potential as "catalyst for, and shaper of, social movements" (Hamilton and Curran 2013, 1567). Resource mobilization can touch on both tangible

and intangible assets. According to Jenkins (1983) tangible assets include assets such as

money, facilities, and means of communication. Intangible assets are the "human" assets

that are the essential component of movements. These type of assets can include

specialized abilities including organizing, legal skills, technical skills, etc. "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" (Hamilton and Curran 2013, 1570).

Just Green Enough:

Since its inception, the concept of gentrification has highlighted how working-

class communities have been displaced as waves of middle and upper-class in-movers,

oftentimes, change the physical and social fabric of the neighborhood. In studying

industrial neighborhoods in New York City, Curran and Hamilton offered an alternative

to countering these types of outcomes. With a focus on the neighborhood of Greenpoint

in Brooklyn, the Curran and Hamilton (2012) explain that "decades of environmental

activism by long-term residents and collaboration with more recent in-movers, many of

whom are gentrifiers, has resulted in a cleanup process that actively contests the assumed

outcome of environmental gentrification" (1028). Rather than trying to depoliticize,

minimize, or find positive associations with gentrification, Curran and Hamilton attempt

to look at:

> The potential for new spaces of politics for sustainability, broadly
>
> conceived with social justice as a central tenet, opening up around new
>
> strategic territorial and class alliances and divisions. We argue that the
>
> conjoined struggle of long-term residents and gentrifiers around

environmental cleanup has provided a space for a politics of sustainability

that makes room for the working class and industrial uses in the

neighborhood (at least in the near term). (1028)

Their argument is for a "just green enough" strategy that allows for continued industrial

use and the associated blue-collar work in an approach where "cleanup does not

automatically or exclusively lead to the 'parks, cafes, and a riverwalk' model of a green

city" (1028). The cleanup of industrial urban neighborhoods in combination with the

creation of new green spaces is often a mechanism to "naturalize" the disappearance of

working-class communities as a result of neighborhoods becoming more attractive, and

thus, "ripe" for development. "The 'just green enough' strategy organizes for cleanup

and green space aimed at the existing working-class population and industrial land users,

not at new development" (1028). As the authors explain, "cleanup of Newtown Creek

will be just green enough to improve the health and quality of life of existing residents,

but not so literally green as to attract upscale 'sustainable' LEED-certified residential

developments that drive out working-class residents and industrial businesses" (1028). In

discussing the 2010 declaration of the Newtown Creek site as a Superfund site, and in

combination with the settlements of suits filed against Exxon Mobil, the authors note

that, although hope of cleanup in the neighborhood might actually happen, it also

"increased fears of environmental gentrification. Of particular concern to the broad

variety of residents active in the cleanup efforts is the ability of manufacturing and the

industrial working class to remain in Greenpoint" (1030). Interviews and observations

conducted by the researchers revealed a particular key to how environmental

gentrification might be confronted and prevented. As they note, their research "revealed

a remarkably cohesive community vision of Greenpoint as just green enough to achieve cleanup, while maintaining working-class residents and industrial uses" (1030).

In the case of Greenpoint, residents and activists worked to conceptualize cleanup in a manner which contested the narrative of gentrification as an inevitable result of "greening" the city, which once established, would consume an entire neighborhood. Key to the case of Greenpoint is the political identity that is "forged in place through the everyday lived experience of a neighborhood" (1032). Although gentrifiers may have originally attracted to the neighborhood for various reasons (proximity to Manhattan, waterfront views, historic architecture, etc.), they were oblivious to the area's environmental issues and the struggle related to those issues. "Thus, the fight to cleanup Newtown Creek has created a newly organized constituency, perhaps originally motivated by self-interest, but now more rooted in environmental justice" (1032). Activism in this scenario is an attempt to battle the false narrative of cleanup and reinvestment versus decay and to recognize the injustice that gentrification causes and represents. The "greening" of the neighborhood has assumed many forms, and in each case, "local long-term activists have been at the forefront of these environmental battles and crucial to the construction of an environmental vision that both greens the neighbourhood while also maintaining its working-class character and allowing room for community residents to participate in the process" (1033). This idea of maintaining the existing character of a place is critical to their approach. An important consideration in any project, noted in Curran and Hamilton's case studies, is the idea that maintaining a community's working-class status does not mean that the residents must continue to be deprived of green space. In discussing the Newtown Creek Nature Walk, they note that

32

"while green space projects are often tied explicitly to residential and commercial development of industrial sites, and hence to environmental gentrification, the nature trail represents a significant victory of long-term residents' battles for amenities independent of entrepreneurial redevelopment processes" (1034).

Residents should not have to make a choice between staying in their homes, having access to jobs, and also having access to green space. In discussing the vision of one initiative within the neighborhood, it is "not about the transformation of vacant toxic sites, but rather the cleaning up of a still-viable working-class neighbourhood in order to protect public health, initiate ecological regeneration, and maintain and increase industrial uses of the area" (1036). According to the work of Banzhaf and McCormick (2012), this fits with other literature that suggests that projects that fit the existing character of the neighborhood are less likely to trigger gentrification. In their conclusion, Curran and Hamilton explain that "the alternative vision for urban sustainability constructed in Greenpoint is one we understand as 'just green enough', in which as much of the environmental hazard as possible is removed in order to assure community health while still allowing for industrial uses on the waterfront for the explicit purpose of maintaining the area's working-class population" (1039). Important to the studies of Greenpoint, it has been demonstrated that "in contesting the narrative of inevitability surrounding environmental gentrification, activists have formed alliances at a variety of scales, constructing an alternative vision of the sustainable city, forcing a more democratic, diverse, and just view of what green looks like" (1039).

Clarifying Curran & Hamilton's "Just Green Enough" strategy

Since its publication in 2012, the phrase "just green enough" and its associated approach has been cited by numerous individuals discussing methods for combating environmental gentrification (Wolch, Byrne and Newell 2014; Miller 2016; Dooling 2018; Mullenbach and Baker 2018; Rigolon and Németh 2020). Despite the suggestion of such an approach, it appears as though many have failed to fully understand what the method specifically suggests. For example, Mullenbach and Baker (2018) ask whether vulnerable communities must settle for a 'just green enough' environment to defend against gentrification and whether that is a just or fair outcome. "Making parks 'just green enough' may fend of environmental gentrification, but should lower-income communities be deprived of a higher quality amenity? (12)" This confusion related to level of quality is often cited/prominent/prevalent (in the discussion) by professionals in a range of fields. Despite the perceived association of "just enough" equating to "of a lower quality, less formal or poorer investment", there does not appear to be any such suggestion from Curran and Hamilton (2012) in their original publication. As they argue with reference to a "just green enough" strategy in the neighborhood of Greenpoint, New York City, it is a strategy "that makes room for continued industrial use and blue-collar work, where cleanup does not automatically or exclusively lead to 'parks, cafes, and a riverwalk' model of a green city (1028)." Furthermore, "the 'just green enough' strategy organizes for cleanup and green space aimed at the existing working-class population and industrial land users, not at new development (1028)." They do note that cleanup will be "just green enough to improve the health and quality of life of existing residents, but not so literally green as to attract upscale, 'sustainable', LEED-certified residential developments that drive out working-class residents and industrial businesses (1028)."

Perhaps it is from this statement that the quality of projects and a "just green enough"

strategy has been assumed to be of a lesser quality. Certainly some would point to the

explicit statement regarding upscale, "environmentally" driven development as a reason

to justify why the aforementioned belief has become the typical understanding of a "just

green enough" strategy, but the question should be asked, "what particular type of

residential development is being referenced?"

"In addition, planners aiming for 'just green enough' solutions can promote green

space interventions that are small-scale and in scattered sites, rather than grander civic

green space projects that geographically concentrate resources and kick-start rounds of

gentrification (Wolch, Byrne and Newell 2014; 241)." This sentence appears to be the

reason for others' confusion related to what a "just green enough" strategy should be.

There does not appear to be an evidence to support this claim. Instead, the authors cite

the work of Schauman and Salisbury (1998), saying that "refocusing on small-scale

interventions, they argue, has the benefit of more evenly distributing access to nature for

urban residents rather than creating a focal point for property development strategies

(Wolch, Byrne and Newell 2014, 241)."

In a later publication, the authors provided clarity regarding a 'Just Green

Enough' approach. According to Curran and Hamilton (2018):

> Some have misconstrued the just green enough concept as a strategy that
>
> sacrifices or limits environmental cleanup and amenities in order to
>
> combat gentrification, a kind of 'polluted protection' wherein toxicity
>
> protects communities from displacement (see Miller 2016); that is not at
>
> all what we envision. Just green enough is about cleanup and community

service provision, not real estate development. It is clean water, not a

waterfront café; equal access to green space, not tourist-oriented parks;

democratic process, not privatized planning. It is about making space for

different visions of green, visions that promote greater access and

livelihoods, not about taking over space that is stigmatized as wasteland or

underutilized without understanding its history and alternative

possibilities" (5-6).

Whether in the original text from 2012, or in their publication from 2018, there is never a

mention of smaller scale or lower quality. Curran and Hamilton challenge us to consider

the character of the neighborhoods we are working in and creating a future where the

working class can continue to actually live and work.

It was Glass' observations on what was happening to the working class in London

that began the original conversations related to gentrification. By understanding what the

process is, it is possible to understand how and why gentrification continues to occur.

