

GROWING THE GREEN CITY: NAVIGATING THE TENSIONS OF VALUE-FREE DEVELOPMENT AND SUSTAINABILITY IN PHILADELPHIA

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ABSTRACT

This dissertation focuses on the relationship between sustainability and growth as it plays out through sustainable development projects in Philadelphia. Cities are interested in adopting policies and practices that will make them greener. In 2009, Philadelphia adopted its first sustainability plan, *Greenworks*, and throughout the past decade, many other cities have adopted similar plans. This has happened at the same time that cities have attempted to address their shrinking populations and coffers by aggressively pursuing pro-growth strategies. This dissertation explores the tension between growth and sustainability and, given this tension, how the process of sustainable development plays out in Philadelphia.

This research focuses on green building and urban greening projects using a single-case embedded case study design. Projects of varying scales are examined – including large- and small-scale sustainable development projects. Data comes primarily from in-depth interviews, which were conducted over the course of one year with project managers, sustainability professionals, government bureaucrats, and community members, among others. The data from these interviews are supplemented with historical archival records, open government records, and other primary and secondary sources.

This research highlights two tensions in the sustainable development process. First, the politics of development give rise to a tension between exchange value and use value. On one hand are powerful urban actors who believe that development of urban space should be value-free, or guided by the free market. On the other are community members who may value the space for another purpose.

The second tension is between different approaches to resource use in urban development. Most measures of economic success are tied to growth, or the extent to which we collectively produce and consume goods. However, the production of goods is fueled by natural resources, which are dwindling. There is a tension between how pro-growth and pro-sustainability actors view resource use. This research contributes to the literature by examining the relationship between these tensions, or how the value-free politics of development are reconciled with the crisis of natural resource consumption.

The results of this analysis show that sustainability initiatives are treated by powerful urban actors as means to a growth-oriented end, rather than as ends in themselves. This is true even when these actors frame their discussions of sustainability in ideological terms. They believe that sustainability is a worthy endeavor, insofar as it also coincides with a growth-oriented agenda. The production of green buildings and green open places supports green place making, which is an important component of commodifying – and growing – the green city. The tension between sustainability and growth, however, are a point of weakness where traditional growth-oriented politics of development may be challenged.

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TABLE OF CONTENTS

	PAGE
ABSTRACT	iii
ACKNOWLEDGMENTS	v
DEDICATION.....	VII
LIST OF TABLES	XI
LIST OF FIGURES	XII
CHAPTERS	
1: INTRODUCTION AND LITERATURE REVIEW.....	1
Introduction	1
The Relationship between Growth and Sustainability	5
Urban Growth Ideologies: Land, Investment, and Value Free Development.....	6
The Tenets of Sustainability: Environment, Economy, and Society.....	8
The Tensions of Resource Use: The Relationship between Sustainability and Economic Growth	16
City Forces and Structures that Guide Development.....	20
Urban Sustainable Development Initiatives	25
Conclusion.....	27
Overview of the Dissertation.....	28
2: METHODS	31
Introduction	31
Research Approach: Constructivist Grounded Theory	31
Research Methods	35
Historical Analysis	35
The Embedded Case Study.....	36
Subunit Selection.....	41
Subunit Description	42
Bilbo Building: Limestone Investment Trust.....	43
Energy Efficient Housing: Sustaincity Development.....	45
Winthill Plaza: the Downtown Development Corporation	46
Forge Wash Urban Farm.....	47

The Interviews	48
Conclusion.....	53
3: GREEN BUILDING: THE PRODUCTION AND COMMODIFICATION OF THE GREEN CITY	55
Introduction	55
What is Green Building?.....	57
Defining Green Building	59
Credentialing Green Building.....	60
A History of Green Building.....	62
Green Buildings Before Sustainability	63
The Historical Role of Government in Green Building.....	64
Green Building: the Philadelphia Context.....	67
Philadelphia as a City for Climate Protection	67
Paving the Way: Building Demolition Under NTI	68
Forays into Green Building Policy	69
The Nutter Administration: Building Green?.....	70
Conclusion.....	73
4: “GREEN BUILDING IS JUST BUILDING”	75
Introduction	75
The Cost of Doing Business in the City	81
Project Funding.....	82
Racing Against Time: The Role of City Government Bureaucracy in Project Success	89
Making the Best of It: The Importance of Relationships in Project Success ...	93
Conclusion.....	97
5: THE HISTORICAL PRODUCTION OF GREEN OPEN PLACES IN PHILADELPHIA .	100
Introduction	100
Green Open Places.....	101
Open Spaces.....	101
Green Spaces	102
An Operational Concept: Green Places	104
The History and Context of Green Places	107
The Commons and the Right to the City.....	107
The History of Green Space in U.S. Cities	109
A History of Green Space in Philadelphia.....	112
Pre-Neighborhood Transformation Initiative Greening Efforts of the Pennsylvania Horticultural Society:.....	112
The Neighborhood Transformation Initiative: More Space for Green	114
Conclusion.....	119

6: PRODUCING AND CONTESTING GREEN OPEN SPACES.....	121
Introduction	121
Large- and Small-Scale Green Open Places in Philadelphia	122
Defining Sustainability for Large- and Small-Scale Urban Greening Projects	124
The Purpose of Green Space	130
Land access and tenure	135
Conclusion.....	139
7: CONCLUSION, IMPLICATIONS, AND FUTURE RESEARCH	142
Introduction	142
Findings.....	144
Limitations.....	155
Future Research	156
Policy Recommendations.....	158
Conclusion.....	160
BIBLIOGRAPHY	163
APPENDICES	
A: WAVE ONE INTERVIEW GUIDE.....	175
B: WAVE TWO INTERVIEW GUIDE.....	177
C: WAVE THREE INTERVIEW GUIDE	179

LIST OF TABLES

Table 1: Summary of Philadelphia's Sustainable Development Projects	43
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LIST OF FIGURES

Figure 1: The Single-Case Embedded Design	39
Figure 2: The Embedded Case Study Applied to this Research.....	40

CHAPTER 1 INTRODUCTION AND LITERATURE REVIEW

Introduction

Contemporary U.S. cities are characterized by a primacy of growth-oriented development (Molotch 1976, 2007). During earlier stages of urbanization, U.S. cities experienced rapid growth with industrialization, which continued with migration and immigration. Throughout this time, the population of cities grew at an enormous rate. Today, however, many of these same cities have experienced a crisis of growth.

Supported by federal subsidies, urban areas have sprawled into suburbia (Jackson 1987). At the same time, businesses and large employers that once called cities their homes have moved their operations outside of cities, or more likely, out of the country altogether (Wilson 1997). As a result, some cities have responded by directing their attention away from growth and toward sustainably managing populations and economies as they shrink (Richardson and Nam 2014; Ryan 2014). However, many cities in the United States have been left for decades struggling to figure out how they will continue to grow because growth underlies urban capitalism and real estate development.

The preeminent underlying principle present in urban efforts to reinvent themselves and attract people and capital back to urban centers is that growth is good. Powerful urban actors – politicians, developers, and others – adopt and promote a philosophy of growth that lauds its benefits for cities; however, benefits

often accrue to these elites at the expense of other less powerful people (Logan and Molotch 2007). Growth, therefore, is a highly political process that plays out in urban areas. Often, this process involves attracting and supporting large-scale development projects resulting in tension between residents, business owners, developers, and politicians. Growth is often assumed to be beneficial, but where and how it happens are often debated. Is growth really good? Or, perhaps a better question: for whom is growth good?

While cities have increasingly worked to compete for people (through, for example, tourism, corporate relocation incentives, and encouraging immigration), there has also been a concomitant focus on environmental resource conservation. In recent years, cities have been giving increased attention to sustainable development. This increased interest in sustainable development is evidenced by the membership of over 1100 local governments in 68 countries in what is the largest international organization of local governments, the ICLEI – Local Governments for Sustainability¹ (ICLEI - Local Governments for Sustainability 2009, 2011). Of these, 49% are local governments in the United States. Clearly, then, many cities are displaying an increased consciousness of the effects of natural resource use on the environment, of corporate capitalism and globalization on local economies, and of the effects of these on disadvantaged populations (Portney 2003).

¹ The ICLEI-Local Governments for Sustainability was formerly known simply as ICLEI, or the International Council for Local Environmental Initiatives.

² The field of ecological economics is a notable exception (see, for example,

The concept of sustainability has entered the popular imagination and discourse in an impressive way. Its meaning, however, seems to defy precision. What is “sustainable?” What does it mean to talk about sustainable *development*? This research seeks to investigate how sustainable development initiatives are implemented as part of a city’s growth and sustainability agendas.

Approaches to resource use for pro-growth and pro-sustainability actors are, in many ways, completely paradoxical and contradictory (Krueger and Gibbs 2007). Growth relies on an ever-increasing production/consumption cycle that necessarily requires the use of more resources. On the other hand, sustainability is the explicit recognition of finite resources and the use of fewer of these resources for production and consumption (Daly and Cobb 1994).

Given this tension between using and conserving natural resources, and given the highly political nature of growth, how is sustainable development implemented in cities? Can cities achieve growth while at the same time promoting agendas toward sustainability? Can sustainability serve the prerogatives of growth and, conversely, can growth support the ideology of sustainability? Placed amidst this tension, the notion of sustainable development, noble as it may sound, is fraught with contradiction.

Sustainability is a feel-good concept that everyone loves to love. Swyngedouw notes the difficulties in finding anyone *against* sustainability: “Greenpeace is in favor, George Bush Jr. and Sr. are, the World Bank and its chairman are, the Pope is, my son Arno is, the rubber tappers in the Brazilian Amazon forest are, Bill Gates is, the labor unions are” (2007:20). However, with all

its fanfare, sustainability initiatives in local governments are not without contention, in part because they occur within the context of a local growth agenda. What comprises sustainable, how sustainability happens, where it happens, and for whom it happens are all debated, as I describe later in this chapter. And as I will discuss, whether or not a project labeled "sustainable" measures up to the various standards of "true" sustainability (whatever that may be) is also contested.

Projects relating to sustainable development are contentious because they have political and economic consequences. Urban elite interests in growth, revitalization, and renewal are wrapped up in power struggles fixed on how to reinvent and transform decaying urban centers (Molotch 1993:35). The relatively new interest of urban areas in sustainability and the discourse that surrounds it might be seen as looking at an oft-told tale of urban power regimes and growth machines through a set of green-tinted glasses.

This dissertation is about how sustainable development projects are faring in a city that has adopted a sustainable development agenda. The research is a comparative analysis of both large- and small-scale development projects in a large urban center. My goal is to investigate sustainable development by examining sustainability initiatives within metropolitan development. In particular, my guiding question asks how urban sustainable development projects are implemented within the context of an urban growth agenda. How are sustainable initiatives defined and managed within institutions that govern urban growth? Do different types of sustainability projects (for example, green building versus urban greening) and projects with different scopes (large- versus small-scale) meet with

different responses from those with the political power to push development projects through to completion? How do those who are invested in sustainable growth projects understand sustainability as a concept? What does sustainability actually mean operationally within the context of a profit-making growth-oriented urban agenda?

This chapter proceeds as follows. The first part examines some of the ideological underpinnings of urban growth and sustainability and then delineates the tensions between them. The second part describes the development process, paying particular attention to how local actors are able to influence development, even in the face of global political and economic forces. The last section discusses sustainable urban development initiatives to show how the principles of sustainability are pursued in practice.

The Relationship between Growth and Sustainability

Cities are increasingly turning toward sustainability at the same time that they try to increase growth. But approaches to pursuing growth and sustainability are, in many ways, opposed. This section will examine these positions independently and then explains the tensions. I then turn to an examination of some of the structures that guide urban development. Finally, I broadly survey sustainable development initiatives happening in cities.

Urban Growth Ideologies: Land, Investment, and Value Free Development

The development of urban areas is, at its most basic, the development of space. Henri Lefebvre theorized space in a uniquely Marxist way by explaining its attributes and development (or lack thereof) as a function of the larger political and economic system of capitalism. While traditional Marxist philosophy put labor and capital at the forefront of social analysis, Lefebvre introduced space as another crucial ingredient in the forces of production. In order for this to occur, though, space must first be commodified; that is, spatial processes of capitalist accumulation must be facilitated by turning land into a commodity to be bought and sold, invested and accumulated (Lefebvre 1970, 1992).

Land is a unique commodity in two ways. First, inasmuch as it is tied to location, it is finite. Thus, based primarily on locational demand, its value can be altered. This is the second way that land is commodified: its value is determined not just by the physical characteristics of a given parcel, but even more so by the effects of externalities, or what surrounds that parcel. This second characteristic is crucial for the land investment and development process.

The distribution of development across space is a function of the processes of accumulation that support such development. Lefebvre understands the physical production of space as a function of what he refers to as the two circuits of capital (1970). The primary circuit, which involves the manufacturing sector of the economy, has a tendency toward over-production.

This consequential over-accumulation results in economic crisis characterized by decreased prices and rising rates of unemployment. But, drawing

from Marx, urban theorists like Lefebvre and Harvey argue that these issues can be resolved by switching investment into the secondary circuit of capital – investment in space (Harvey 2009; Lefebvre 1970). An immobile investment, investment in space cannot be moved without being destroyed (Smith 2008:121). This, then, is a circuit of capital “that both flows and accrues through making space” (Merrifield 2002:143). Those who facilitate the financial flows of capital into land, such as real estate companies, developers, and financial institutions, are at the heart of this secondary circuit, which transcends boundaries and is global in nature (Feagin 1997; Gotham 2006). While these activities of the secondary circuit of capital are less direct than those of the primary circuit, the capital investment process is crucial for understanding urban growth patterns.

Based on this commodification of and investment in land, I understand growth as an economic phenomenon characterized by increased flows of capital to support the cycle of production and consumption. With this undergirding structure of land commodification and investment serving as a foundation, growth in urban areas is primarily a function of two forces. First, as discussed above, growth happens at a macro level as a result of global, national, and local financial flows; that is, the types of investments made in the primary and secondary circuits of capital. Second, at a more micro level of analysis, local elites with land-based interests promote and guide land investment; this is known as “the growth machine” (Jonas, Wilson, and Meeting 1999; Logan and Molotch 2007; Molotch 1976, 1993). This second aspect of urban growth patterns is one where land-based elites are able to

guide investment patterns using an ideology of value-free development to support them.

This ideology frames development as good as it ultimately helps to grow the urban area; that is, urban growth is portrayed as a general public good. The ideology helps to ameliorate tensions between two primary stakeholders in the urban land conflict. On one side are those who view and use land through its “exchange value;” landowners and speculators, guided by the growth machine, push to make money off of the patterns of development. The growth machine’s interest in exchange value, however, comes into direct conflict with the other side: those interested in the “use value” of place, which is the value of the use of developed and undeveloped land in the daily lives of residents and other non-growth machine actors (Logan and Molotch 2007:viii).

The Tenets of Sustainability: Environment, Economy, and Society

At its most basic, sustainability refers to “that which can be maintained over time” (Heinberg 2010:13). An Iroquois Nation maxim says that “in our every deliberation, we must consider the impact of our decisions on the next seven generations” (Goodstein 2010:88). In the same spirit, A report to the World Commission on Environment and Development defines sustainable development as “paths of progress which meet the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs” (World Commission On Environment and Development 1987:4). As Castells notes, this concept might be thought of sociologically as a sort of “intergenerational solidarity”

(2000:118). And while focusing on future generations, it also recognizes the importance of adequately addressing the needs of people who are here now.

However, since this definition was presented to the United Nations World Commission on Environment and Development in 1987, new definitions of sustainability have proliferated, with one study citing upwards of 300 definitions in the academic literature alone (Johnston, Everard, and Karl-Henrik 2007). A sustainable label is applied to many things from government and corporate policies and practices to products in big box stores. This broad application and, in some cases, co-optation of the term has resulted in confusion and skepticism. What does it mean to be sustainable?

Defining sustainability is difficult for a few reasons. First, the word sustainable has become widely used to simply refer to practices that are supposedly more environmentally sound than others. Wrapped up in this is the fact that, over time, vested interests have intervened in defining and using the term to serve their own profit-making agendas. Sustainability has been co-opted to serve the interests of the rich and powerful (Dauvergne and Lister 2013). A second challenge to defining sustainability is that, as we see from the oft-cited Brundtland Commission Report, definitions of sustainability are often conflated with development. There is a loose application of the terms sustainability and sustainable development. As I discuss in the next section, sustainable development is a term that is often viewed as, at best, ambiguous or, at worst, an oxymoron. Finally, a third challenge to defining sustainability is that the components of the definition need to be broad enough to apply to many contexts while also specific enough to operationalize and

measure success. For example, what does it mean to measure our current and future needs, who gets to decide, and how should it happen?

The goal of this section is not to create a working definition of sustainability but, rather, to highlight that its meaning and operationalization are actively contested. This is true for academic researchers and theorists and, as we will see, for practitioners trying to create sustainable development projects. Despite this, there are three elements of sustainability that are often discussed in the literature (Agyeman and Evans 2003; Agyeman 2013) and, rather than try to force them into a definition, it is perhaps better to understand them as tenets of a sustainability value system. These elements include the environment, the economy, and social equity.

Sustainability as a value system recognizes that there are finite resources and argues that a way of life involving consuming resources faster than they can be reproduced will not be able to continue. For some, the term sustainability may evoke a deep ecological perspective, which highlights the inherent worth of nature as opposed to its utility for human consumption (Naess 1973). However, definitions of sustainable development have evolved from a primarily environmental focus to also include economic and social justice concerns. This is often referred to as a “triple bottom line” approach to sustainability. The remainder of this section examines how each of these three Es – environment, economy, and equity – is part of a value system that frames thinking about sustainability.

Environmental sustainability

Sustainability originated as an environmental concept over a century ago, and was a concept used to think about long-term and continuous yield of timber from forests (Farley and Smith 2013). Thus, concerns about resource depletion have meant that thinking about sustainability has largely been rooted in an environmentalist consciousness. As such, sustainability advocates point to modern environmental concerns such as climate change, food security, access to drinking water, and the myriad concerns associated with rising energy costs due to an ever-decreasing supply of finite energy sources like oil. Sustainability efforts promote turning toward renewable and more efficient means of energy to support lifestyles that will not negatively impact the ability of current *or* future generations to access life-sustaining natural resources.

The environmental component of sustainability includes thinking about how materials for consumption are sourced, used, and disposed of. When sourcing materials for the production of goods, an approach rooted in environmental sustainability thinking argues that it is crucial to be conscious of the long-term viability of extracting or harvesting those resources. In order to meet the needs of future generations, we must ensure that we are not consuming these resources faster than they can be replenished. And waste disposal should be minimized and done in ways that are least harmful to the environment.

For many years, cities were seen as antithetical to nature (Benton-Short and Short 2013); they were either ignored altogether or seen as part of the problem. However, more recently the place of cities is being questioned. On one hand, cities

are seen as more sustainable than many suburban and rural areas; the density of cities helps to reduce the negative impacts of carbon-use, for example (Agyeman 2013). On the other hand, cities are sometimes seen as environmentally unsustainable, because their environmental impacts are more concentrated (Rees, Wackernagel, and Testemale 1998).

Economic sustainability

The environmental aspect of sustainability remains prevalent in the literature (Čapek 2010; Coplan 2005). However, interpretations of sustainability have evolved to recognize that environmental issues are directly connected to economic systems, as the increasingly interdependent global economy that relies on access to cheap resources and energy (Daly and Cobb 1994). Scientists who have argued for increased attention to the rate at which we consume non-renewable resources assert that we may have reached an extraction peak for non-renewable oil. The increased costs of energy and raw materials for production drive up production costs, increasing the cost of living (Lerch 2010; Whipple 2010). Thus, the environmental and economic aspects of sustainability are inextricably intertwined. Traditionally, labor and environmental movements have been seen as working on opposite sides of a struggle, with job losses perceived to be a consequence of successful environmental initiatives (see, for example, Freudenburg, Wilson, and O'Leary 1998). In fact, though, claims that successful environmental legislation has negative effects on jobs is unsubstantiated by economic analyses and appears in many cases to be a politically motivated means of separating these

movements (Mayer 2009). Despite challenges, a number of successful “blue-green coalitions” have formed (Gould, Lewis, and Roberts 2004).

There are two broad approaches to thinking about economic sustainability, largely falling in line with tensions surrounding how economic growth in urban areas should occur. The first approach argues that “green collar jobs” and “green industry” are an important means of attracting industry (Jones 2009; Mattera 2010). Cities have worked toward green economic development strategies such as creating green job workforce development programs and helping non-green manufacturers retool to expand into green markets (Fitzgerald and Green Leigh 2002; Fitzgerald 2010:14–15). Linking the concepts of environmental, economic, and social sustainability, Van Jones (who was instrumental in helping the Green Jobs Act get through Congress and who later became Obama’s “green jobs czar”) defines “green collar jobs” as those that are family-supporting, career-track jobs that preserve or enhance environmental quality. We can think of them, he says, as the “2.0 version of old-fashioned blue-collar jobs, upgraded to ... meet the environmental challenges of today” (Jones 2009:12).

The second approach to thinking about urban economic sustainability points out that there is an increasing demand for support of local business owners and entrepreneurs (who may or may not have environmentally “green” businesses.) The increasing interdependence of our global economy means that local economic systems are increasingly at the whim of broader forces. Some argue that urban areas should create self-reliant local economic systems and that “sustainable economic development” should mean that, rather than attracting outside

investment, local governments should instead focus on supporting local businesses (Hess 2009). Why? Through local and fair trade, strong local economies help to create an insular effect against broader economic risk factors by keeping money and profits within communities, building social cohesion, and reducing the negative environmental impacts associated with global trade (such as the fuel expended in the long-distance shipping of many consumer goods.) (Roseland and Soots 2008).

Social Sustainability

While the tenets of sustainability include goals that are both environmental and economic, approaches to sustainability also recognize that these two components do not work in a vacuum. Rather, they work on and around people, with very real effects for individuals, communities, and entire societies. A social component of sustainability recognizes that it is possible to enact environmental and economic changes that could have adverse social consequences.

This third tenet of sustainability is the least well defined in the literature and also the least attended to in urban sustainability plans (Brand and Thomas 2005; Portney 2003). One definition argues that social sustainability “must achieve fairness in distribution and opportunity, adequate provision of social services, including health and education, gender equity, and political accountability and participation” (Harris and Goodwin 2001). This definition is useful in helping us to think about the social outcomes of social sustainability programs; however, it also leaves us with some very important questions.

In particular, one very important question about outcomes of environmental, economic, and social equity policies is: how do we meet these goals? And as we move toward a more sustainable society, who gets to determine what social issues are important to tackle and the process for addressing them? How should we tackle greenhouse gas emissions, for example, and what will our plans mean for historically marginalized groups (Dillard, Dujon, and King 2008)? Studies of environmental gentrification have pointed out that important urban environmental improvements have also resulted in the displacement of poor and working-class residents (Curran and Hamilton 2012). In the pursuit of environmental sustainability, people in the United States and across the world are struggling to reap the benefits of sustainable development and to not be pushed out of their communities (Agyeman and Evans 2003; Evans 2002). In cities that have embraced sustainable development agendas, social inequality is built into the politics of urban environmental and land development (Quastel 2009). Access to the benefits of sustainability is unevenly distributed across the urban landscape.

The environmental tenet of sustainability is the most frequently discussed. But it is clear that cities pursuing it without also considering social equity can result in the same marginalization that has traditionally impacted the poor, women, and people of color in urban development. Therefore, the social equity component of sustainability should address two things: social equity *outcomes* and the *process* used to establish and reach our goals in environmental sustainability, economic sustainability, and social equity.

The Tensions of Resource Use: The Relationship between Sustainability and Economic Growth

Our consumption of fossil fuels is intricately connected to high rates of economic growth, and advocates for sustainability don't always agree on how to address the nature of the relationship between sustainability and growth (Krueger and Gibbs 2007). Some believe that in order to be truly sustainable we must engage in degrowth, or completely curb or even shrink growth, and that growth and sustainability are not compatible (Jensen 2006; Kallis 2011; Zerzan 2008). Others believe that economic growth can be achieved through more sustainable ends, and that the two do not necessarily have to be disjointed in practice (Daly and Cobb 1994; Hawken, Lovins, and Lovins 2010; Jones 2009).

Advocates of sustainable *development* assert that mainstream economists have tended to ignore environmental limits to growth in their models² (Daly and Cobb 1994; Dietz and O'Neill 2013; Hawken 2010; Heinberg 2011; Krueger and Gibbs 2007). They point out that traditional economic development models measure economic success against economic growth. These models plot out supply and demand with little attention given to the costs and dwindling availability of natural resources. These resources, central to the production and distribution of goods, are often referred to as externalities rather than making them central to the models (Heinberg 2011:40–41).

² The field of ecological economics is a notable exception (see, for example, Costanza 1980).

Ecological economists argue that without putting the true cost of inputs like natural resources at the center of their analyses, traditional measures of economic success are already doomed to inaccuracy (Costanza 1980; Dietz and O'Neill 2013). This is because high rates of economic growth are achieved only when societies have access to large quantities of cheap energy. Production is limited by the amount of energy available to create goods.