Environmental gentrification operates similarly to gentrification. However, by using

environmental and similarly themed terms, scholars highlight the more recent trend to co-

opt a language of sustainability and environmental concerns to accelerate the

gentrification process. Numerous strategies have been implemented in an attempt to

resist environmental gentrification. Of particular note, policy and community activism

have proven to be most effective.

As it pertains to the framework discussed in Chapter 4, the literature review

addresses three questions: who is vulnerable to environmental gentrification, how can

environmental gentrification be resisted, and how does environmental gentrification

occur? In addition to others pertaining to each consideration, these questions are

explored and answered in the following categories: Identify Vulnerabilities, Protection &

Resistance, and Scrutinize the Proposal. The remaining categories of Community

Engagement, Concept & Design, and Accountability were determined in response to

discussions within the environmental gentrification literature that pertained to the

planning and implementation of green infrastructure projects. With lessons learned from

relevant scholarship and publication, case studies provide further opportunities to explore

the relationship between green infrastructure projects and the communities that they are

implemented in.

CHAPTER 3

CASE STUDIES

Within the last decade, the City of Atlanta has been the site of several green

infrastructure projects. Two such projects are the Rodney Cook Sr. Park Project and the

Urban Food Forest at Browns Mill. As case studies, the projects were not selected to test

the framework questions presented in Chapter 4. Instead, they help to serve as a

supplement to lessons learned during the literature review process. In addition to

providing insight into green infrastructure projects and the community engagement

process, the Cook Park and Browns Mill projects were selected for a number of reasons.

Prior awareness of each project, as well as their location in the Atlanta area,

played a role in their selection. Sites within the Atlanta area were chosen due to

familiarity with the BeltLine project, its associated issues and local knowledge of the

city, more generally. With a budget in the tens of millions, provided in part by major

corporate and philanthropic donations, the Cook Park project offers a stark contrast to the

more modest Federal grant funding that began the Browns Mill project. Given their

differences in funding, and also in scale, the two projects may be thought of as a large-

scale green infrastructure project and a "JGE" project. The Cook Park project was

managed by a national level nonprofit, Trust for Public Land, whereas the Browns Mill

project was managed by a local municipal program, AgLanta. The Browns Mill project

has been heralded as "a new model for a City of Atlanta park" (AgLanta, n.d.). Both

projects offer similarities in neighborhood demographics, although the Cook Park project

is in an area showing clear signs of gentrification. For these reasons, as well as being established at similar times, the projects offer further insight into questions regarding green infrastructure and environmental gentrification.

<u>Rodney Cook Sr. Park</u>

Located in Atlanta's Historic Vine City, the home of many of Atlanta's Civil Rights Icons, Cook Park is a 16-acre site designed and engineered to address flooding issues that have historically plagued the area thru the use of green infrastructure. Although a once vibrant neighborhood, more recent times have reflected decades of disinvestment and inequality.

In 2015, discussion commenced regarding the creation of a new stadium, now Mercedes Benz stadium, on the westside of Atlanta. Leadership (philanthropic, elected, city, etc.) began discussions behind the scenes about the value that the stadium would bring to the neighborhood, and more generally the city, as well (Jay Wozniak, Zoom interview with the author, October 29, 2020). In the years preceding, there had been conversations to create a series of parks along the Westside, including in the Vine City and English Avenue area, to reduce flooding in the neighborhoods along the Proctor Creek watershed. Despite previous attempts to start the construction of a park to be sited in the Vine City neighborhood, nothing had come to fruition.

The Arthur M. Blank Foundation expressed a desire to invest in this park and the surrounding neighborhood and approached the Trust for Public Land (TPL) to steward the project. Partnering with the City of Atlanta, TPL was responsible for fundraising and management of the design and construction process. Based on information from the earlier Proctor Creek-North Avenue Park study, TPL immediately began the community

engagement and participatory design process. Because of time constraints, TPL was unable to initiate the typical process that they implement during a project.

The community engagement process would usually involve the creation of a steering committee of interested individuals who would provide feedback related to aspirations, features, siting, etc. to determine the qualities of the project. The steering committee would work with TPL thru the process until completion at which point they would establish a "Friends of" group. In the instance of Cook Park, TPL was asked to design and build the park using the information from a previous, failed attempt. Over the years, the Vine City and English Avenue neighborhoods had previously been a part of 19 community planning studies without any subsequent implementation of those plans. For this reason, as well as the deadlines mentioned earlier, it was decided to avoid an extensive re-engagement planning process with the community. Rather than initiating a new study, TPL relied on previous studies but sought to groundtruth them to determine whether information was still pertinent. Through on-site events, townhall meetings, and one-on-one interviews with individuals, TPL was able to determine the "wants" of the community. The final design responds to many of these desires (i.e. a splash pad) and remains generally informal with the provision of more natural spaces to allow for a variety of uses. Additionally, a series of "blank canvases" is provided in the form of blank concrete walls that will allow for the community to implement its own mural projects. Although there was not an equity report, equity concerns were still kept in mind during the process (Jay Wozniak, Zoom interview with the author, October 29, 2020).

Although TPL was not taking direct actions related to equity (affordable housing, economic opportunity, etc.), the area is home to the Westside Future Fund (WFF). As the

organization explains, the Westside Future Fund is "a nonprofit formed by Atlanta's public, private and philanthropic partners who believe in the future of Atlanta's Westside and are committed to helping Historic Westside neighborhoods revitalize and develop into a community Dr. King would be proud to call home" (Westside Future Fund, n.d.). Launched in late-2014 by the Atlanta Committee for Progress, WFF is intended to address the long-term inequity experienced in Atlanta's Historic Westside by fostering long-term transformational change through a collaborative approach.

Utilizing "best-practice" research in community revitalization, WFF identified and developed plans for four areas that are intended to be addressed simultaneously: "safety and security, cradle-to-career education, health and wellness and mixed-income communities" (Westside Future Fund, n.d.). As it pertains to their mission, the addition of green space and environmental infrastructure was achieved with the creation of Cook Park. WFF, in partnership with the City of Atlanta and six neighborhood associations, developed the Westside Land Use Framework Plan (adopted in late-2017 by the Atlanta City Council). They have held numerous stakeholder and community meetings. WFF has acquired and redeveloped a number of multi-family and single-family units to address housing issues. Additionally, they launched the Anti-Displacement Tax Fund program which provides financial assistance to qualifying homeowners to avoid being displaced by rising property taxes in the Westside area. Despite their efforts, speculation in the neighborhood had begun before WFF was created. Even with WFF now established, Westside neighborhoods have continued to see rapid increases in gentrification, so much so, in fact, that the City of Atlanta took actions to try and slow this issue.

With an understanding of the processes involved in gentrification and environmental gentrification, several points stand out in exploring the Cook Park project. The area was primed for speculation before announcements for the new stadium were made. In addition to the substantial investments being made in the neighborhood, the project is within a mile of the BeltLine, is in close proximity to the Westside Reservoir Park (a 280-acre park that will become the largest greenspace in Atlanta), rail transit, a central business district, and downtown, and is located in a community with historic architecture, often associated with Civil Rights Icons, including the Reverend Dr. Martin Luther King, Jr. These factors, in combination with demographic factors shown to coincide with vulnerability to gentrification left Vine City, and the larger Westside area, would suggest a high likelihood of gentrification occurring in the neighborhood. Only after plans for the new stadium were made, were efforts taken to provide protections for affordable housing and to spur local economic growth. The rapid increases in gentrification in the area highlight the crucial sequencing of events surrounding green infrastructure and development projects. If measures had been taken before announcements were made, then it is possible that speculation and gentrification would not have occurred at the rates that they have.

Possible concerns may arise from the alterations that were made to TPL's standard process for community engagement. Given an accelerated process intended to meet pressing deadlines, as well as a history of 'empty' engagement that already existed within the community, does the final design truly reflect the needs and desires of the community? Were all residents given ample opportunity to provide input? Because of the neighborhoods' history with community engagement, were residents less likely to

participate in the process with TPL? Additionally, given TPL's specific focus on green space provision and creation, there are concerns over their ability to address other issues within the neighborhood. In Rigolon and Németh's (2018) study of the 606 Trail in Chicago, which was a project also led by TPL, the authors noted that despite TPL's increasing concern with park equity and environmental justice issues (at both the local and national level – in the form of the effort to provide walking access to parks to all Americans), the organization is not equipped to work on housing issues, including affordable housing.

Urban Food Forest at Browns Mill:

The site of Atlanta's first community urban food forest, the Urban Food Forest at Browns Mill is a 7.1-acre green space located in the Browns Mill neighborhood of southeast Atlanta. The neighborhood is classified as a LILA (Low-Income Low-Access) area, which in the past has been referred to as a food desert. Previously owned by the Morgan family, a Black family who had a homestead on the property, the space held a deep history of food production in the community. Rather than a bottom-up approach, the project was initiated by Mario Cambardella, both Atlanta's and the United States' first urban agriculture director, in pursuit of the city's goal of ensuring that at least 75% of residents were within a half-mile of fresh, affordable food. The project was the recipient of a U.S. Forest Service Community Forest Program grant, which provided funding to purchase the site.

For the first year and a half, the location of the site was not revealed to anyone beyond those working on the project and the community members they were engaging with. In close proximity to two schools, the site can essentially connect to a series of

trails that connect to seven parks in the area. The project began with no resources

allocated for community engagement and required the use of personal finances to provide

resources (i.e. printed materials, food at meetings, etc.) for the process. It is the result of

the efforts of numerous federal, state, and local partnerships in the public, private and

nonprofit sectors.