Prior to fossil fuels, economic production was limited by how much biomass (such as food for people and livestock, and wood for heating and industry) could be produced for energy (Sachs 2006:32). With the discovery of new energy sources like fossil fuels, the available energy increased and so, too, did the production of goods. The Industrial Revolution was born from this. However, most scientists agree that our planet has reached (or is close to) the peak production of many non-renewable resources, including oil, gas, coal, and others (Lerch 2010). In other words, we are using up our resources at a faster rate than they can be replenished. Fossil fuels are not as easily replaced as earlier forms of energy. As the reserves of fossil fuels dry up, so too must production.

Traditional models of economic success will see this decrease in production as an economic failure. However, ecological economists argue that, without putting natural resource consumption at the center of their analyses, they are not offering a complete picture of economic health to begin with. Some, such as Herman Daly, former economist for the World Bank, have argued that we should shift our economic goals away from growth and instead toward a steady state economy (Czech 2013; Daly 1973).

It is too simplistic and polarizing to suggest that the value positions of growth and sustainability are inherently and diametrically opposed (although this has been argued; see, for example, Krueger and Gibbs 2007). Approaches that consider sustainability are concerned with the harvesting, use, and disposal of raw materials, economic resiliency, and facilitating equitable social outcomes and processes. The extent to which economic growth figures into these considerations varies widely. The tension that exists is not so much between growth and sustainability as it is between the resource use approaches encapsulated in each of these perspectives. It is perhaps better to think about the perspectives of growth, sustainability, and resource use along a continuum. At one extreme end, proponents of sustainability argue that environmental, economic, and social sustainability are not possible without degrowth, which involves slowing and reversing economic growth and, in the process, reevaluating the measures through which we collectively measure success (Kallis 2011). At the other extreme of the continuum, proponents of growth argue that there is no need to change our consumption patterns and that, in fact, fears about natural resource harvesting, use, and disposal are overblown.

These are two opposing approaches, but there are many positions in between. For example, some advocate for a steady-state economy, where policy aims to support stable population levels and stable levels of resource consumption. Finally, there are also those who advocate for more traditional sustainable development models, which argue that economic growth can happen, but with an eye toward the environmental, economic, and social aspects of sustainability.

There are two implications of this for cities. First, the increasing interdependence of our global economy means that local economic systems are increasingly influenced by economic forces. The creation of self-reliant local economic systems is proposed by some who believe that “sustainable economic development” should mean that, rather than attracting and backing outside investment, local residents and governments should instead focus on developing and supporting local businesses (Hess 2009; Shuman 1998). By increasing a local economic multiplier effect, strong local economies may help to create an insular effect against broader economic risk factors by keeping money and profits within communities, building social cohesion, and reducing the negative environmental impacts associated with global trade³ (such as the fuel expended in the long-distance shipping of many consumer goods.) (Roseland and Soots 2008).

Second, if cities are truly interested in sustainable development, they must reconsider what growth and development will look like. In addition to emphasizing the limits to growth, sustainability also recognizes a number of negative externalities connected to growth. The relationship between environmental and economic decline results in consequences to people who are experiencing increased costs of goods due to escalating resource prices (Whipple 2010). Those who promote sustainability offer a number of solutions meant to mitigate already

³ While local production of goods can ameliorate these negative impacts, it is also worth noting that it is not possible to produce everything locally; global production systems are important in these cases. In addition, increased local production and consumption may have negative impacts at the global level. For example, “buy local” campaigns in the United Kingdom had negative impacts on small local farmers in Kenya who relied on the UK market (Agyeman 2013).

existing damages and adequately prepare us for the future, such as decreasing production and consumption and the development and support of local businesses and food systems, effectively decreasing an area's reliance on outside resources that are highly susceptible to the economic shifts associated with decreasing environmental resources (Shuman 1998). The values of sustainability maintain that, as resources diminish, it is necessary to consider that continued economic growth will not be possible (unless we find alternative ways to fuel it – and use them). What does this mean for urban growth? As the crucial ingredients for the primary circuit of capital diminish, we should expect to see (or have already noticed) less investment in the material economy, including the physical development of space.

City Forces and Structures that Guide Development

As cities in the U.S. grew with industrialization and immigration/migration, urban sociologists attempted to understand what forces guided the spatial and population growth that cities were experiencing. At the University of Chicago, sociologists attempted to understand the spatial growth of urban areas by investigating processes leading to neighborhood segregation, social order, and the spatial distribution of immigrant groups (Park, Burgess, and McKenzie 1925). The Chicago School developed a concentric zone theory of urban development. In this approach, urban growth occurs through a series of concentric rings – or zones – around the city center. Through a series of invasion and succession, where various

social groups “invade” others’ neighborhoods and push them into zones further from the city center, the city expands outward (Burgess 1925).

The Chicago School’s explanations for urban spatial growth patterns were guided by a neo-classical free market ideology, which portrayed urban structure as the outcome of free competition among individuals and groups. Through this lens, Chicago School theorists saw the process of spatial settlement – that is, where various social groups lived and businesses set up shop – as a function of the forces of supply and demand. Feagin has referred to this invisible-hand-guides-urban-development approach as “Adam Smith Sociology” (1997:136).

Building on community power studies and on the work of Marxist sociologists, philosophers, and geographers, growth machine theorists challenge the invisible hand approach to explaining urban growth. Instead, the growth machine thesis argues that urban growth is guided by local land-based elites. These elites are powerful individuals and groups who have a stake in local economic growth as it is tied to land investment and development. Because of their collective stake in the economic growth of the city, these actors coalesce into a growth “machine” in order to directly influence where and how growth happens (Logan and Molotch 2007; Molotch 1976, 1993).

These elites subscribe to a “free-market” ideology of urban place production. Using an ideology of value-free development, aggregate growth is portrayed as a public good. Both the where and how of place production are influenced so that “communities do not evaluate a product by its social worth ... [or] a locational decision by its social consequence. Instead, they invite capital to make virtually

anything... City governments are thus wise to do what they can to attract investors” (Logan and Molotch 2007:32–33).

Chicago School and Marxist capital circuitry theories of urban growth, while taking different approaches, are both very structural perspectives that do not focus on the explanatory power of local actors in development decisions. Growth machine theory attempts to strike a balance between structure and agency. It gives credence to macro-level political economic approaches in its understanding that local actors are working within larger political and economic systems and, at the same time, asserts the power of agency exerted by local actors and institutions.

The growth machine regulates growth within an otherwise free market system through a variety of local mechanisms including building codes, zoning, regulations, and licensing. Their purpose is to manage the externalities – both positive and negative – that are a part of the built urban environment:

Markets presuppose the basic social order that guarantees property through contract; in the case of real estate, commercial value requires not only deeds backed by government force but also the infrastructure of roads and other forms of access that create economic utility... deeds and access mean nothing if their value can be destroyed by the acts of others, as when an upstream user diverts a common waterway or a neighbor performs activities so noxious that they seriously compromise the ability to use and enjoy one’s own property (Warner and Molotch 2001:1).

In order to minimize owners’ negative externalities and maximize the positive, urban regulations are established. Thus, there is the formation of business and financial districts, entertainment districts, and the management of density through codes dictating building heights and the number of units allowed per parcel. So while some criticize regulation as government interference that unjustly impacts the

consumption of land, it can also be seen as a means by which growth is actively encouraged and institutionally supported.

Regulation present within codes and zoning laws are part of a system that operates in a framework of value-free development. These regulatory frameworks ultimately serve to distribute use and exchange values throughout the urban system, with the benefits primarily going to actors within the growth machine coalition.

The ideology of growth shapes regulatory frameworks inasmuch as it provides a “growth is good” ideology for those who are actively involved in the regulatory process, such as planners, zoning commissions, and the like. Supported by this ideology, Logan and Molotch note “the most powerful business groups [succeed] in using the planning apparatus to achieve their goals” (2007:156). In this sense, the growth machine coalition does not directly control where development must occur. Instead, it manages growth through a designation of land’s “highest and best use.” This designation “align[s] the work of planning officials with the needs of local growth machines” (2007:156), managing and supporting – but not controlling – the market for the benefit of the growth machine.

Growth machine theory is just one perspective that can be used to examine issues of urban sustainable development; however, some may argue that other perspectives could be better suited to investigating this issue. For example, a Lefebvrian right to the city approach could be used to understand how and for whom sustainable development projects happen. Lefebvre argues that residents have a right to the city – a right to prioritize how spaces are used and a right to be an

active part of the process that creates those spaces. This perspective may serve as an excellent lens through which to examine how cities implement the social equity aspect of sustainability into their frameworks. That would be a very interesting project; however, it is not the focus of this dissertation.

Similarly, since growth and development are so central to the questions being asked in this research, some would argue that a perspective more strongly rooted in economic analysis would be best. For example, a Marxist urbanist approach could be used to examine how the primary and secondary circuits of capital interact with sustainable development, and how sustainable development projects might be seen as just one more way of opening place-based markets for development in the secondary circuit. Or, one could argue for a perspective rooted in more traditional neo-classical economics that would help us understand how market demand – the “invisible hand” – drives the development of sustainable development projects. The problem with both of these approaches is that their top-down, structural approaches do not allow us to see how local actors make decisions that guide local development.

The power of the growth machine perspective lies in its ability to understand macro-level structures and systems and how, within this structural context, local actors make decisions that guide development. While the Marxist urbanist approach to understanding broad structural economic forces is powerful and compelling, it removes individuals from the analysis. With growth machine theory, we can adopt the Marxist structural explanations while still investigating why

individuals involved in sustainable development project implementation pursue sustainability and the meanings that sustainability has for them.

Urban Sustainable Development Initiatives

Sustainable development initiatives happen in the same places and under the same sorts of regulations faced by other non-sustainable projects. This section examines just some of the different types of urban sustainable development: green building and urban greening.

Urban sustainable design, a process of designing the urban built environment while attempting to adhere to the three tenets of sustainability (Farr 2007:28–29), ranges from site-level projects to those that look at the city or region as more of a coherent whole. At the site level, research addresses the greening of individual structures and green spaces, whether through new design or retrofitting. The greening of individual structures is often tied to a green building certification process called “LEED” (or Leadership in Energy and Environmental Design). This certification process – a product of the US Green Building Council (USBGC) – is based on a point system focused on site-level green development and renovations (US Green Building Council 2011). Green building construction in particular is interested in site-level concerns with the environmental impacts of the building process, such as the responsible sourcing of materials (Deane 2008; Gorgolewski et al. 2008; Mora 2007) or the reduction of on-site construction related waste (Esin

and Cosgun 2007; Horvath 2004; Kibert 2008; Lockwood 2006)⁴. The design of green buildings is also, at the site level, interested in how longer-term use will impact the environment and also save money for the building residents (Kats et al. 2003; Kibert 2008).

The phrase urban development can often conjure images of buildings. But urban development is also about the spaces between buildings. Urban greening projects at the site level can range from parks, plazas, and playgrounds to community gardens and urban farms. Research on these kinds of projects often highlights the benefits of urban greening. For example, transforming vacant lots into desirable green spaces has been shown to increase property values for neighboring and nearby properties (Bark et al. 2011; Tajima 2003; Voicu and Been 2008). Proximity to green spaces is also correlated with positive health outcomes for residents (Bell, Wilson, and Liu 2008; Mitchell and Popham 2008; Sugiyama and Thompson 2007; de Vries et al. 2003.)

This dissertation focuses on sustainable development construction of buildings and open spaces. Urban development research frequently focuses on these sorts of projects. However, it is also important to acknowledge additional forms of urban development, such as development focused on building and maintaining the infrastructure necessary to support building and open space development. For example, modes of public transportation such as subways and trains are

⁴ LEED building has been criticized, however, for being yet another greenwashing tool (Wedding 2008). As Brook (2007) points out, “Installing a \$395 bike rack is worth the same under the LEED checklist system as installing a \$1.3 million environmentally sensitive heating system.” Recent updates to LEED certification have been updated to deal with these issues.

infrastructure-related and facilitate access to the built spaces in urban areas. In addition, the sustainable management of water and sewer systems is a crucial component of sustainable development – there is a reason most major cities were built around major waterways, after all. Urban growth and development are tied to access to this most basic of resources. The development of infrastructure systems such as public transit and water are often managed at the regional level, but they support the development of both buildings and open green space in cities (Scott 2007).

Conclusion

During industrialization and high levels of immigration, U.S. cities were primarily concerned with how to manage an overwhelming level of growth. But through the processes of suburbanization and globalization, people and capital left cities. These cities have been trying to figure out how to increase their growth – or at least manage their decline – ever since.