Project team members began by meeting residents at transit stops and worked

with local school children to pass out invitations to initial meetings and to receive

introductions and establish a greater network with local community members. Going

door to door, invitations were made available in multiple languages. The community

engagement process began by asking community members if the food forest was

something they actually wanted in the neighborhood. A vote of those attending an early

neighborhood meeting was taken and the proposal passed unanimously. Following the

purchase of the property, a festival event was held to provide information to residents

about food forests and to explore their new green space. Eco-tours, dotmocracy

techniques, and other resources were given to help residents understand what the site

could become. Inquiries were made about resident interest in participating in the process

moving forward. Of the almost 200 guests at the first neighborhood event, sixty-seven

neighbors signed up to become "Friends of the Food Forest" and help shape the future of

the site. In addition to emails sent directly to those individuals regarding future events,

etc., the project team utilized the Neighborhood Planning Units (NPU) system,

neighborhood associations, school leaders, church and faith leaders to distribute

information about the site.

In the course of their meetings with community members, the team discovered that the biggest fear of residents related to beliefs that the food forest would actually function more like a park. These fears of a park resulted in a pause in the community engagement process, and a transition to attending local meetings to hear residents express their concerns. To ease these fears, the team provided opportunities for community members to see other examples of food forests, to speak with other "Friends of" groups and community leaders running similar projects.

Community members engaged in design charettes and neighbors helped choose the design team that was hired for the project. They also participated in additional rounds of visioning, taste testing, and field trips. Throughout the process, a steering committee was responsible for outreach. Members were compensated at $14/hour to distribute invitations and engage in outreach. During the process, meetings were held twice a month – one consisting with the project team and the steering committee and the other as a general meeting for all residents.

Throughout the process the team engaged with the community in a number of ways. Communication was sent in a variety of forms, including signage, newsletters and emails. Festivals were one of the primary ways they sought to engage the community. Monthly classes and volunteer opportunities were held, but most of those volunteering were not from the neighborhood. Instead, the project team was successful with neighbors by providing paid workforce training. They also received direct volunteer assistance from schools and local organizations. High school and college students were provided paid compensation for project work. Although several major projects have been completed, the site will continue to evolve and respond to residents needs.

Applying the lessons learned from studying the processes of gentrification and environmental gentrification, several points stand out in exploring the Browns Mill project. "Community plans move at the speed of trust" (Elizabeth Beak, Zoom interview with author, November 4, 2020). Especially in a top-down scenario, gaining the trust of community members is critical to residents having "buy-in" in the project. Limited resources required project team members to take a more hands-on approach in engaging with community members. Relationships were built by going to the residents' neighborhoods and literally going door to door. Additionally, rather than asking the committee to come to them, the project team engaged with residents in their community and did so through a variety of settings (NPU, neighborhood associations, schools, churches, etc.) Partnerships were formed across various scales (local, state, and federal) and included members across various sectors (public, private, and nonprofit). The project team worked to provide educational resources in print form, field trips, speaking arrangements, and "networking" events. They made an effort to communicate in a variety of languages and in both electronic and print forms to reach all residents. When residents expressed fears over the project, the project team slowed the process and provided additional resources to help allay those concerns. One of the most critical take aways from their engagement process is that neighborhood residents did not have time to volunteer. As residents in a LILA neighborhood, they had other needs that needed to be met. Volunteering is a privilege. Steering committee members were paid for their time, as were high school and college students working on site. Paid workforce training was also successful in engaging existing residents.

As case studies, the Cook Park and Browns Mill projects offer an opportunity for a deeper exploration of many insights gained during the literature review process. In the case of the Cook Park project, it highlights the critical nature of sequencing and reveals that well-intentioned policies and other measures may not be enough on their own to prevent gentrification if enacted too late in the planning process. It also allows for a more critical evaluation of the community engagement process. In the case of the Browns Mill project, it demonstrates numerous approaches to engage with the community during the planning process and highlights many of the challenges in creating something that truly reflects the "voice" of the community and its residents. Both projects help to reinforce the greater scrutiny that the framework of considerations seeks to create in working to build greater social equity.

CHAPTER 4

SOCIAL EQUITY CONSIDERATIONS

Basing their statement on lessons learned from examples in New York City, Gould and Lewis (2017) assert that "communities need to be organized before green gentrification threats emerge, articulate a vision for their community, and demand process justice in redevelopment planning from the outset" (145). Furthermore, sequencing matters. "Not only do communities need to be organized early, but they also need to get the ordering of new developments right to maximize greening and minimize displacement" (145). The following questions are intended to be thought provoking and to create a more holistic perspective for professionals as they engage in green infrastructure projects with the community. Sequencing does matter, and so the questions are generally arranged from project conception working towards project completion. In many instances, additional information has been included to provide further insight with respect to what the question is asking. Figure 1 illustrates the conceptual framework of considerations. The framework focuses on six primary considerations. The process for each is essentially a two-part process. First, each consideration has a related set of questions which are intended to address the topic highlighted by the consideration.

A Framework for More Holistic Considerations

Objective: Does this project seek to create places of connection, social equity, and economic opportunity for all?

IDENTIFY VULNERABILITIES

Does everyone in the neighborhood want "green" space? Do local residents view their current environmental situation as a deterrent against displacement?

Is the community vulnerable to gentrification?

Is there a profit to be made in the neighborhood?

PROTECTION & RESISTANCE

What policies are in place to prevent displacement?

Will sufficient affordable housing be provided to meet the needs of the community?

How long will these protections be in place?

How many good-paying jobs will be created? And, how many are lost with the creation of the project?

SCRUTINIZE THE PROPOSAL

Is the language of the project vague in a way that doesn't clarify social and environmental intent?

Does the language of the project purport to be sustainable, low-carbon, mixed use, etc?

Does the project use language intended to specifically target the creative and high-tech industries and their workers?

Who stands to actually benefit from the project?

COMMUNITY ENGAGEMENT

What community groups exist in the neighborhood(s) already?

Are there any alliances that exist? What groups could align to work towards a common goal for the community?

What are the current power dynamics of participation? Is this a bottom-up or top-down driven approach? What possible agendas, political interests, etc. might exist with relation to the project? Does there appear to be an equal balance of power in the decision-making process?

CONCEPT & DESIGN

Will the project result in a feeling of dis-belonging for certain residents already living in the community? Is it meant to repair the social fabric of the community or meet the needs of private developers?

Is the project designed to integrate with the existing habits of the community or is it designed as a tourist destination? What is the character of the proposed project? Do the two compliment one another, or will the character of the neighborhood be lost as a result of the project?

ACCOUNTABILITY

Is there a system of accountability in place? Are goals actually being achieved? Is the process transparent? Can community members actually see if project claims (i.e. use of community labor force, building community wealth, creating spaces for local businesses, etc.) are being achieved?
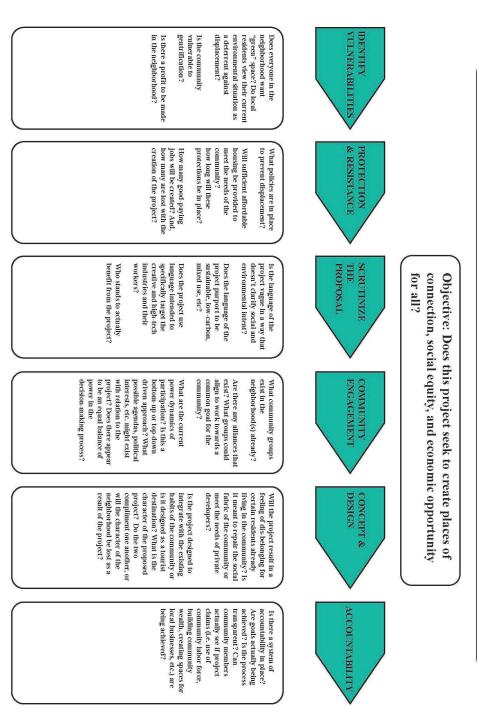
Figure 1

Use these questions to assess and explore each category. Second, based on responses then determine: is it safe to proceed to the next consideration, or, should you stop and reassess things? For example, you have answered the questions related to the Protection & Resistance consideration and determined that significant measures are in place to resist gentrification. Now you can proceed to the Scrutinize the Proposal consideration. If you had determined that these measures and other factors did not exist in the community, then it would be vital to stop the planning process and work to ensure that these protections were in place before proceeding.

Identify Vulnerabilities

Before a project is ever proposed, the simplest question to ask may be:

Does everyone in the neighborhood want "green" space? **Do local residents view their current environmental situation as a deterrent against displacement?** Cleaning and greening are not synonymous with beneficial. Pollution can be viewed as a protective barrier against the ill effects of green gentrification. For some residents, other issues, such as affordable housing or economic opportunities tied to particular industries, may take precedence over the benefits associated with a "clean" or "green" neighborhood.

Given evidence to suggest that the announcement of a project is enough to set off rounds of speculation and gentrification, before a project is ever proposed it is critical to determine:

Is the community vulnerable to gentrification?