Cities' search for growth primarily means they focus on how to invest in land, or what Lefebvre and Harvey have called the secondary circuit of capital (Harvey 2009; Lefebvre 1970.) When powerful actors in cities guide investment in the secondary circuit, investment in the primary circuit (production of goods) is supported. For example, when land parcels are seen as good opportunities for development, investors support increased production of building materials and all the other manufactured “stuff” that residents will need when they move in: appliances, furniture, drapes, and all the rest. Thus, investment in and speculation

of land also supports traditional economic models of growth that advocate for the ever-increasing production and consumption of goods.

Cities are also increasingly interested in sustainability, which requires that, collectively, we consider the long-term viability of our production and consumption patterns. Measures of economic success are tied to growth, or the extent to which we continue to produce and consume goods. However, the production of goods is fueled by natural resources. Growth increased dramatically following the discovery of fossil fuels. However, availability of these resources is dwindling. Ecological economists argue that, as we lose access to these resources, production of goods and, consequently, growth, will slow.

There is a clear tension between resource-use approaches to growth and sustainability. So what does this mean for cities interested in both? At its core, this dissertation is a story about land, in two layers. First, the research presented here offers an account of the politics of development that have been observed by urban sociologists for some time. The second layer, though, questions how this can be reconciled with the crisis of excessive natural resource consumption. The land politics of development is now not only about how development happens, but also about whether or not it can continue in the same ways.

Overview of the Dissertation

The above literature gives rise to a number of questions about the nature of sustainable development projects. For example, who is initiating sustainable development projects, and what are their motivations? In order to make these

projects happen, what bureaucratic processes need to be negotiated? Are the laws in place for guiding and directing urban development (such as codes, zoning, and licensing) supportive of the needs of sustainable development projects? Certainly, urban areas' increased interest in urban sustainable development projects does not transfer to support of every such project. So how do members of the growth machine respond to these projects? Do their responses vary according to the type or scope of the project? If the responses are positive, what reasons are given? Or if, on the other hand, projects are met with a negative response, how do actors in the growth machine justify this response? Once a sustainable development project is established, how does the growth machine influence its continued existence?

In short, this research is focused on the process of creating urban sustainable development projects. Types of urban sustainable development projects can vary widely, and this dissertation will examine some of this variation. However, this research is focused specifically on sustainable development construction (of buildings and open green spaces) versus infrastructure (such as water systems.) My guiding questions ask:

- What conditions are necessary for urban sustainable development projects to be successful?
- How do people involved in the process of establishing a sustainable development project deal with constraints placed on their actions?
- What meanings do people involved in these projects attach to their success or failure?

Chapter two describes the methodological approach to answering these questions. Using a comparative case study approach, I interviewed actors involved in four sustainable development projects in Philadelphia.

Chapters three through six describe empirical findings. Chapter three looks at the history of green building in order to better contextualize chapter four, which focuses on more recent processes of green building in Philadelphia through a comparison of different green building projects.

Chapters five and six focus on urban greening in Philadelphia. A historical examination of urban greening, both nationally and in the City of Philadelphia more specifically, is the focus of chapter five. This examination sets the stage for chapter six, which compares two urban greening projects.

Chapter seven concludes this dissertation. It highlights the key findings of this research, explores implications for urban sociology, and suggests that these findings mean for policy.

CHAPTER 2: METHODS

Introduction

This chapter describes the research design, methods, and data in this research. I first describe constructivist grounded theory, the research approach I used. I then describe my methods – historical analysis and the embedded case study – and offer a description of the sustainable development projects focused on in this research and how they were chosen. In the third section, I describe the data and data analysis.

Research Approach: Constructivist Grounded Theory

Grounded theory is an approach to research that begins with data collection and ultimately builds to the creation of theory to explain a phenomenon. The philosophical underpinnings of grounded theory link theory with data collection and analysis. Contrary to many methodological approaches that focus on theory testing, grounded theory methodology flips this traditional model by making data collection and analysis an iterative and concurrent process that leads to the generation of theory to explain the data. In short, grounded theory shifts from theory testing to theory generating.

In their first descriptions of grounded theory methodology, Glaser and Strauss (1967) aimed to challenge the then-prevailing notion that qualitative research methods were unsystematic with findings based on researchers' subjectivity. They also challenged the idea that data collection and analysis should

be separate phases of the research process, arguing instead that collecting and analyzing data concurrently can help researchers discover themes as the research process unfolds. This allows the researchers to engage in research informed by inductive, rather than solely deductive, reasoning.

In challenging these methodological assumptions, Glaser and Strauss focused on developing a methodology that would allow them to “construct abstract theoretical explanations of social processes” (Charmaz 2006:6). They argued that critical components of such an approach would include: simultaneously engaging in data collection and analysis; constantly coding data and researcher memos, and grouping these codes into concepts (a process that ultimately builds to theory construction;) using a constant comparative method, where comparisons among data are made at each stage of the analysis; and engaging in sampling not for the purpose of representing a population, but rather for the generation of an explanatory theory based on themes emerging from the data.

A constructivist approach to grounded theory is rooted in relativist epistemology, or a theory of knowledge arguing that individuals do not express an absolute, objective truth but, rather, have subjective viewpoints based on their experiences, perspectives, and context. “Neither data nor theories are discovered. Rather, we are a part of the world we study and the data we collect.... Research participants’ implicit meanings, experiential views – and researchers’ finished grounded theories – are constructions of reality” (Charmaz 2006:10). In other words, the researcher does not discover data but, instead, data (and, consequently, theories of social processes) are constructed by research participants in their

communications with the researcher. In turn, the constructivist approach also argues that the researcher's construction of data and theory are also informed by the researcher's own perspectives and social positions.

Grounded theory is an appropriate method for this research for two reasons. First, its approach to research is useful when the questions are exploratory and about process. Second, it is an advantageous method when the researcher's goal is to work from data to hypothesis about a particular phenomenon, rather than hypothesis testing through data collection.

While the process of grounded theory data collection and analysis is useful for developing hypotheses about sustainable urban development, I argue that grounded theory does not necessarily lead to the development of theory. Theories describe why and how social facts are related. A study such as this would require a great deal of replication and expansion to adequately and fully explain how sustainability enters into the politics of urban land development. I argue, therefore, that the results of a grounded theoretical study such as this one do not necessarily lead to the development of theory but, rather, to the creation of hypotheses about social phenomenon. Hypotheses are useful and can potentially build to theoretical explanations; however, the use of grounded theory does not, by default, result in a theoretical explanation of a social phenomenon. This research is exploratory and rooted in process-based questions. My interest is to examine how sustainable development projects are implemented in cities that have actively embraced a sustainability agenda. I am interested in how people involved in the creation of these projects explain their perceived successes and challenges. In pursuing

answers to these questions, I wanted to use a method that would allow the research to be directed by data collected throughout the process. Grounded theory allows for this.

Nestled in these questions are larger ones that situate this research within urban sociology more generally. Are the processes at work behind sustainable development projects different from those at work in standard (i.e., not labeled or discussed as “sustainable”) urban development? Are sustainable development projects similar in politics, impetus and processes to more typical development projects?

Theories addressing how urban growth happen are plentiful. However, one should not assume that these theories also adequately explain sustainable urban growth. It is possible that the processes behind sustainable development projects are in some way different from processes guiding standard development projects. The research used to understand this process of sustainable development could be either deductive (using data to test a pre-existing hypothesis) or inductive (using data to build to a hypothesis.) I argue that an inductive research approach is best for explaining the processes at work behind sustainable development. In the end, the data may or may not line up with already-existing theories about urban development. However, the inductive approach built into grounded theory allows for the possibility of a new explanation behind sustainable development that differs from standard development theories.

Research Methods

Historical Analysis

This research is an examination of a relatively new phenomenon in cities: sustainable development. Although recent, understanding social facts, events, and processes requires placing them into historical context. In order to adequately understand sustainable development as a social process, it is important to also try to identify the social structures and institutions that have influenced its proliferation. Therefore, one of the methods used in this dissertation is historical analysis.

The purpose of historical analysis is to examine historical processes and the institutions that influence them, in order to understand their present effects and anticipate future ones. Sustainability is certainly not a new concept, but the social construction of sustainability as a concept – and certainly as a development tool (“sustainable development”) – is relatively new. Understanding how sustainability and sustainable development have been socially constructed is important for informing our understanding of modern urban development.

Sociological historical analysis differs from that of historians in that the sociological analysis pays particular attention to social institutions in order to explain (rather than describe) historical processes (Lachmann 2013). This research uses archival data and written secondary sources to investigate how social institutions have impacted sustainable development. For example, this analysis uses archival meeting minutes from City Council, boards, and authorities.

Secondary sources used include newspaper articles and the accounts of other researchers via journal articles, working papers, and books/book chapters.

Data for historical analysis in this dissertation also came from personal interviews with individuals who had extensive institutional memory from their work with a variety of development projects in Philadelphia. The value of simultaneously engaging in data collection and analysis was very apparent here, as I could engage in a constant comparison between individual stories and the other historical data sources listed above to form a multi-dimensional picture of the important structures and players in the process of sustainable development. Because of the concurrent and recursive pattern of data collection and analysis in grounded theory, the influential actors and institutions could be verified and reinforced across multiple data sources. Through the coding of these primary and secondary data sources, I was able to identify major social institutions that have played a role in painting the picture that is the context for present-day sustainable development projects in Philadelphia.

The Embedded Case Study

Historical analysis is a useful tool for providing context and identifying influential systems, institutions, and actors. It is one part of a picture of how people involved in sustainable development projects explain their present-day successes and challenges. For a more complete picture, this technique was supplemented with another qualitative method: the embedded case study approach.

The case study method is an ideal approach in social science research when the research asks how or why questions about a contemporary set of events or phenomena (Yin 2008:14). Case study research is useful when the researcher wants to understand a contemporary phenomenon and believes investigating contextual conditions is important for developing this understanding. Case study inquiries investigate phenomena in depth and within their context, especially when the boundaries between the phenomena and context are not clear (Evans 2011:57; Yin 2008:18).

The case study approach is appropriate for this research for two reasons. First, sustainable development projects are created and work within a larger political and spatial framework; it is impossible to separate an understanding of individual projects from this larger framework. A case study approach is important for the understanding how sustainable development happens within a framework of space and power. A second reason in support of the case study approach for this research is that sustainable development is a relatively recent phenomenon and case studies are useful for understanding contemporary phenomenon about which little is known (Yin 2008). Cities have only begun to adopt sustainability plans within the past decade. The relative recency of sustainable development combined with a sociological perspective that demands putting issues within a framework of politics and space compels a case study approach.

Sustainable development projects are not one size fits all. This research investigates not just sustainable development projects but, more specifically, sustainable development projects of varying sizes and scopes. The interest in

comparing these different types of projects draws from the urban sociological growth machine literature, which focuses on the tension between use and exchange value in how urban land is bought and sold, and developed or not. In this literature, development decisions are based on the extent to which projects are seen to benefit a powerful coalition of actors interested in growth-oriented development; Large-scale projects are those that benefit this growth-oriented strategy, and for which growth machine actors actively advocate. Small-scale projects may be valued by the communities in which they are located, but their contribution to growth is seen as small or limited.

In order to understand whether the power dynamics of the growth machine work the same way for sustainable development projects, this research compares large- and small-scale projects. The simple case study, where the case is also the unit of analysis, is not adequate for parsing out differences that might arise across projects of varying size. Because the applications of the case study approach can be so broad, it is important for the researcher to have a clear sense of the boundaries of the study and of the units of analysis to be investigated (Yin 2008). Therefore, this research uses the embedded case study approach.

An embedded case study is one that contains more than one sub-unit of analysis. Sub-units are situated within the case of interest, which are, in turn, investigated within a particular bounded context (see figure 1.)