Typically, neighborhoods are vulnerable if …

- They have higher percentages of residents over the age of 65

50

- Residents have lower incomes

- There are few residents with college degrees

- They have higher than average populations of communities of color

- They have higher than average populations of renters

If gentrifiers tend to be young, affluent, college-educated, white homeowners, then logically those being displaced would possess the opposite characteristics. Neighborhood qualities, such as proximity (to downtown, the central business district, large-scale green infrastructure projects), access to rail and other non-automobile transportation options, and historic building stock, may affect desirability, but, by themselves, and even in the case of being qualities of low-income areas, they do not necessarily result in gentrification. They can, however, be helpful in predicting where future gentrification will occur. This leads to the next question,

Is there a profit to be made in the neighborhood? Gentrification is often explained through Smith's (1979) "rent gap" theory. As Goodling, Green and McClintock (2015) explain:

> There is always some physical location that is underdeveloped and/or devalued relative to others. It is here, when the gap between actual and potential market value is wide enough that redevelopment and rehabilitation into new land uses becomes a profitable prospect, and capital begins to flow back. (509)

Although this has been thought to occur in low-income neighborhoods, the reality is that this process can occur in any location where the potential for money to be made exists.

As a consideration, Identifying Vulnerabilities essentially offers one option for continuing within the framework 'flow'. If a neighborhood/community and its residents has been determined to have populations vulnerable to displacement, then one should proceed to assess what forms of protection and resistance are in place. If not, then theoretically the planning process could proceed without further assessment of the considerations within the framework. However, given the hyper-local vulnerability of certain populations, as well as the vulnerability of populations in proximity to existing and in-progress gentrifying neighborhoods, it seems highly unlikely that no vulnerable groups will exist.

<u>Protection & Resistance</u>

In addition to exploring neighborhood/community vulnerabilities, before a project ever begins, it is of particular importance to consider:

What policies are in place to prevent displacement? Are measures in place to ensure that existing residents will be able to successfully remain in their homes, have access to jobs, and also have access to green space? Most often, these center around affordable housing provisions, but efforts to promote economic wealth of the existing residents are increasingly utilized, as well. Such policies include:

- sufficient affordable housing

- housing assistance

- rent stabilization

- rent controls

- community land trusts

- tax assistance

- local hiring requirements

- set asides for local businesses

- a binding community benefits agreement

- shared equity housing

- grants, loans or tax abatements to landlords

- inclusionary zoning which requires developers to set aside low-income housing in exchange for expedited building permits and other compensations

- acquiring and rehabilitating privately owned properties as affordable housing

- homebuyers' clubs

Policies and other agreements provide tangible goals and protections, but they require additional scrutiny in determining if they are truly beneficial to the residents they claim to assist. For example, with respect to the provision of affordable housing, a follow-up question should ask:

Will sufficient affordable housing be provided to meet the needs of the community? Oftentimes, new development projects will highlight the number of affordable housing units that will be created. However, if a project creates 100 new units, but 150 existing units are lost in the process, then affordable options have experienced a net loss. It is critical to ensure that, at a minimum, the needs of all existing residents are met. Additionally, **how long will these protections be in place?** If the provisions only last for a few years, then the likelihood of displacement will still remain. In a similar fashion, when considering claims related to job creation and economic growth, the question should not be; how many jobs will be created, but instead:

How many good-paying jobs will be created? And, how many are lost with the creation of the project? In addition to increases in housing costs, gentrification brings an increase in the general cost of living, as well. Projects that tout job creation claims require deeper scrutiny. If 100 jobs are created, but most are only paying minimum wage, then the potential for financial stability is not provided for the residents these claims purport to help.

Based on responses to questions related to the Protection & Resistance consideration, there are two possible options for continuing within the framework. If there are measures in place to protect against gentrification, then proceed to the Scrutinize the Proposal consideration. If not, or if those measures may not successfully resist and protect against gentrification, then one should stop the process and reassess the current conditions. As other case study examples have demonstrated, without policies and other measures in place before the announcement of green infrastructure projects, vulnerable populations are at greater risk of experiencing the negative effects of gentrification. Before moving forward in the planning process and continuing within the framework, steps should be taken to ensure that policy and other protective measures are put into place to ensure that vulnerable populations are not subject to the effects of gentrification.

<u>Scrutinize the Proposal</u>

Continuing in this scrutiny of project language and claims:

Is the language of the project vague in a way that doesn't clarify social and environmental intent? Does the language of the project purport to be sustainable, low-carbon, mixed use, etc? Does the project use language intended to specifically

target the creative and high-tech industries and their workers? Over the last

decades, urban planning has adopted "sustainability" as it's goal (Quastel, Moos and

Lynch 2012). Such planning includes the promotion of dense urban neighborhoods,

social mixing, non-automobile forms of transit, and the regulation of outward sprawl.

These types of terms are often utilized to project apolitical, "win-win" outcomes for

everyone that are seemingly irrefutable, but these types of projects typically are only

favorable for the interests of the affluent, municipal governments in need of funding

sources, and the real estate and development companies that champion their benefits and

profit from the process.

It is critical to question:

Who stands to actually benefit from the project? Does the project genuinely

build community wealth or merely pay "lip-service" to this idea? Does the project

truly address racial equity? Centering racial equity in the planning process would

require that decisions be made with regards to needs, challenges facing the community,

and risks of displacement.

Are actions/intentions grounded in the "now" and in helping existing residents

or in drawing in future residents? "With its emphasis on attracting future residents and

future outcomes related to ecological and economic neighborhood revitalization, the

planning process and goals were not grounded in the current social and environmental

contexts" (Dooling 2012; 110).

What is the cost of the project? How will it be maintained? Does it favor

middle- and upper-income residents and their desires? With respect to policy and

planning, Haase et al. (2017) suggest that a number of prerequisites might help to support

greening as a socially inclusive solution. The first is to acknowledge and consider the socio-spatial inequalities as professionals involved in these processes. Inequalities will not simply disappear after implementation. In fact, they may result in other "repercussions", "e.g. when parks are expensively renovated in residential locations and this renovation leads to rising costs for housing which, again, only affluent households can afford" (45). Inclusive greening should seek to avoid further privileging the middle class and high-income districts at the expense of the social structure of the city.

Oftentimes, projects are too narrowly focused. For this reason, it is important to identify:

Who are the various municipal actors who will be involved/affected in this process? Civic assets (parks, libraries, community centers, etc.) are rarely considered a network. "Municipal resources tend to be siloed" (Gaynoir 2020, 8). As such, examples can include: parks departments are responsible for parks, the library systems for libraries, and the transportation department for streets and sidewalks. Although this makes sense from an institutional perspective, "it also means that agencies tend not to speak to one another and pursue redundant or even counterproductive activities and planning processes" (8). Gaynoir et al. (2020, 8) assert that in order to "get the most out of these public assets and deliver ambitious outcomes for communities, it is beneficial to consider all assets in a given neighborhood as a diverse portfolio of assets."

For similar reasons, as the project moves forward:

Who is in charge of project management? Who are the various organizations involved in the project? What is the leadership hierarchy? Is the project management fragmented? What benefits are emphasized? Can actors be held

accountable during the process? Based on their in depth case study of the 606 rails-to-trails project in Chicago, Illinois, Rigolon and Németh (2018) demonstrated that "reliance on park nonprofits, a popular approach in the U.S. and elsewhere, provides a compelling explanation for why so many of these projects result in gentrification" (72). As they explain:

> Although the nonprofitization of project management for LGIPs has some
> real benefits in terms of efficiency, this strategy can increase the chances
> of environmental gentrification due to the fragmentation of green space
> development and affordable housing goals, an overemphasis on the
> ecological and public health benefits of parks that can draw away attention
> from displacement concerns, and the reduced accountability of both public
> and non-state actors. (72)

As other authors have demonstrated, when various local agencies are omitted in the process (such as housing, despite claims to create affordable housing, or perhaps because a project will have a direct and/or indirect effect on housing), local communities that are vulnerable to gentrification are ultimately harmed in processes purporting to be conducted on their behalf.

Is a park non-profit, such as a conservancy, "Friends of" group, or homeowners association, involved in the park process?

The proliferation of park nonprofits including conservancies, "Friends of" groups, and homeowner associations has raised equity concerns (Perkins 2010; Joassart-Marcelli, Wolch and Salim 2011; Holifield & Williams 2014; Rigolon and Németh 2018). Combining their own work on "Friends of" groups with that of other scholars, (LGIPs

(Large Green Infrastructure Projects) - Pearsall 2018 and community-based organizations such as DSNI (Dudley Street Neighborhood Initiative) - Anguelovski 2014), research findings "suggest that the fragmentation between parks and housing is particularly notable for nonprofits that work on LGIPs and for non-grassroots organizations that do not directly respond to a range of needs expressed by local communities" (Rigolon and Németh 2018, 77).

After assessing questions within the Scrutinize the Proposal consideration, a decision must be made to proceed to the next consideration in the framework or to stop and reassess the current situation. If a project has demonstrated that the project seeks to create places of connection, social equity, and economic opportunity for all, then proceed to the Community Engagement consideration. If not, then what steps can be taken to do so? It may be necessary for actors to intervene and demand clearly stated goals and agreements that ensure the community truly benefits and plays an active role in the decision-making processes.

Community Engagement

As the process transitions from planning to engagement, communities can often play a critical role in combating gentrification. In addition to policies, community strength and an established network of social infrastructure can be used to resist gentrification. Before initiating the engagement process with the community, start by asking:

What community groups exist in the neighborhood(s) already? Community groups and other nonprofit organizations already working in the neighborhood possess local knowledge and may more appropriately be able to identify and reflect the needs,

concerns, etc. of the residents they represent. They may also possess an extremely critical element: community trust.

Are there any alliances that exist? What groups could align to work towards a common goal for the community? As the adage says, "there is strength in numbers." When multiple groups and community-based organizations focused on a variety of different issues (housing, health, poverty, etc.) work together, it may be possible to create an enhanced level of organization that allows for mobilizing larger campaigns to address community needs and concerns. In addition to other groups, this may include working with politicians at the local, state and federal levels and/or working with private entities that share similar interests and goals.

As the community engagement process begins:

What are the current power dynamics of participation? Is this a bottom-up or top-down driven approach? What possible agendas, political interests, etc. might exist with relation to the project? Does there appear to be an equal balance of power in the decision-making process? Although it is possible that the dynamics of land-use planning have changed greatly since the time of publication in 2008, Glover, Stewart and Gladdys' publication on the social ethics of landscape change provides a crucial consideration with respect to land-use planning processes. As they explain:

By and large, land-use planning processes remain expert driven with decisions reflecting a top-down approach that favors the preferences of professional planners, policy makers, and economic interests. In most processes, roles for citizens are minimal and sometimes socially controlled or engineered (e.g., tell and sell). (385)

Miller (2016) explains that public participation in environmental decision-making process has become a commonplace part of the process. Despite the public nature, "these practices are unequally accessible to potential participants, and patterns of involvement demonstrate political and social privilege" (287). Power differences between community members and the agencies that construct the final decisions create relationships that are fraught with controversy (Jarrell, Ozymy, and McGurrin 2013; Miller 2016). Additionally, agendas, political interests, and the political identities of institutions leading these processes complicate participation (Jarrell, Ozymy, and McGurrin 2013; Miller 2016). Although participation in bureaucratic channels provides one avenue for formally registering community concerns, "some groups have found that their participation does not have meaningful impact on the outcome, particularly given disproportionate power dynamics within low-income and minority communities, and may result in a brief aside that there was opposition to the project" (Pearsall and Anguelovski 2016, 2).

Is there a general lack of participation in the process? Does this suggest that the community is not interested in a particular "greening" project? Questions typically ask what residents would like to see in their project design. Oftentimes, they do not appear to ask whether they want the project to be implemented or not. For those who do not wish to provide input in the process, it may simply be because they do not want the project to be constructed.

During the process:

Are citizens engaged, active citizens? Are citizens active or activist? Do they have true authorship and input or are they merely following a "script" with predetermined outcomes? Buijs et al. (2016) highlight scholarship that concludes that

60

"involvement of citizens in greenspace governance has developed from a focus on public participation in government policies towards increased active citizenship" (1). As they define it, active citizenship is "citizens' ability to organize themselves in a multiform manner, to mobilize resources and to act in the public […] in order to protect rights and take care of common goods" (1). Active citizenship does not originate from government interventions, or what might be thought of as a top-down approach. Instead, it can be thought of as self-organization, self-governance, DIY democracy or a bottom-up approach. In their research, Buijs et al. (2016) note that "some researchers have criticized attempts to mobilize citizens to compensate for government retreat as neoliberal governance techniques with little real shift in power from public agencies to local communities" (2). Related to the notion of active citizens, Lister (2015) notes that Isin (2008) goes further and draws a distinction between active and activist citizens. As he explains, "the former are not involved in the authorship or creation of activity, they 'follow scripts and participate in scenes that are already created', whereas the latter are creative and have authorship and input in their activities" (Lister 2015, 364).

Is the process designed to successfully create change or merely follow a script to produce predetermined, status-quo results?

Through their research, Ventriss and Kuentzel (2005, 521) determined that "citizen involvement employed by formal organizations limits the scope and contentiousness of conflict, and narrows the boundaries of possible change, all under the guise of democracy and 'fair and open' deliberation."

What steps are being taken to ensure greater citizen participation? Is childcare, food, remuneration, etc. being provided to entice individuals to

participate? Where and how are meetings being held? What forms of

correspondence are being used? Based on the previous work of multiple scholars,

Miller (2016) makes an argument for how this process of inequity plays out in the public

participation process. First, disparities in social class, gender and race, and political

involvement compound the aforementioned limitations and power differences (Verba et

al. 1995). Second, based on the social challenges that these groups may face to be able to

take part in the decision-making process, only those with power and privilege take part in

these processes (Yang and Callahan 2007). Reinforcing this point with the work of

Scholzman et al. (2012), Miller notes that "people with high incomes, favorable

occupational status, and high education attainment levels are more likely to take part in

participatory processes" (2016, 288). An astute observation made by one participant

notes that "People that have non-traditional work schedules and single parents, people

with multiple jobs: it's probably not very accessible to them. But also people that don't

have the social or technological means to be connected to larger community bulletins and

communications" (Miller 2016, 291).

    How can we ensure that all groups are included in the process? Are we

reaching out to them in alternative ways (newsletters, posters, community boards,

etc.)? The community engagement process should seek to include the perspectives of

residents across the ethnoracial, generational and income spectrums. How you attempt to

engage residents should consider whether the medium is context-appropriate or not.

Attempting to reach residents via email may be problematic for residents who do not

have internet access. "Community outreach activities should also seek to adequately

engage residents across the age spectrum, and specifically youth and elderly people"
(Rigolon et al. 2020, 43).

During the engagement process, does the environment feel "cliquey"? How can we allow for all voices to be amplified equally, or in many cases perhaps less so, to ensure greater participation? Are materials and translators available for non-English speaking participants? Are all groups truly represented or simply the most vocal? Essential to active citizenship is cultural capital, which can be thought of as the capacity and capability of citizens to be involved in actions, projects, etc. that relate to the spaces they value. Because this type of capital is not evenly distributed across communities, "retreating government initiatives can lead to unintended impacts on environmental justice and the fair distribution of access to public green space with selective participation by vocal and well-organized interest groups in negotiation and management" (Buijs 2016, 2). In addition to concerns over the most vocal participants preventing others from being heard, it is also important to consider whether all members of the community are given an opportunity to participate.

Are renters and other non-homeowning residents included in the planning process? In discussing the East Riverside Master Corridor (ERMC) plan in Austin, Texas, Dooling (2012) notes how local homeowners favored redevelopment, because it would increase the share of homeowners in the area. This apparently in part because of the perception that rental housing carried the stigma of being a space for crime. As she explained:

> The plan was framed around the physical transformation of the
> neighborhood aligned with city-wide transit goals and tied to

redevelopment agendas intended to economically and ecologically revitalize the neighborhood. Little was known about the views of the numerous low-income immigrant renters living in the community, and there was no charge from city council to the consultant to assess the population's needs nor how these needs relate to the goals presented for the plan. (109)

Have the values of the community residents been identified? Have the needs of the community been identified? As Glover, Stewart, and Gladdys (2008) note, it is critical to understand the values of the community stakeholders in order to develop strategies that allow for their representation. This is crucial to the development of a community-based model of landscape change. Community-based values are more than the preferences or statements of opinions of the stakeholders involved. Specifically, "landscape values are conceived as narratives that inextricably link people to place. Before land use planners can integrate diverse values about growth management and landscape change, they must first identify them" (387).

As the questions within the Community Engagement consideration highlight, it is critical that all voices within the community are given an opportunity to provide input during the planning process. If this has been achieved, then proceed to the Concept & Design consideration. If not, then steps should be taken to re-engage with more members of the community before continuing in the process. Reiterating the overall objective that should be achieved during the process, this consideration should seek to create opportunities for connection and social equity for all. To do so, it is critical that the engagement process truly connects with all the voices of the community.

<u>Concept & Design</u>

As the project transitions from engagement to design, questions may ask:

Does this project seek to create places of connection, social equity, and economic opportunity for all? Will the project result in a feeling of dis-belonging for certain residents already living in the community? Is the project meant to wipe out the material and symbolic identity of the traditional neighborhood group? Is it meant to repair the social fabric of the community or meet the needs of private developers? Although these type questions may arise as design iterations take place, questions related to inclusion and sense of community may also be thought of as objectives throughout the process.

Is the project designed to integrate with the existing habits of the community or is it designed as a tourist destination? What is the character of the proposed project? Do the two compliment one another, or will the character of the neighborhood be lost as a result of the project? The creation of numerous large-scale green infrastructure projects, such as The Highline, NYC, The Beltline, ATL, The 606 Trail, CHI, etc., has ultimately generated a discussion of these types of projects as "destinations". As Quastel (2009) notes in his discussion of urban revitalization projects occurring in Vancouver, British Columbia, the projects encouraged an emergent new ideal of "a park-like, nature and tourism destination, following a discursive tradition that political ecologists have identified whereby parks (Braun, 2002) and ecotourism destinations (Waitt and Cook, 2007) are constructed as independent from and free of working communities" (714). Oftentimes, these types of projects ignore the existing

residents living and working in the community and create an "eco"-future which they are no longer a part of.

When presented with design options:

Are residents being "directed" in their choices during the process? Would residents select anything less than the "most visually appealing"? Are they making choices that address the communities actual needs? In discussing a "visioning workshop", Dooling (2012) writes that "not surprisingly, given the cost-free choice of selecting the most visually appealing images, the end result was an endorsement of the initial charge for the plan: 'an area that welcomes and encourages pedestrian activity by providing a broad range of commercial retail and residential uses, high quality streetscapes and a robust transit system'" (109).

During the Concept & Design consideration, it is critical to create spaces that are truly reflective of the community and its residents. Will the project create places of connection, social equity and economic opportunity for all? If the concept and design have achieved these objectives, then proceed to the Accountability consideration. If they haven't, then stop the process and reassess. During this phase, it may be necessary to return to the community engagement process to assess how the concept and design can be modified to better reflect the community and its identity.