Figure 1: the single-case embedded design



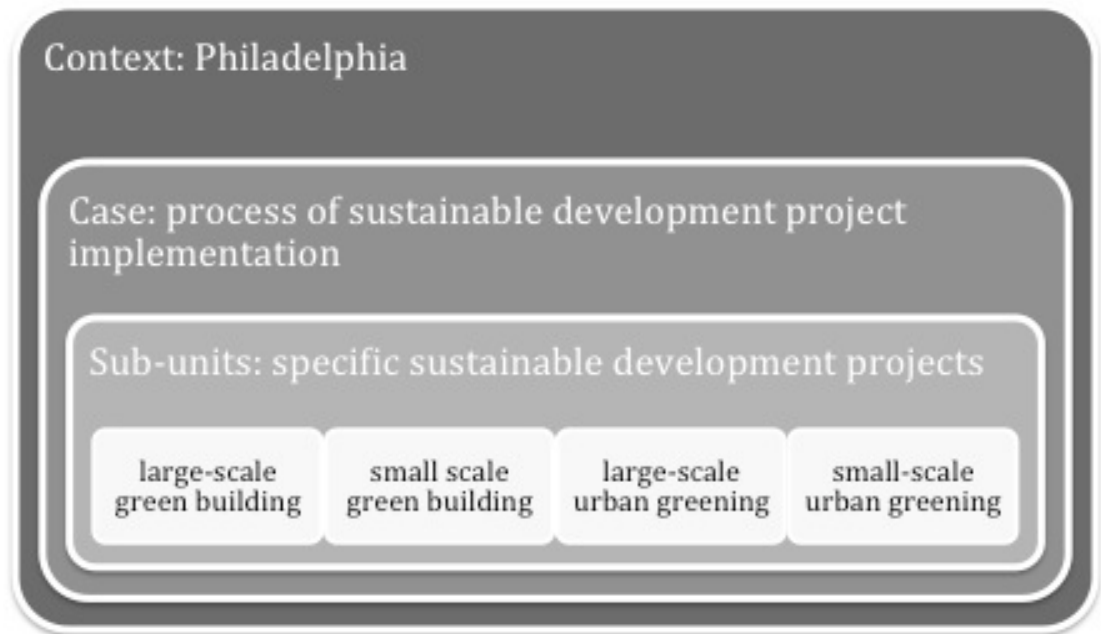
This research would most accurately be described as a single-case embedded design, where the context is Philadelphia, the case is the process of sustainable development project implementation, and the sub-units embedded within this case are the four sub-units listed above (see figure 2.) The three important elements here are context, case (or unit of analysis,) and sub-units. In this research, the first element, or context for the research, is the City of Philadelphia. Philadelphia is a good contextual choice for a number of reasons. First, it is a large city that has recently taken an interest in sustainable development at the highest levels of city government. Second, Philadelphia has a number of sustainability projects happening within its borders, offering many potential projects to focus on. Finally, the history of Philadelphia is not unlike the history of many other cities in the United States, with the development of its geographic boundaries and population base reflective of a city with an industrial past that suffered from disinvestment and racist housing practices. However, Philadelphia is also distinct from other U.S. cities – its development patterns are different from Western U.S. cities, for example – and the differences that exist between Philadelphia and other cities means that the

findings of this research, while transferrable to other similar cities, will not be generalizable to U.S. cities as a whole.

The second element of the single-case embedded design is the case, or unit of analysis. In this research, the case of interest is process: the process of how Philadelphia-based sustainable development projects are implemented.

The third element of the single-case embedded design is the subunit. This research is interested in sustainable development project implementation and, more specifically, how this process might vary across projects of varying sizes and scopes. Therefore, this research examines projects – or units – of varying scopes. It looks at two large-scale projects and two small-scale projects. The large-scale projects examined here cover two types of land-based development: green building and urban greening. The small-scale projects examined here similarly cover these two areas (green building and green space.)

Figure 2: the embedded case study applied to this research



Subunit Selection

Large-scale and small-scale were not objectively defined prior to engaging in the research. A constructivist standpoint would argue that the words large and small have different meanings for people based on their positions and experiences. While I did identify potential cases for the purpose of the dissertation proposal, it was understood that these proposed cases were tentative and open to change upon speaking with initial respondents. I asked initial respondents to suggest large- and small-scale projects based on whatever that meant to them. The resulting projects highlighted in this research were chosen because many respondents identified them, believing them to be representative of the large- and small-scale sustainable development project experience. In identifying the projects that would be considered large or small in scope, respondents expressed consideration of a number of factors, such as physical size, project location, cost of project development, and attention given to the projects by local mainstream media.

Guidance from people I interviewed proved most useful in identifying the four projects for investigation. I also conducted a media analysis of the *Philadelphia Inquirer*, *The Daily News*, and *GRID Magazine* to garner an understanding of what projects were being popularly discussed by print media.

A media analysis was conducted using the electronic Temple University news archive search system, powered by the Lexis-Nexis database. Understanding that the process for development can often be a long one, a ten-year time frame was chosen, and news articles dating from 2002 through 2011 were searched. Keywords such as “green building,” and “LEED” for green buildings, and “green

space” and “greening” for green open spaces were used. Many articles were returned, and these were scanned and pared down even further to piece out those that had to do specifically with sustainable development projects (versus policies, for example) within Philadelphia borders (versus surrounding municipalities.) The media analysis proved useful for assessing large-scale projects. Respondents that I interviewed largely confirmed the large-scale projects discussed in the print media as important and worthy of investigation.

Small-scale projects, however, are much less likely to receive major media attention. Therefore, in addition to interviews and print media analysis, I attended sustainability events (two at the Academy of Natural Sciences and two sponsored by GRID magazine, a local monthly magazine focused on regional sustainability issues.) Talking to people I met at these events helped to identify the small-scale projects described in this dissertation.

Subunit Description

This section describes the four projects investigated in this research, including the large-scale green building, Limestone Investment Trust’s Bilbo Building; Sustaincity’s small-scale Energy Efficient Housing buildings; the large-scale Winthill Plaza, an urban greening project; and a small-scale urban greening project, Forge Wash Urban Farm. These are provided in Table 1:

Table 1: Summary of Philadelphia's Sustainable Development Projects

Project type	Project scale	Project Description
Green building	Large scale	Bilbo Building: a LEED-certified downtown skyscraper developed by Limestone Investment Trust
	Small scale	Energy Efficient Housing: a group of 3 low-income, energy efficient housing units developed by Sustaincity Development
Urban Greening	Large scale	Winthill Plaza: a downtown plaza and green space meant to increase vibrancy by encouraging foot traffic
	Small scale	Forge Wash Urban Farm: a West Philadelphia, non-profit urban farm with tenuous land access

Bilbo Building: Limestone Investment Trust⁵

Limestone Investment Trust is a large-scale, public real estate company that has headquarters in Philadelphia but has offices spread throughout the world. An \$8.8 billion real estate trust, Limestone’s holdings are extensive and include 101 million square feet of industrial office space in the United States and United Kingdom. They advertise that they are one of the nation’s top developers for high-

⁵ Data for this dissertation relies heavily on interviews with people who strongly wished to remain anonymous. To protect the confidentiality of information provided to me through personal interviews with respondents, all names of respondents, projects they are associated with, and organizations they work with have been changed.

performance, energy efficient green buildings. They advertise that their buildings make workers happier, healthier and, therefore, more productive.

In 2008, Limestone Investment completed development of the Bilbo Building, a Philadelphia skyscraper in the center of downtown with LEED (Leadership in Energy and Environmental Design) certification from the US Green Building Council. The Bilbo Building is fifty-eight stories tall with a gleaming glass façade. Its biggest tenant is a major media conglomerate, which rents 90% of the office space for the high \$30s/square foot.

The development of the Bilbo Building was politically contentious. Prior to construction beginning in 2005, Limestone Investment appealed to Pennsylvania Governor Ed Rendell, who had previously been a Philadelphia mayor with a big focus on downtown development, for financial assistance. In particular, Limestone was looking for KOZ (Keystone Opportunity Zone) status, a status that gives tenants in buildings on these sites exemption from state and local taxes.

Owners of other downtown office buildings protested, arguing that the downtown site was far from blighted, and that awarding the KOZ status would artificially lower rents and increase vacancy in their buildings, hurting their bottom lines and downtown vibrancy. Ultimately, the state legislature declined to award KOZ status to the site.

Governor Rendell, however, released other state money, totaling almost \$43 million, to both Limestone and the media conglomerate in the form of grants and tax credits. During this battle for public money, the Governor's relationships with key players in Limestone and the media conglomerate were criticized. While he was

Mayor, a Vice President of the media company was Rendell's chief of staff, and the chief executive of Limestone Trust had served as the director of the Philadelphia Industrial Development Corporation (PIDC,) with whom Rendell had worked with very closely. The Bilbo Building is an example of a large-scale sustainable development project. Issues of space and power are at the center of its creation.

Energy Efficient Housing: Sustainability Development

Sustainability Development is a local, small-scale Philadelphia firm whose focus is on the design, development, and building of energy efficient housing in Philadelphia. As a design/develop/build collective, the firm incorporates all elements of the process, from securing funding for projects to designing structures, to physically constructing them. Sustainability's mission is, in part, to design and build green buildings in environmentally friendly ways. They also highlight their commitment to engaging residents and community in the design process. The firm also expresses a commitment to making energy-efficient, green housing (and the cost-savings that comes along with it) available to the general population, and especially the poor who could especially benefit from lowered energy costs.

In 2012, Sustainability completed the development of three energy-efficient housing units. These units were designed to be an attainable model for low-income, subsidized infill housing development. The homes are zero-energy certified, meaning that the amount of energy used in the homes annually is equal to the energy created on site (in this case, primarily through the significant photovoltaic solar arrays on site.)

When Sustaincity first formed in the late 1990s, all funding for their projects came from private sources – most often banks. However, with more recent projects, they have been able to secure funding, in some form or another, from public sources. In the case of the energy-efficient housing units discussed here, the land was secured from the Philadelphia Redevelopment Authority in a competitive bid process. Sustaincity’s energy-efficient housing project is an example of a small-scale development project with very high levels of energy efficiency designed to help those in subsidized housing lower their energy costs.

Winthill Plaza: the Downtown Development Corporation

The Philadelphia Downtown Development Corporation (DDC) is comprised of a business improvement district, a community economic development corporation, and a transit management association. They are a major player in downtown development. The DDC represents the interests of a number of major businesses and institutions, including finance, real estate, commerce, retail, tourism, and arts and culture, among others.

In the early 2000s, the DDC commissioned a study to examine the vibrancy of the city’s downtown streets and to identify gaps in the fabric – or blocks that were lacking in activity that would interrupt the pedestrian experience, discouraging them from continuing on to other downtown areas. One gap in the fabric identified by the study was Winthill Plaza.

Winthill Plaza was an uninviting space made entirely of concrete at the center of downtown Philadelphia. The goal of the Winthill Plaza redesign was to

create a more active and vibrant public space by constructing outdoor green space, space for an outdoor café, fountain displays, outdoor markets, and even ice-skating in winter. Construction on the project began in 2011 and is slated to finish in Fall of 2014.

The redesign and construction of Winthill Plaza was a major endeavor, requiring about \$50 million in funding, which came from both public and private sources. One of the biggest reasons informants identified Winthill as a large-scale project, though, is due to the scope of the groups that had to be involved to make it happen. To list just a few: the City of Philadelphia owns the land, the DDC was in charge of spearheading the redevelopment, and SEPTA (the Southeast Pennsylvania Transit Authority,) which has a station under the Plaza with access from the top, had to be part of the planning and construction process. With a downtown locale and support from powerful urban actors interested in urban growth, the Winthill Plaza redesign is a good example of a large-scale greening project.

Forge Wash Urban Farm

The Forge Wash Urban Farm was created in 2005, and grew out of previous efforts of a non-profit organization to improve food security in West Philadelphia through the creation of schoolyard gardens and open-air farmers markets. The farm uses organic farming methods to educate and provide affordable organic produce to the community.

A small-scale greening project, the Forge Wash Urban Farm relies heavily on grants for operating costs and access to publicly-owned land. As such, a number of

actors are involved. The Philadelphia Redevelopment Authority owns the land, which, until the 1970s, had houses built on it. The houses were ultimately torn down because their foundations were unstable due to Forge Creek, which runs directly under the land. When the Philadelphia Water Department was looking for ways to mitigate stormwater runoff in the early 2000s, they approached the Redevelopment Authority about partnering to provide grants for groups interested in urban land management that would also address storm water. Forge Wash's application won; however, their continued access to the site has been tenuous (as we will see in Chapter 6.) Forge Wash is located on public land that has previously been deemed unfit for building; however, development pressures have made their continued access uncertain. This development pressure on a community asset makes this a good choice for a small-scale greening project.

The Interviews

The most valuable (and most heavily relied-upon) source of data for this dissertation is from interviews. Interviews began in March 2012 and concluded in December of the same year. There were three waves of interviews, all with unique, semi-structured interview guides.

In the first wave, interview questions were intended to identify the four projects of interest and to get a broad overview of the issue. Second wave interviews focused on those directly involved with the projects and were focused on getting informants to tell me a story of their project's development, to help me better understand the process, forces and actors involved in it, and how people most

closely involved explained project success and failure. The third wave of interviews was focused on interviewing those actors that had been identified as important, influential pieces of the process during wave two interviews. Wave three interviews focused on understanding the process from alternate points of view.