Accountability

During and after the process:

Is there a system of accountability in place? Are goals actually being achieved? Is the process transparent? Can community members actually see if project claims (i.e. use of community labor force, building community wealth,

creating spaces for local businesses, etc.) are being achieved? As Gaynoir et al. (2020, 10) note, the "RCC's version of adaptive leadership come from different sectors, thus infiltrating change agents across a broader spectrum of agencies, departments, and organizations and creating the right climate for more long-lasting systems change." One component of the RCC's approach to achieve its core goals is that "its mandate to regularly measure a diverse set of metrics require stakeholders to track socially relevant successes and challenges, identify what is and is not working, course-correct as needed, and build accountability" (14).

Although the Accountability consideration is addressed as the final topic within the framework, in reality, this is a consideration that should be kept in mind throughout the planning process. If measures are in place to hold actors accountable, then it is reasonable to move forward with project construction, etc. However, if none are in place, then the process should be paused until there are measures in place.

Many of the questions in this chapter consider the impacts of proposed projects and designs. However, they are not intended to simply be raised after proposals, or at fixed intervals in a linear process. Instead, they ask for a more holistic consideration before, during, and after many of these processes occur. In many instances, by evaluating the process, those determinations can be used to refine and improve the process moving forward. If, in the course of asking questions related to concerns of social equity, the process is determined to be detrimental to the community and no actions to correct these issues are taken, then as a final question professionals may ask: **Should the project proceed at all?**

CHAPTER 5

CONCLUSIONS

It's possible that any understanding of gentrification and its "trends" can be most easily understood through Molotch's (1976) concept of the "growth machine". Molotch argued that "'growth' is the driving force of all cities, as the economic benefits that accumulate through urban growth provide incentive for elites to act collectively in ways that structure further growth" (Loughran 2014, 49). As seen in various examples, this "growth" ethos has only exacerbated the social inequalities that exist within the city. Returning to Miller's (2016, 286) definition, gentrification is "a process that includes the following four elements: the reinvestment of capital, the social upgrading of locale by incoming high-income groups, landscape change, and direct or indirect displacement of low-income groups." Environmental, and similarly termed concepts (ecological, eco-, green, carbon) gentrification is essentially the same process. The use of an environmentally centered concept, however, is intended to highlight how sustainability and other environmental concerns have been co-opted, most often by private, profit-seeking interests, to create a process that is difficult to refute because of its apparent apolitical nature. It is also often utilized to target a very specific audience: young, affluent, "eco-conscious" in-movers in tech and other creative class industries.

As Hackworth and Smith (2001) have explained, the state often takes an active role in fostering gentrification, because it stands to benefit from the financial opportunities created by (re)development. Despite claims that environmental, economic,

and social benefits will be experienced by all, this is not the case, and lower-socioeconomic groups are almost always negatively affected. Sustainability is often touted for achieving a "triple bottom line" that addresses concerns related to the environment, economic development and social equity. However, the social equity component has failed to materialize in most of these processes. Over the last decades, resistance to environmental gentrification has most often come in the forms of policy and community strength.

In attempting to combat environmental gentrification, policy is the most important means of resistance. Although it may be argued that social infrastructure and strength of the community are of equal importance to policy, ensuring that policies are in place to prevent the displacement of existing residents is crucial to fighting environmental gentrification. Stronger communities provide stronger resistance, but without the resources they need to remain in the neighborhood, their efforts may be for naught.

Drawing on lessons learned through scholarship addressing both gentrification and environmental gentrification, as well as several local case studies, this research provides a series of questions that more deeply explore the underlying mechanisms of environmental gentrification and strategies that can be applied to resist the process. In so doing, we can begin to ask questions regarding social equity. With respect to social equity, Gould and Lewis (2017) envisioned it as comprised of two parts. The first part is centered on process. As they ask: "who has a say about development? Who makes decisions? Who gets to participate?" (3). The second part is centered on outcome. As they explain: "the equitable distribution of environmental goods and bads. In other words, who bears the costs of development and who gets the benefits?" (3). Despite its

omission in sustainability plans, which tend to focus more on environmental and economic criteria, social equity "in terms of process and outcomes – is a key element of urban sustainability" (3). In a similar fashion, the series of questions provided for consideration in Chapter 4 are intended to examine the process with a more critical lens. Beginning with considerations of vulnerabilities, and whether protections are in place, questions transition to essentially ask: for whom is the project being completed? By exploring claims and intentions more deeply, it may be possible to confront environmental gentrification. Once vulnerabilities and intentions are explored, it is important to consider how engagement and participation are conducted. Does design reflect the needs and desires of the existing community? Are they given an opportunity to provide genuine input and to reflect their identity? Rather than benefit everyone in a "win-win" situation, "green gentrification scholarship points out that the green spaces may evolve toward socially exclusive amenities and that, as a result, municipal representatives and sustainability advocates who uncritically accept calls for more urban green space may create new socio-spatial inequities" (Connelly 2018, 66). The concept of environmental gentrification requires us to consider and question the relationship between environmental and economic goals that the contemporary orthodox urban planning generates.

If gentrification and its associated trends (environmental, etc.) is ultimately driven by the desire to earn greater profits and/or generate greater revenues, then answering a question of how we can stop it seems as difficult as answering how we essentially stop capitalism itself. As landscape architects and other allied design professionals, we have an opportunity to act as advocates for those who are vulnerable to gentrification and to

scrutinize the processes in an attempt to create spaces that are reflective of the communities we engage with, but, despite our best intentions, we may still ultimately fail to protect those who are at most risk to the processes of gentrification. We can call for policy changes, but these decisions are left for elected officials to decide. We can attempt to engage every voice in the community, but we may still fail to reflect the "truest" voice of the residents. In the end, we are most often simply tasked with the creation of a design. And that design may or may not (positively or negatively) impact the lives of those who interact with it on a daily basis. Despite what may feel like a limited power, if enough of us raise our voice in concert with those making similar calls, and we take the time to more holistically consider how we interact with one another and how our views may not be shared by those around us, then perhaps we'll one day be able to create spaces that are truly equitable for all.

Echoing similar calls, future research should investigate how resources are distributed during the implementation of large-scale green infrastructure projects. In particular, is there an equitable distribution of funding? Given the rising costs involved in green infrastructure projects, more generally, is there a way for a "lighter, faster, cheaper" versions to be created? Would these types of projects allow for greater resident input and more adaptable sites that respond to neighborhood change and desire over time? We call for research that seeks to find new ways to build social infrastructure and create neighborhood spaces that truly reflect their residents' identity through place. To do so, we also call for future research to explore how to break from a Euro-centric view of nature and its associated aesthetics.

WORKS CITED

AgLanta. n.d. Urban Food Forest at Browns Mill. Accessed October 10, 2020.

https://www.aglanta.org/urban-food-forest-at-browns-mill-1

Agyeman, Julian and Bob Evans. 2004. "'Just sustainability': the emerging discourse of

environmental justice in Britain?" *Geographical Journal* 170 (2): 155–164.

Anguelovski, Isabelle. 2014. *Neighborhood as Refuge: Community Reconstruction, Place*

Remaking, and Environmental Justice in the City. Cambridge, MA: The MIT Press.

Anguelovski, Isabelle. 2016. "Healthy food stores, greenlining and food gentrification:

Contesting new forms of privilege, displacement and locally unwanted land uses in

racially mixed neighborhoods." *International Journal of Urban and Regional Research*

39 (6): 1209–1230.

Anguelovski, Isabelle, James Connolly & Anna Livia Brand. 2018. "From landscapes of

utopia to the margins of the green urban life: For whom is the new green city?" *City* 22

(3): 417-436.

Anguelovski, Isabelle, James J.T. Connolly, Laia Masip, and Hamil Pearsall. 2018. "Assessing Green Gentrification in Historically Disenfranchised Neighborhoods: A Longitudinal and Spatial Analysis of Barcelona." *Urban Geography* 39(3): 458-491.

Anguelovski, Isabelle, James J.T. Connolly, Melissa Garcia-Lamarca, Helen Cole, and Hamil Pearsall. 2019. "New Scholarly Pathways on Green Gentrification: What Does the Urban 'Green Turn' Mean and Where Is It Going?" *Progress in Human Geography* 43 (6): 1064–86.

Baker, Susan. 2006. *Sustainable Development*. New York: Routledge.

Banzhaf, H. Spencer, and Randall P. Walsh. 2008. "Do People Vote with Their Feet? An Empirical Test of Tiebout's Mechanism." *American Economic Review* 98 (3): 843–63.

Banzhaf, H. Spencer, and Eleanor McCormick. 2012. "Moving beyond Cleanup: Identifying the Crucibles of Environmental Gentrification." In *The Political Economy of Environmental Justice*, edited by H. Spencer Banzhaf, 22-51. Stanford: Stanford University Press.

Baró, Francesc, Amalia Calderón-Argelich, Johannes Langemeyer, and James J.T. Connolly. 2019. "Under one canopy? Assessing the distributional environmental justice implications of street tree benefits in Barcelona." *Environmental Science and Policy* 102: 54-64.

Bates, Lisa. 2013. *Gentrification and Displacement Study: Implementing an Equitable Inclusive Development Strategy in the Context of Gentrification*. Portland, OR: Portland State University.

Benedict, Mark A., and Edward T. McMahon. 2002. *Green infrastructure. Linking landscapes and communities*. Washington, D.C.: Island Press.

Benford, Robert D., and David A. Snow. 2000. "Framing Processes and Social Movements: An Overview and Assessment." *Annual Review of Sociology* 26: 611–639.

Braun, Bruce. 2002. *The Intemperate Rainforest: Nature, Culture and Power on Canada's West Coast*. Minneapolis: University of Minnesota Press.

Bryson, Jeremy. 2013. "The nature of gentrification." *Geography Compass* 7/8: 578–587.

Buijs, Arjen E., Thomas JM Mattijssen, Alexander PN Van der Jagt, Bianca Ambrose-Oji, Erik Andersson, Birgit HM Elands, and Maja Steen Møller. 2016. "Active Citizenship for Urban Green Infrastructure: Fostering the Diversity and Dynamics of Citizen Contributions through Mosaic Governance." *Current Opinion in Environmental Sustainability* 22: 1–6.

Chapple, Karen, and Miriam Zuk. 2016. "Forewarned: The Use of Neighborhood Early Warning Systems for Gentrification and Displacement." *Cityscape* 18 (3): 109–30.

Checker, Melissa. 2011. "Wiped Out by the 'Greenwave': Environmental Gentrification and the Paradoxical Politics of Urban Sustainability." *City & Society* 23(2): 210–229.

Chestnut, Dennis, and Marianne E. Krasny. 2018. "Countering Environmental Gentrification through Economic, Cultural, and Political Equity: The 11th Street Bridge Park." In *Grassroots to Global : Broader Impacts of Civic Ecology*, edited by Marianne E. Krasny, Keith G. Tidball, and David Maddox, 194-212. Ithaca: Cornell University Press.

Connolly, James J.T. 2018. "From Jacobs to the Just City: A foundation for challenging the green planning orthodoxy." *Cities* 91: 64-70.

Cucca, Roberta. 2012. "The Unexpected Consequences of Sustainability: Green Cities Between Innovation and Ecogentrification." *Sociologica* 2: 1-21.

Curran, Winifred, and Trina Hamilton. 2012. "Just Green Enough: Contesting Environmental Gentrification in Greenpoint, Brooklyn." *Local Environment* 17 (9): 1027–42.

Curran, Winifred, and Trina Hamilton. 2018. "A just enough green? Industrial gentrification and competing socio-natures in Greenpoint, Brooklyn. In *Just Green Enough: Urban Development and Environmental Gentrification*, edited by Winifred Curran and Trina Hamilton, 32-46. New York: Routledge.

Dooling, Sarah. 2009. "Ecological Gentrification: A Research Agenda Exploring Justice in the City." *International Journal of Urban & Regional Research* 33 (3): 621–39.

Dooling, Sarah. 2012. "Sustainability Planning, Ecological Gentrification and the Production of Urban Vulnerabilities." In *Cities, Nature and Development: The Politics and Production of Urban Vulnerabilities,* edited by Gregory Simon and Sarah Dooling, 101-119. Burlington: Ashgate.

Dooling, Sarah. 2018. "Making just green enough advocacy resilient: Diverse economies, ecosystem engineers and livelihood strategies for low-carbon futures." In *Just Green Enough: Urban Development and Environmental Gentrification*, edited by Winifred Curran and Trina Hamilton, 47-60. New York: Routledge.

Eckerd, Adam. 2011. "Cleaning Up without Clearing Out? A Spatial Assessment of Environmental Gentrification." *Urban Affairs Review* 47 (1): 31–59.

Elkington, John. 1994. "Towards the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development. *California Management Review* 36 (2): 90–100.

Elmqvist, Thomas. 2018. *The urban planet: knowledge towards sustainable cities*. New York, NY: Cambidge University Press.

Finn, Donovan, and Lynn McCormick. 2011. "Urban Climate Change Plans: How Holistic?" *Local Environment* 16 (4): 397–416.

Freeman, Lance. 2006. *There goes the 'hood: Views of gentrification from the ground up*. Philadelphia: Temple University Press.

Furman Center .2016. "State of New York City's Housing and Neighborhoods – 2015 Report." NYU Furman Center. Accessed on January 30, 2021. https://furmancenter.org/research/sonychan/2015-report

Gaynoir, Gillian, Mark Treskon, Joseph Schilling, and Gabriella Velasco. "Civic Assets for More Equitable Cities." Urban Institute. Last modified August 4, 2020. https://www.urban.org/research/publication/civic-assets-more-equitable-cities/view/full_report

Gibbs, David, and Rob Krueger. 2007. "Containing the Contradictions of Rapid Development? New Economy Spaces and Sustainable Urban Development." In *The Sustainable Development Paradox: Urban Political Economy in the United States and Europe*, edited by Rob Krueger and David Gibbs, 95–122. New York: Guilford Press.

Glass, Ruth. 1964. *London: aspects of change*. London: MacGibbon & Kee.

Glover, Troy D., William Stewart, and Katerie Gladdys. 2008. "Social Ethics of Landscape Change: Toward Community-Based Land-Use Planning." *Qualitative Inquiry* 14(3): 384-401.

Goodling, Erin, Jamaal Green, and Nathan McClintock. 2015. "Uneven Development of the Sustainable City: Shifting Capital in Portland, Oregon." *Urban Geography* 36 (4): 504–27.

Gould, Kenneth Alan, and Tammy L. Lewis. 2017. *Green Gentrification: Urban Sustainability and the Struggle for Environmental Justice*. New York: Routledge.

Gravel, Ryan. 1999. "Belt Line – Atlanta: Design of Infrastructure as a Reflection of Public Policy." Master of Architecture & Master of City Planning Thesis, Georgia Institute of Technology.

Gunder, Michael. 2006. "Sustainability: Planning's Saving Grace or Road to Perdition?" *Journal of Planning Education and Research* 26 (2): 208–222.

Haase, Dagmar, Sigrun Kabisch, Annegret Haase, Erik Andersson, Ellen Banzhaf, Francesc Baró, Miriam Brenck, Leonie K. Fischer, Niki Frantzeskaki, Nadja Kabisch, Kerstin Krellenberg, Peleg Kremer, Jakub Kronenberg, Neele Larondelle, Juliane Mathey, Stephan Pauleit, Irene Ring, Dieter Rink, Nina Schwarz, and Manuel Wolff. 2017. "Greening Cities – To be socially inclusive? About the alleged paradox of society and ecology in cities." *Habitat International* 64: 41–48.

Hackworth, Jason, and Neil Smith. 2001. "The Changing State of Gentrification." *Tijdschrift voor Economische en Sociale Geografie* (Journal of Economic & Social Geography) 92 (4): 464-477.

Hamilton Trina, and Curran Winifred. 2013. "From 'Five Angry Women' to 'Kick-Ass Community': Gentrification and Environmental Activism in Brooklyn and Beyond." *Urban Studies* 50 (8): 1557–74.

Harper, Earl T. 2020. "Ecological Gentrification in Response to Apocalyptic Narratives of Climate Change: The Production of an Immuno-political Fantasy." *International Journal of Urban & Regional Research* 44 (1): 55–71.

Heynen, Nik, Maria Kaika, and Erik Swyngedouw. 2006. "Urban political ecology: politicizing the production of urban natures." In *In the nature of cities: urban political ecology and the politics of urban metabolism*, edited by Nik Heynen, Maria Kaika, and Erik Swyngedouw, 1–20. New York: Routledge.

Holifield, Ryan, and Kathleen C. Williams. 2014. "Urban Parks, Environmental Justice, and Voluntarism: The Distribution of Friends of the Parks Groups in Milwaukee County." *Environmental Justice* 7 (3): 70–76.

Immergluck, Dan. 2009. "Large Redevelopment Initiatives, Housing Values and Gentrification: The Case of the Atlanta Beltline." *Urban Studies* 46 (8): 1723–45.

Immergluck, Dan, and Tharunya Balan. 2018. "Sustainable for whom? Green urban development, environmental gentrification, and the Atlanta Beltline." *Urban Geography* 39 (4): 546-562.

Isin, Engin F. 2008. "Theorizing Acts of Citizenship." In *Acts of Citizenship*, edited by Engin F. Isin and Greg M. Nielsen, 15-43. New York: JaZed Books Ltd.

Jarrell, Melissa L., Joshua Ozymy, and Danielle McGurrin. 2013. "How to Encourage Conflict in the Environmental Decision-Making Process: Imparting Lessons from Civic Environmentalism to Local Policy-Makers." *Local Environment* 18 (2): 184–200.

Jenkins, J. Craig. 1983. "Resource mobilization theory and the study of social movements." *Annual Review of Sociology* 9 (1): 527–553.

Joassart-Marcelli, Pascale, Jennifer Wolch, and Zia Salim. 2011. "Building the Healthy City: The Role of Nonprofits in Creating Active Urban Parks." *Urban Geography* 32 (5): 682–711.

Johnson, Alison, Kate Diedrick, Abby Scher, Biko Koenig, Eric Dirnbach, and Brandy Ball Blake. "BeltLining: Gentrification, Broken Promises, And Hope On Atlanta's Southside." Housing Justice League. Last modified October 2017. https://www.housingjusticeleague.org/b4all-report

Keenan, Sean Richard. 2020. "City halts all building permits near Westside Park project to confront 'rapid gentrification.'" Curbed Atlanta. Last modified February 18, 2020. https://atlanta.curbed.com/2020/2/18/21141160/atlanta-gentrification-westside-bellwood-quarry-park-construction-permits

Keil, Roger. 2003. "Urban Political Ecology." *Urban Geography* 24 (8): 723–738.