There was chronological overlap across the three waves. For example, I interviewed wave three respondents who dealt with green building while I was still interviewing wave two respondents for the urban greening projects and I would re-interview wave two respondents if I needed clarification from something that may have come up during a wave three interview. Interview questions for waves two and three were developed based on data analyzed from previous waves. The interview protocols are in appendix A.

In total, I interviewed thirty-one unique respondents face to face. Four were interviewed more than once. The duration of each interview was half an hour to two and a half hours. Interviews with those directly involved with sustainable development projects (wave two) were of longer duration. Interviews with high-level public officials and bureaucrats (wave three) were typically 30 – 45 minutes long.

I also conducted test interviews with subjects outside the City of Philadelphia to improve my knowledge in areas I was unfamiliar with. For example, prior to interviewing anyone in the building/development industry, I spoke with architects and builders in another city. These informal interviews greatly helped my basic knowledge of the field and exposed me to jargon I would otherwise have been unfamiliar with.

Sampling of respondents was based on the initial categorical needs of the project; initial interviews were conducted based on respondents' experience and expertise in the areas of green building and urban greening (Charmaz 2006; Morse 2010). Based on the focus of this research - sustainable development projects and, in particular, in green building and urban greening projects – initial respondents were identified through print media or suggestions of people I met at sustainability events I attended. By starting with this initial sample of respondents in the first wave, I was able to identify the four projects described above.

Following the initial identification of respondents, additional subjects were selected once the particular projects were identified and, thereafter, through snowball sampling. As interviews were conducted, concepts and categories became clearer, thereby allowing future interviews to be informed by earlier ones. It was clear that data saturation was being reached once no new information was obtained through further data collection. At the conclusion of each interview, I asked for suggestions of additional respondents. It became clear that I was reaching saturation not only when data across interviews were similar, but also when, in my last interviews, respondents could suggest no one I had not already spoken with.

I contacted and obtained access to my respondents as follows. First, I sent an email identifying myself and the research topic and requested time to talk with them, stressing that any information collected in the process would remain confidential. Second, if potential subjects had been referred to me by another participant, I got the permission of that subject to use his/her name in the email in

order to identify the person who had referred me. When emails went unanswered, I sent follow up emails or made phone calls until I was able to reach the person.

For interviews with project managers of the green business and urban greening projects, I wanted to have the interviews on site at the projects because when talking to informants about their relationship with space, it can be useful to directly connect what people say with where they say it (Jones et al. 2008). One interview conducted with an owner/operator of Sustaincity Development was conducted at the site of a then nearly completed row of six energy-efficient houses. Another interview with the President of Forge Wash Urban Farm was conducted at the farm itself. The data from these interviews was particularly rich, as respondents found it helpful refer to clear, visual examples as they talked and were therefore better able to illustrate things that were exciting and important to them.

I was unable to conduct my interview with the project manager of the Bilbo Building in the actual project building; however I was given a tour of the building after the interview to help illustrate and highlight things we discussed. I was also unable to conduct an on-site interview was Winthill Plaza because, during the time of this research, it was still under active construction. This interview, however, appeared to have some place based richness because it took place in a room full of artistic renderings of the project's design.

Upon completion, the interviews were immediately transcribed and coded. Rather than developing a coding scheme in advance of the coding process, I engaged in a dual-step categorization process. First, I identified concepts and categories across the data, remaining open to everything the data could possibly contain in

order to allow concepts to emerge. In this stage, my codes were typically either very broad (such as “sustainability” and “government”) or very specific (like “Navy Yard” and “laws lag behind sustainable innovation.”)

In the second, more focused stage of coding, broad categories were broken down to reveal additional codes and specific codes were grouped together (for example, “bureaucracy,” “inertia,” and “tenacity”) (Charmaz 2006:46). This two-stage process continued as data continued to come in from additional interviews.

In addition to coding interview data, my own research memos were treated as data. In grounded theory methods, memos and notes are also data, and they are an essential part of making connections between the codes and building to an explanation of the phenomenon being investigated (Charmaz 2006:72).

Ultimately, initial coding resulted in 144 codes. Through the process of grouping and identifying important themes, though, 35 codes were identified through the focused coding process. Memos further helped to understand how these codes related to one another.

Codes were identified, grouped, and analysed using Dedoose, a qualitative analysis software. The relative importance of codes was determined in a two-stage process. First, I examined how frequently codes occurred throughout the data. Codes that were present in many different interviews were deemed relevant for thinking about research findings. Second, using the Dedoose co-occurrence matrix, I examined the codes identified in the first stage and determined how often different codes overlapped in the same segment of coded text. For example, the codes “bureaucracy” and “inertia” separately showed up 95 times and 70 times,

respectively, across all interviews. But these codes *overlapped* 9 times across my total 33 separate interviews. In other words, respondents often linked these two seemingly separate concepts together when they talked about their experiences. Combined with my own memos after interviews, this sort of overlap indicated to me that the relationship between these was worth paying attention to.

Conclusion

This research addresses the process of sustainable development project implementation in a city that has embraced sustainability as a part of its growth agenda. To do this, I used a single-case embedded case study design. Philadelphia provides the context for the case, which looks at sustainable development as a process and seeks to understand how, or if, the process is different for projects of different size. Specifically, I examine the process of sustainable development project implementation for large- and small-scale green building and urban greening projects.

Data was collected primarily through a combination of two methods. First, historical analysis was used, and data came from archival and secondary sources. Additionally, interviews were conducted with government bureaucrats, non-profit organization employees, and project managers and developers, among others. These interviews were semi-structured and conducted in three waves.

The data gathered provide a rich pool of information that helps paint a picture of how these projects happen. The information provides for an in-depth exploration of power and influence, government inertia, commodification and place

making, and, ultimately, the place of sustainability in urban sustainable development.

CHAPTER 3:
GREEN BUILDING: THE PRODUCTION AND COMMODIFICATION OF THE GREEN
CITY

Introduction

Building in cities is an important part of their growth and development work. So, when a city like Philadelphia appears to embrace an agenda of sustainability, what does this mean for green building projects? The building and selling of cities is, certainly, a process that happens outside of sustainability-related thinking. However, different values have been used to support urban development over time. For example, the creative city (Florida 2003) and the authentic city (Zukin 2009) have both been discussed as places that draw investors, businesses, and developers. Similarly, I argue that sustainability is a concept – a value – used to support urban development.

Green is a value, but it is packaged and sold, as well. The green ideology and value system is one that is commodified. Green exists as a value system, but is a value that can be produced, bought, and sold. It would be over-simplifying the issue to assert that green building development happens purely as a result of the demands of a green value system. But it would be similarly simplistic to argue that green building development is solely about a system of urban production and consumption. Rather, I argue in this chapter that green building developers have a mixture of ideological and profit-driven motivations, which converge. Green building is not devoid of either of these two elements, but developers display varying tendencies toward each.

This chapter also argues that the production of green buildings helps to create a commodification of place. Urban sociologists have discussed the ways in which place is created. Place is the result of space imbued with value. In other words, place is a social creation inasmuch as people imbue space with meaning. When people view buildings through a lens of sustainability, those structures become enmeshed in a value system. So while green buildings are being produced, bought, and sold, so too are values. And while buildings are commodified and imbued with values of sustainability, so is the image of the City by proxy. In other words, this production of place applies not only to the lots on which green buildings are constructed, but also to the city as a whole. The production and availability of both residential and commercial green buildings makes the City competitive among those who embrace the green ideology.

Green building is a development process that is wrapped up in traditional growth politics, but the values enter the development debate in a new way. The politics of growth becomes the politics of green growth. So how is it reconciled when most everyone is pro-green but only some are for growth-oriented development? Building in cities is an important part of their growth and development work. So when a city like Philadelphia appears to embrace an agenda of sustainability, how do green building projects fare? This research seeks to understand how sustainable development projects are implemented within an urban context where major players, such as politicians and developers, see growth as an essential part of the urban agenda. In order to address the above questions

within the context of this larger research question, my examination of green building is separated into two chapters.

In this chapter, I focus on providing the context for understanding the present-day experiences of large- and small-scale green builders and ultimately argue that green building is an important part of a city's place making efforts. First, I examine common definitions of green building before settling on one that will be used in this dissertation. I then examine the process of how buildings are given the green label; as with so many things, "green" as a concept is not only socially constructed, but it is also defined through a costly credentialing process, which ultimately increases the value of the building by virtue of the label. The third section of this chapter seeks to put green building into historical context by examining the development of green building in the United States broadly, and in Philadelphia more specifically, paying particular attention to the last three mayoral administrations: Edward Rendell, John Street, and Michael Nutter. In Chapter 4, based on research conducted with builders, developers, green building advocates, residents, and government officials, I investigate the similarities and differences between large- and small-scale green development projects in present-day Philadelphia.

What is Green Building?

When I moved into my row home, which was built in 1907, one of the first improvements I made was the installation of insulation for energy savings. I also installed a water saving toilet, and replaced the grassy back yard with a low water,

more sustainable design that would provide me with vegetables and herbs, and provide local wildlife and pollinators with beneficial plants and microclimates. These improvements, and others, have certainly made my home more energy efficient and sustainable than others on my block. But do these improvements make it a green building⁶?

In addition to developing a useful working definition for green building to be used throughout this dissertation, this section seeks to position green buildings as something more than the sum of bricks and mortar used in their construction. I argue that green buildings are both values (manifest through their physical structure) and commodities. On the one hand, green is an ideology. When applied to green building, the ideology of sustainability emphasizes an attention to resources – natural, economic, and social – in the demolition, construction, and placement of structures. As an ideal type, the ideology of sustainability can be seen as a set of values that emphasizes the importance of using resources responsibly to ensure quality of life for present and future generations. On the other hand, green is a commodity. Viewed in this way, green buildings – especially those that are certified in some way – are seen as financially desirable, both from the perspective of the developer, who can market it as green, and the ultimate tenants, who will be able to save money on their energy bills.

In practice, viewing green buildings in such a dichotomous fashion – as a statement of ideology or a pursuit of financial gain – is problematic. Developers and

⁶ It can also be argued that, despite being constructed before developers were actively considering green building practices, my home was already “green” inasmuch as it is located in a very dense urban space.

residents of green buildings that I interviewed during the course of this research spoke of their desire for green buildings in terms that were *both* ideological *and* based in profit motive. Therefore, the development of green buildings should be seen as being driven by mixed motivations.

Defining Green Building

Definitions of green building vary a great deal. For some, “a building that is ‘not as bad’ as the average building in terms of its impact on the environment” may qualify (Zeigler 2002:1). Definitions may include – or not – categories that address a structure’s impact on the health of its users; resource management during construction; resources, such as energy, used in its maintenance; and site impact, such as stormwater runoff (Office of the Federal Environmental Executive 2003; Yudelson and Fedrizzi 2008; Zeigler 2002). The attention given to energy saving in federal buildings under the Clinton administration is seen as an important tipping point for a national green building framework, but the Clinton Administration was certainly not the first to address energy savings in buildings; interest groups, NGOs, international organizations like the UN, and state governments like California’s had been looking at green, efficient buildings for decades (Cassidy 2003). However, the attention given to energy efficiency at the highest levels of the federal government helped to create definitions of green building that are widely used and accepted today.

The Office of the Federal Environmental Executive defines green building as “the practice of (1) increasing the efficiency with which buildings and their sites use

energy, water, and materials, and (2) reducing building impacts on human health and the environment, through better siting, design, construction, operation, maintenance, and removal – the complete building life cycle” (Office of the Federal Environmental Executive 2003:8). This is the definition I will use in this dissertation. This definition views “green building” as a process, not an object; it sees buildings as part of a process and place. In this understanding, the process of siting, sourcing materials, and eventual deconstruction are just as important as the operation of the building itself.

Credentialing Green Building

Who gets to determine whether or not a building is “green?” Certainly, when I try to sell my home, I could ask the realtor to market it as a green building. From the sustainable landscaping and stormwater catchment systems outside to the insulation, energy-efficient appliances, water-saving toilet, and zero-VOC paints used inside, my home has many green features. However, with the increased interest in green buildings, a number of certification systems have sprung up, offering some measure of credibility, institutional backing, and standardized metrics for understanding green buildings. By far the most well known of these systems is the US Green Building Council’s Leadership in Energy and Environmental Design – or LEED – certification system.

LEED provides guidelines and metrics for those involved in building and renovation to assess and compare how green their buildings are. Different rating systems within LEED cover everything from existing buildings and new construction

to specific types of buildings and industries, such as LEED for homes. There is even a LEED rating system for neighborhood design. Each of these rating systems is evaluated through a set of categories, including site selection, water conservation, energy efficiency, use of sustainable materials, indoor environmental quality, and innovation in design (US Green Building Council 2011). Some rating systems – LEED for housing, for example – have additional categories that give structures credit for location (is it infill versus new development? Is it close to public transit, walkable, and near green space?) Credit is also given for education of homeowners, building managers and/or tenants to help them understand how to maximize energy efficient features of the homes (U.S. Green Building Council 2013). Green building projects can earn a score of 0 – 100, with categories within this scale ranging from “LEED certified” (the lowest possible LEED level) to “LEED platinum” (the highest possible level.)

Discussing the LEED certification process is important for understanding how this certification plays into green building as both an ideological and a commodification phenomenon. What is interesting to note is that, according to developers I interviewed, the process of LEED certification can be arduous and expensive. In addition to adding to the cost of a project, LEED trainings, certifications, inspections, and paperwork can add valuable time to the project. So, if a developer can build a building with features that adhere to the LEED certification system but not waste time and money on the LEED label, why bother? As one architect told me, value is attached to the label:

It does give you the Good Housekeeping seal of approval, in a way. Everybody understands it. They don't know what LEED means, most

of them, but the fact that a third party entity came in and said ‘this is a LEED-certified project,’ means other people then say ‘this is a good thing. We want that.’ Why do you go to an accountant who is a certified public accountant? Because some entity said that they met a certain criteria” (personal interview, 6 June 2012).

The process of certifying a green building is one that appeals to both an ideological and a profit-based motivation. Buyers or tenants interested in the ideological facets of green have a label to prove their adherence to the ideological code of sustainability. LEED certification, in this sense, can be likened to “I Buy Organic” bumper stickers or even the simple act of bringing reusable bags to the grocery store. These are physical markers of adherence to an ideological value system – markers that, in many ways, provide their carriers with a claim to moral superiority. The connection of values to structures also helps us to understand the commodification of the buildings. The LEED label offers the equivalent of a “Good Housekeeping seal of approval” to buildings that can save owners and tenants money on operating costs and offers two fronts on which developers can market their sale: one based on the ideology of sustainability, and the other based on money savings and the commodification of a value system.

A History of Green Building

While the excitement around green buildings is relatively new, their existence certainly is not. The goal of this section is to provide some historical context – both in the US generally and in Philadelphia specifically – to green building and development practices. By describing a historical trajectory of green building as it has interacted with market and government forces, I will show that 1)

government policies regarding green building have been a substantial contributing force in their increased demand, and 2) government adoption of green building policies is not only instrumental in the commodification of structures themselves, but also in a commodification of place – that is, the creation and sale of the green city.

Green Buildings Before Sustainability

Green building techniques such as the use of natural, local materials and passive heating/cooling are demonstrated in the Anasazi ruins in the desert Southwest, for example. Even comparatively modern structures that were never labeled “green” include systems that are discussed today in relation to green design. For example, the Crystal Palace in London (built in 1850) featured roof ventilators for passive cooling; the Flatiron building in New York City (built in 1902) features deep-set windows to block the sun and keep the inside cool; and Chicago’s Carson, Pirie, Scott and Company building (built in 1899) featured retractable awnings to shade the store from the sun in the warm months but allow its warmth to penetrate during the winter (Gissen 2003). None of these buildings was labeled green or sustainable. Their architects simply designed them with the natural environment in mind.

However, the advent of new building technologies combined with increased access to cheap fossil fuels drastically changed building design in the 1930s; from the massive glass and steel structures in cities to single family homes, heating and cooling could now be powered by cheap oil (Gissen 2003). When heating and

cooling could be done so inexpensively, attention to passive design was no longer necessary. At the same time, post-war suburbanization saw more people purchasing cars and regularly commuting across highways and into the cities for work. Inexpensive fossil fuels, then, contributed both to building form and to the configuration of regions, which were becoming increasingly suburbanized.

The Historical Role of Government in Green Building

In 1973, after Egypt and Syria launched a surprise attack in Israel on Yom Kippur, the United States government decided to support Israel by supplying them with weapons. In response, The Organization of Petroleum Exporting Countries, or OPEC, announced an oil embargo on oil sales to the US. The oil embargo of 1973 captured public attention and led many in the US and internationally to think about the dependability of cheap oil (Stein 2006:57). A number of consequences resulted from that embargo. Images of gas lines, for example, are ingrained into the minds of many Americans (Angelova 2011). Sammy Hagar's 1984 hit song "I Can't Drive 55" was written in response to the National Maximum Speed Law, which was designed to save fuel by mandating slower driving speeds. At the beginning of winter in 1973, President Nixon requested that the public lower their thermostats to no higher than 68 degrees (Nixon 1973). And amidst the nation's next energy crisis in 1979, following the Iranian Revolution, President Jimmy Carter famously installed solar panels on the White House (Shelton 2007:33).

While broad and comprehensive conversations regarding the longevity of fossil fuels (or "peak oil") were not yet happening on a large scale, acknowledgment

of the difficulty of relying on them in the midst of a politically unstable world was beginning to happen. The federal government's adoption of energy efficiency additions like solar panels is important because it helped make these ideas visibly institutionalized in a way that hadn't been done at such levels before. It was also important, though, because government actors very clearly established the link between energy efficiency and economic and political resiliency. Some have attributed the increased attention given to green architecture and design principles at this time to such increased visibility and attention at the highest levels of the US government (Cassidy 2003).

President Reagan's removal of the White House solar panels in 1981 symbolically illustrated a shift in the position of the executive branch of the federal government regarding energy conservation (Shelton 2007:32). However, the green building movement had already begun and was about to reach a critical mass. The American Institute of Architects (AIA) Committee on Energy pursued research looking at both passive systems and more technological solutions to green building and California had already commissioned the construction of energy saving state office buildings (Cassidy 2003:4). International conversations were happening, as well. Participants at the 1992 UN Conference on Environment and Development, or the Earth Summit, developed Agenda 21, which was the UN's action plan regarding sustainable development. One of these participants was the president-elect of the American Institute of Architects (AIA), Susan Maxman. Maxman was so impressed by the conversations at the Earth Summit that she went on to organize the next AIA/UIA convention – "Architecture at the Crossroads" – around the theme of

sustainability. This convention is widely recognized as a “turning point in the history of the green building movement” (Cassidy 2003:5).

The executive branch of the federal government, under the Clinton administration, began to take notice. The “Greening of the White House,” which began in 1993, saved \$300,000 and reduced carbon-based emissions by 845 tons per year (Cassidy 2003:5; Shelton 2007:36). The connection to cost savings helped lead to a rash of green building projects in federal properties, including new buildings and retrofits of existing structures.

At the same time, the U.S. Green Building Council incorporated and five years later, in 1998, the USGBC membership approved their first green building, sustainability rating system, LEED version 1.0. Since then, a number of institutions, including governments (federal, state, and local), major corporations, colleges and universities, and real estate developers have adopted policies requiring building projects to conform to LEED standards (Cassidy 2003:7). Green building – in particular LEED standards set by the USGBC – took off, and the role of government played no small part (Tolan 2012:245). A number of people had, for years, been advocating green building principles through ideological messages that emphasized the importance of conserving natural resources. However, the realization that green buildings have a large role to play in a political and economic environment of uncertain access to non-renewable energy sources like oil was no doubt hastened by world events and US leaders’ response.

Green Building: the Philadelphia Context

Philadelphia as a City for Climate Protection

Political leaders in Philadelphia were slower to model green building practices than their federal counterparts. On June 23, 1999, with just a few months in his term remaining, Philadelphia Mayor Ed Rendell signed a proclamation declaring Philadelphia to be a City for Climate Protection (Samans-Dunn 2004:208). “City for Climate Protection” was a program supported by the International Council for Local Environmental Initiatives. Aimed at reducing the City’s greenhouse gas emissions, the goal of the program was to create a framework for departments and agencies throughout the city to measure and reduce greenhouse gas emissions. The City’s involvement in the program required that one office or department coordinate these efforts, and so the City’s first official department to address and coordinate issues of sustainability city-wide was the Office of the Managing Director (2004:208).

This focus on greenhouse gas emissions was important for green buildings in Philadelphia in part because it required the City to audit energy consumption in its own buildings. The City would now have data on its overall energy use and, through the City for Climate Protection program, would have to monitor progress in decreasing it. It is interesting to note that the name of the program – “Cities for Climate Protection” – has a distinctly ideological ring to it. Advocates for sustainability express concern for climate change and its effects on present communities as well as the ability of future communities to thrive. However, the

implementation of the program focuses on energy efficiency in government buildings, which is an important consideration for reducing greenhouse gas emissions from energy production plants, to be sure. However, the draw for many city governments in participating in this program could not have been purely ideological, as the tangible economic benefits of lowering energy costs would also only add to cities' coffers.

Paving the Way: Building Demolition Under NTI

John Street's administration (2000 – 2008) continued the monitoring work required under the Cities for Climate Protection program; however, no substantial efforts toward decreasing energy consumption were made. Street's foray into sustainability was in his Green Communities/Sustainable Lifestyles campaign. This initiative was launched soon after he took office and illustrated his administration's focus on neighborhoods, as opposed to Rendell's focus on Center City. The campaign involved training neighborhood representatives on environmental protection issues; these "Eco Teams" were then charged with disseminating the information to their neighbors (Samans-Dunn 2004:208). This program was eventually folded into the city wide initiative that the Street Administration is best known for: the Neighborhood Transformation Initiative (NTI.)

The Street Administration unveiled its Neighborhood Transformation Initiative in April 2001, just over a year after the creation of the Green Communities/Sustainable Lifestyles campaign. Aimed at eliminating blight and encouraging redevelopment in neighborhoods, NTI pursued wholesale demolition of

seriously blighted sections of city neighborhoods (McGovern 2006). The resulting lots were assembled for redevelopment or were “greened” for neighborhood parks and gardens (more on this in Chapter 5.) Street’s green building policy was less about building or rehabilitating and, ostensibly, more about demolishing structures that were contributing to a poor quality of life for surrounding residents, decreasing property values for surrounding property owners, and a lack of investment from developers. Street’s NTI program was both criticized and praised and, while green building was never an expressed purpose of NTI, it certainly paved the way for private developers to build on the new sites – green or not; in other words, NTI was seen as little more than a land clearance subsidy for developers (Shlay and Whitman 2006:158). Despite this, Street’s Neighborhood Transformation Initiative did give attention to the equity dimension of sustainability by encouraging engagement as part of an ongoing process rather than focusing solely on outcomes. In other words, Street seemed to recognize that the route and the destination are both important.

Forays into Green Building Policy

Toward the end of Street’s second term, though, the City demonstrated that it was paying more attention to the national groundswell of interest in green building, which was perhaps due to an increased awareness of green building initiatives happening throughout the nation and awareness that attention to sustainability had important economic – not just ideological – implications. In particular, 2007 saw three interesting developments. First, the City’s Sustainability Working Group released their Local Action Plan for Climate Change (City of Philadelphia

Sustainability Working Group 2007). This plan included ten suggestions that specifically related to buildings. Most suggestions focused on what could be done to decrease the climate impacts of city buildings, including purchasing wind energy, using Energy Star rated products, and requiring LEED certification for the City's new buildings and large renovation projects, among others (2007:9–22). However, there were also a couple of suggestions aimed at encouraging a public/private partnership to help reduce negative climate impacts of privately-owned buildings, such as the suggestion to make weatherization programs directed at poor homeowners more affordable. Second, while many environmental advocates were not convinced that it was enough, Street signed an executive order that directed City departments and agencies to pursue many of the report's suggestions, including the building-related suggestions listed above (Street 2007). Most interesting about this executive order, though, is that it also created the City's first Office of Sustainability – then called the Office of Sustainability and the Environment⁷. Finally, in 2007 Mayor Street also signed the Green Roof Tax Credit into law, allowing businesses to offset the costs of installing a green roof by deducting a portion of them from their business privilege taxes (Kenney 2007).

The Nutter Administration: Building Green?

In 2007, the campaigns for the next mayor were well under way. The previous year, the William Penn Foundation, which often funds work relating to the

⁷ Mayor John Street's creation of this office an accomplishment for which his successor, Michael Nutter, is usually given credit.

environment and sustainability, saw an opportunity to get sustainability initiatives on the political agenda. They funded the “Next Great City” initiative, spearheaded by a statewide environmental advocacy group, PennFuture. Next Great City created a coalition of roughly 100 organizations, including environmental and faith-based groups, labor, and civic associations. What came out of their discussions and polling was a ten-point policy agenda (Eichel 2007). Michael Nutter’s campaign noticed the report and ultimately included many of its policy recommendations in his campaign platform (Bauers 2007).