Kern, Leslie. 2018. "Mobilizing community identity to imagine just green enough futures: A Chicago case study." In *Just Green Enough: Urban Development and Environmental Gentrification*, edited by Winifred Curran and Trina Hamilton, 167-180. New York: Routledge.

Kim, Esther. 2018. "Bring on the yuppies and the guppies! Green gentrification, environmental justice, and the politics of place in Frogtown, L.A." In *Just Green Enough: Urban Development and Environmental Gentrification*, edited by Winifred Curran and Trina Hamilton, 181-196. New York: Routledge.

Lees, L. 2000. "A Reappraisal of Gentrification: Towards a 'Geography of Gentrification.'" *Progress in Human Geography* 24 (3): 389–408.

Lennon, Mick , and Mark Scott. 2014. "Delivering ecosystems services via spatial planning: reviewing the possibilities and implications of a green infrastructure approach." *TPR: Town Planning Review* 85 (5): 563-587.

Lister, Michael. 2015. "Citizens, Doing It for Themselves? The Big Society and Government through Community." *Parliamentary Affairs* 68 (2): 352–70.

Loughran, Kevin. 2014. "Parks for Profit: The High Line, Growth Machines, and the Uneven Development of Urban Public Spaces." *City & Community* 13 (1): 49–68.

Marcuse, Peter. 1998. "Sustainability is not enough." *Environment and Urbanization* 10 (2): 103–111.

Marcuse, Peter. 2015. "Gentrification, Social Justice and Personal Ethics." *International Journal of Urban & Regional Research* 39 (6): 1263–69.

Meerow, Sara, and Joshua P. Newell. 2017. "Spatial planning for multifunctional green infrastructure: Growing resilience in Detroit." *Landscape and Urban Planning* 159: 62-75.

Miller, Jessica Ty. 2016. "Is Urban Greening for Everyone? Social Inclusion and Exclusion along the Gowanus Canal." *Urban Forestry & Urban Greening* 19: 285–94.

Molotch, Harvey. 1976. "The City as Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology* 82 (2): 309–32.

Mullenbach, Lauren E. and Birgitta L. Baker (2018): "Environmental Justice, Gentrification, and Leisure: A Systematic Review and Opportunities for the Future." *Leisure Sciences* 42 (3): 1-18.

Newman, Kathe, and Elvin K. Wyly. 2006. "The Right to Stay Put, Revisited: Gentrification and Resistance to Displacement in New York City." *Urban Studies* 43 (1): 23–57.

Pearsall, Hamil. 2010. "From brown to green? Assessing social vulnerability to environmental gentrification in New York City." *Environment and Planning C: Government and Policy* 28 (5): 872–886.

Pearsall, Hamil. 2013. "Superfund Me: A Study of Resistance to Gentrification in New York City." *Urban Studies* 50 (11): 1–18.

Pearsall, Hamil, and Isabelle Anguelovski. (2016). "Contesting and Resisting Environmental Gentrification: Responses to New Paradoxes and Challenges for Urban Environmental Justice." *Sociological Research Online* 21 (3): 1-7.

Pearsall, Hamil. 2018. "The contested future of Philadelphia's Reading Viaduct: Blight, neighborhood amenity, or global attraction?" In *Just Green Enough: Urban Development and Environmental Gentrification*, edited by Winifred Curran and Trina Hamilton, 197-208. New York: Routledge.

Pearsall, Hamil, and Jillian K. Eller. 2020. "Locating the Green Space Paradox: A Study of Gentrification and Public Green Space Accessibility in Philadelphia, Pennsylvania." *Landscape and Urban Planning* 195: 1-12.

Perkins, Harold A. 2010. "Green spaces of self-interest within shared urban governance." *Geography Compass* 4 (3): 255–268.

Quastel, Noah. 2009. "Political Ecologies of Gentrification." *Urban Geography* 30 (7): 694–725.

Quastel, Noah, Markus Moos, and Nicholas Lynch. 2012. "Sustainability-as-Density and the Return of the Social: The Case of Vancouver, British Columbia." *Urban Georgraphy* 33 (7): 1055-1084.

Reichl, Alexander J. 2016. "The High Line and the Ideal of Democratic Public Space." *Urban Geography* 37 (6): 904–925.

Rice, Jennifer L., Daniel Aldana Cohen, Joshua Long, and Jason R. Jurjevich. 2020. "Contradictions of the Climate-Friendly City: New Perspectives on Eco-Gentrification and Housing Justice." *International Journal of Urban and Regional Research* 44 (1): 145–65.

Richardson, Jason, Bruce Mitchell, and Juan Franco. "Shifting Neighborhoods: Gentrification and cultural displacement in American cities." National Community Reinvestment Coalition. Last modified March 19, 2019. https://ncrc.org/gentrification/#_edn1

Rigolon, Alessandro, and Jeremy Németh. 2018. "'We're Not in the Business of Housing:' Environmental Gentrification and the Nonprofitization of Green Infrastructure Projects." *Cities* 81: 71–80.

Rigolon, Alessandro, and Jeremy Németh. 2020. "Green Gentrification or 'Just Green Enough': Do park location, size and function affect whether a place gentrifies or not?" *Urban Studies* 57 (2): 402-420.

Rigolon, Alessandro, Samuel J. Keith, Brandon Harris, Lauren E. Mullenbach, Lincoln R. Larson, and Jaclyn Rushing. 2020. "More than 'Just Green Enough': Helping Park Professionals Achieve Equitable Greening and Limit Environmental Gentrification." *Journal of Park & Recreation Administration* 38 (3): 29–54.

Saha, Devashree, and Robert G. Paterson. 2008. "Local Government Efforts to Promote the "Three Es" of Sustainable Development: Survey in Medium to Large Cities in the United States." *Journal of Planning Education and Research* 28 (1): 21–37.

Sandberg, L. Anders. 2014. "Environmental Gentrification in a Post-Industrial Landscape: The Case of the Limhamn Quarry, Malmö, Sweden." *Local Environment* 19 (10): 1068–85.

Schauman, Sally, and Sandra Salisbury. 1998. "Restoring Nature in the City: Puget Sound Experiences." *Landscape and Urban Planning* 42 (2–4): 287–95.

Schlozman, Kay Lehman, Sidney Verba, and Henry, E. Brady, 2012. *The Unheavenly Chorus: Unequal Political Voice and the Broken Promise of American Democracy*. Princeton: Princeton University Press.

Sieg Holger, Smith V. Kerry, Banzhaf H. Spencer, and Walsh Randy. 2004. "Estimating the General Equilibrium Benefits of Large Changes in Spatially Delineated Public Goods." *International Economic Review* 45 (4): 1047–77.

Slater, Tom. (2006). "The eviction of critical perspectives from gentrification research." *International Journal of Urban and Regional Research* 30 (4): 737-757.

Smith, Michael, and Jordan Johnson. "Mayor Keisha Lance Bottoms Issues Executive Order to Place Moratorium on Issuance of New Construction Permits Near Westside Park." Press Releases, City of Atlanta, February 17, 2020. https://www.atlantaga.gov/Home/Components/News/News/13266/672

Smith, Neil. 1979. "Toward a Theory of Gentrification: A Back to the City Movement by Capital, not People." *Journal of the American Planning Association* 45 (4): 538-548.

Smith, Neil. 1982. "Gentrification and uneven development." *Economic Geography* 58 (2): 139–155.

Smith, Neil. 1987. "Gentrification and the rent-gap." *Annals of the Association of American Geographers* 77 (3): 462–465.

Smith, Neil. 1996. *The new urban frontier: gentrification and the revanchist city.* London: Routledge.

Tretter, Eliot M. 2015. "The Environmental Justice of Affordable Housing: East Austin, Gentrification, and Resistance." In *Sustainability in the Global City: Myth and Practice*, edited by Cindy Isenhour, Gary McDonogh, and Melissa Checker, 350-375. New York: Cambridge University Press.

Trudeau, Dan. 2018. "Patient capital and reframing value: Making New Urbanism Just Green Enough." In *Just Green Enough: Urban Development and Environmental Gentrification*, edited by Winifred Curran and Trina Hamilton, 227-238. New York: Routledge.

The Trust for Public Land. n.d. Cook Park. Accessed October 8, 2020. https://www.tpl.org/our-work/cook-park

United Nations World Commission on Environment and Development, 1987. *Our common future*. Oxford: Oxford University Press.

United Nations Environment Programme. 2019. "Global Environment Outlook 6: Healthy Planet, Healthy People." Last modified March 4, 2019. https://www.unep.org/resources/global-environment-outlook-6

Ventriss, Curtis, and Walter Kuentzel. 2005. "Critical Theory and the Role of Citizen Involvement in Environmental Decision Making: A Re-Examination." *International Journal of Organization Theory and Behavior* 8 (4): 520–540.

Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, MA: Harvard University Press.

Waitt, Gordon, and Lauren Cook. 2007. "Leaving nothing but ripples on the water: performing ecotourism natures." *Social and Cultural Geography* 8 (4): 535–550.

Westside Future Fund. n.d. Accessed November 5, 2020. https://www.westsidefuturefund.org/

Wolch, Jennifer R., Jason Byrne, and Joshua P. Newell. 2014. "Urban Green Space, Public Health, and Environmental Justice: The Challenge of Making Cities 'Just Green Enough.'" *Landscape and Urban Planning* 125: 234–44.

Yang, Kaifeng, and Kathe Callahan. 2007. "Citizen Involvement Efforts and Bureaucratic Responsiveness: Participatory Values, Stakeholder Pressures, and Administrative Practicality." *Public Administration Review* 67 (2): 249–264.