In addition to seizing sustainability, Nutter also used a 2004 report from the Building Industry of Philadelphia called “If We Fix It, They Will Come.” The report offered a damning critique of the City’s “burdensome” development process and “dated” zoning codes (Black 2004; Kerkstra 2007). Nutter easily won the election and, in the process, set the stage for his administration’s focus on sustainability and, as one part of that, green building. One respondent I interviewed who was a central part of the creation and everyday workings of the Next Great City initiative told me that he firmly believed that Nutter’s win could be attributed to the attention his campaign gave to sustainability: “So many people in Philadelphia wanted that conversation and after we released our ten-point agenda, which was really something that came right from the community – labor, religious groups, business organizations – you name it – he got all those people. They felt like they were heard” (personal interview, 26 June 2012.)

The Nutter administration, now in its second term, has since dealt extensively with green building – at least compared with previous administrations.

Some examples: he hired professional staff in his Office of Sustainability, which wrote the City's first Greenworks plan (and metrics for tracking progress) and lays out the City's agenda to become the greenest city in American by 2015 (City of Philadelphia Mayor's Office of Sustainability 2009). He signed legislation that requires new City buildings (or significant remodels) to be LEED-certified Silver or higher (Reynolds Brown 2009). He signed "cool roof" legislation, which amended Philadelphia building code by requiring many roofs on new construction buildings to be Energy Star rated as "highly reflective" (Kenney 2010). He helped develop a loan and rebate program, making funds available for city businesses to become greener (Hill 2010). And, both Nutter and Council were able to approve and adopt a new zoning code, which adopted many of the sustainability elements called for by the Next Great City policy agenda, including provisions that encourage more mixed-use districts, energy and water conservation, and increased urban food access (Philadelphia Zoning Code Commission 2012).

Philadelphia's adoption of sustainable green building practices has ramifications beyond just the individual buildings, the sites they are on, or even the communities they are located within. When Philadelphia displayed institutional support for green building, they did more than set the stage for the commodification of individual structures – they also began to produce and commodify the green City. The production of green buildings – essentially just energy-efficient structures that are imbued with a value system – also results in the production and commodification of place. Spaces upon which green buildings are placed are now spaces imbued with value; they are permeated with an ideology of sustainability. In

other words, the buildings themselves are commodified, but so, too, is the image of the City.

Despite the City's vocal and legislative support for green buildings, however, developers have still expressed frustration at barriers to development. A report from the Pennsylvania Environmental Council called "Building Green: Overcoming Barriers in Philadelphia" asked builders and developers about their experiences with green building in the city of Philadelphia. Builders and developers indicated that the barriers are related to a gap between a cheerleader-type advocacy of green building and the everyday workings of City processes and procedures. "There is no doubt," the report notes, "that the single greatest barrier to green building in Philadelphia has been a lack of political will and strong leadership at the top levels of City government" (Wiggins 2008:6) Among some of the biggest complaints cited in the report are the lack of interdepartmental and interagency cooperation, and conflicting policies and chains of command both within and across city departments. These themes, among others, came out of focus groups conducted in 2007; however, my own interviews, which were conducted over the course of one year in 2012, indicate the same frustrations.

Conclusion

On a national level the history of green building indicates that it has been influenced by government policies encouraging it. From the outset, the adoption of green building policies at the federal level was a catalyst for more extensive adoption of green buildings. But public demand for sustainability – for both

ideological and monetary reasons – has also increased; Michael Nutter’s mayoral win is credited, by some, to the inclusion of sustainability in his platform. Nutter’s predecessors began an important process of beginning to integrate sustainability into city policy. I argue, though, that by campaigning on sustainability and releasing the Greenworks plan, Nutter really began the process of green place making – that is, creating and selling Philadelphia as a green city. So how does the development of Philadelphia as a green city intersect with the practice of green building, and how do developers explain their successes and challenges? The following chapter examines these questions.

CHAPTER 4: “GREEN BUILDING IS JUST BUILDING”

Introduction

This research seeks to understand how sustainable development projects are implemented within an urban context where major players, such as politicians and developers, see growth as an essential part of the urban agenda. To understand how this works specifically in the context of green building, I interviewed individuals who represented green building interest and advocacy groups, architecture firms, development firms, builders, property managers, and representatives of city government. In addition to discussing green building in the city with these people, I focused particular attention on two development projects in the city whose missions and recent projects actively support sustainability through green building: one large-scale development group (who I'll call *Limestone Investment Trust*) with an international portfolio whose Class A office space projects, including Bilbo Building, price into the multi-millions, and a small-scale developer (who I'll call *Sustainability Development*), whose energy efficient housing projects are exclusively based in Philadelphia and are primarily dealing with infill housing. Both have extensive experience with building in Philadelphia. The remainder of this chapter will describe some of the projects being pursued by each firm within the context of green ideology and commodification and will then address some of the overlapping and divergent themes that were addressed by each.

Given the barriers that developers have complained about regarding building in Philadelphia *and* the somewhat time-consuming LEED-certification process

described in Chapter 3, what reasons do developers give for pursuing green building in Philadelphia? In my interviews, representatives of the large-scale Limestone Trust (including architects, project managers, and their director of sustainability initiatives) more frequently offered reasons relating to profit, versus more altruistic reasons like saving the environment. However, building green does not translate directly to higher profits through higher rents in downtown office buildings.

Despite this, green buildings are worthwhile investments for developers because they can be built, packaged, and sold as a product that both adheres to an ideology of sustainability and has indirect side-effects of increased worker happiness and productivity. “We’ve been quick to learn that nobody will pay a nickel more to be in a LEED building,” said Michael, a senior project manager for Limestone Trust. “But,” he said,

the LEED buildings in our portfolio tend to be at a higher occupancy. Now, some of that is because they are newer. But also, the people who occupy those LEED buildings also tend to be happier. We’ve done some psychological testing through the Rutgers Green Building Institute, and we got some very positive results from that. So that is spurring us on to do some more (personal interview, 28 September 2012).

While building green structures does not translate to higher profits through higher rents, the side effects of a green building – employee health, happiness, and increased productivity – are important marketing components that Limestone uses as market differentiation to attract its customers to LEED-certified buildings. For Limestone, then, green building has elements of both an ideology of sustainability and a commodification of green. In this case, commodification of green relates is related to ideology, but it is marketed in such as way as to appeal to prospective

tenants' altruism, self-interest, and concern for worker productivity (and, by extension, increased profits.) Michael continues:

We have those better buildings, but because we're not charging more money in rent for that building, you can rent our building where your employees are happier, we believe they're more productive. They're not getting as many allergies or having as many sick days. There's all this natural light... Many people will select a LEED building because they say, "yeah, I've read about that. I've heard about it. I know something about it. Oh, yeah: healthier, more natural light. There's something to be said for that." So it's market differentiation for us, which has become a powerful motivator (personal interview 28 September 2012).

When I toured one of Limestone's flagship downtown properties, Bilbo Building, in downtown Philadelphia the Property Manager, Tony, led me around the towering, gleaming structure and was sure to mention these incentives as well (personal interview, 9 November 2012). In our tour, Tony focused on the sustainable, green features of the building because he knew from conversations with other colleagues of his that I'd interviewed at Limestone that I was interested in green building⁸.

While the overwhelming focus in my conversations with Limestone's employees was on using LEED buildings to attract tenants and, therefore, increase profits, Michael also discussed a more direct altruistic motivation. "Limestone's involvement in sustainability is kind of like the hippies invading the boardroom.... [When Limestone and other developers started looking at LEED], those of us who were interested in sustainability 30 years ago, we realized that we could help our

⁸ While Tony focused his talking points on the sustainable aspects of the building's design for my benefit, I also got the sense that the speeches Tony gave me about natural light and fresh indoor air were practiced enough that he'd given them to many prospective tenants before.

companies or organizations lean more in a green, sustainable position” (personal interview, 28 September 2012).

There are distinct differences in the ways that large-scale Limestone Trust and small-scale Sustaincity Development view the ideology and marketing of green buildings. Most notably, the small-scale developers I spoke to acknowledged the importance of marketing buildings’ energy efficiency while at the same time promoting an ideology that advocates for green building because it is the right thing to do. Sustaincity’s marketing of green buildings as energy-savers is an approach that is distinctly different from Limestone’s focus on worker productivity. In part, this different focus is, by definition, a result of the types of tenants and buyers each development firm is working with. As Maria, the Sustainability Director for Limestone Trust told me, the types of tenants that are attracted to Limestone’s properties are typically very large companies with multimillion dollar budgets who often have headquarters located in places outside of Philadelphia. The tenants of these buildings are not concerned with energy savings because 1) they can generally afford the cost and 2) because local offices have very little incentive to change energy consumption behaviors, as their energy bills are viewed as fixed costs and are typically forwarded to corporate headquarters (telephone interview, 10 September 2012). However, the small-scale Sustaincity Development group typically sells their buildings to owner-occupants. Thus, while the marketing and commodification for large green buildings revolves around worker productivity, small-scale green building developers focus on marketing their buildings in a way that emphasizes energy savings. At the same time Sustaincity is more likely than

Limestone to tap into altruistic motivations. Sustaincity takes more of a direct ideological stance than Limestone, but at the same time they acknowledge the importance of green commodification for marketing. This theme was echoed by Peter and Olivia, who are members and employees of a regional green building membership-based advocacy group:

Peter: I mean, more than anything, people are really most worried about their energy bills right now. And so anything builders can do – either in terms of new design or retrofits...

Olivia: Yeah. I mean, some people will put a few solar panels on their house because they just want to save the planet or whatever. But when most people call us, it's because they're trying to stabilize their costs if they have, like, oil heat or something.

Peter: Yeah. I mean, really it's probably both because, you know, some of those people could go another route. Like, natural gas is relatively cheap right now. So people are probably wanting to move into new green buildings because partly they care about costs but, also, they figure if they're going to get something new it might as well be something that's good for the planet (personal interview, 9 March 2012).

Scott, an owner of Sustaincity Development, more frequently discussed his desire to do things that are “good for the planet” than Limestone representatives. Interestingly, he believed it especially important to show the City that they could be an instrumental part of this process. What is noteworthy here is Scott's efforts to have the city recognize and adopt the more ideological facets of green building; that is, Sustaincity makes an effort to actively engage the city in producing green places not necessarily because it helps in the commodification and sale of the green city (although this would certainly help businesses like Scott's,) but because it is right. In discussing a request for proposal (RFP) that Sustaincity had submitted to the

City's Redevelopment Authority (PRA) to build affordable housing on PRA-owned land, Scott said:

The reason why I'm interested in it is because we literally want to change the fucking world. And, so, if you don't demonstrate to the municipality that they can do that, and that that this can be *standard* around the city, then nothing is going to change. So, they are an audience that can really help transform the city. They own a lot of it. They have the ability to say "let's change the way we think about affordable housing." That's why we do this (personal interview, 5 July 2012).

My interview with Scott was conducted at a construction site, where they were within one week of finishing construction on three units of housing that would be section 8 approved and had, just before I'd arrived, passed a test that would certify them as "net-zero energy," meaning that they were designed and built so their energy contributes zero carbon emissions. Scott wanted to build green for people who could afford to buy new-construction homes, but also for people for whom "this shit really matters. They can not afford to pay their energy bills, and we have the solutions." Scott expressed his desire to see green building become standard, which was illustrated when he balks at the word "green:"

Scott: We're trying to eliminate the adjective "green" in building.

Me: Why? I though you said people want green buildings?

Scott: It shouldn't be "green" – that makes it sound different. It makes it sound pricey, and it doesn't have to be. It should just be "intelligent building," and it should be standard. There shouldn't be a premium associated with it. It should be everyday we can do this. We can build section 8 housing that is this [*waves hands around to the housing units we are standing in*] (personal interview, 5 July 2012)

Scott's dislike for the green adjective is interesting because it illustrates how he, as a small-scale developer, views the importance of ideology and profit. Scott is in the

business of developing and selling green buildings and so, by definition, must think about their commodification. For Scott, green building is not a purely ideological practice. However, wanting to remove the green adjective from green building is illustrative of his more ideological motivations.

This illustrates that small-scale developers may be more inclined to gravitate toward ideological motivations while large-scale developers may be more likely to express motivations relating to marketing and profit. Both large- and small-scale developers, however, express elements of altruism and profit motivation in their green development projects. The question then becomes, “what role does the city play in this process?”

The Cost of Doing Business in the City

The financing of projects (both public and private) and bureaucratic, time-consuming permitting processes were both discussed extensively by Limestone and Sustaincity representatives. They identified problems in city processes as well as things that work well. So, if a city is interested in marketing and positioning itself for growth based on green place making, how does it both facilitate and thwart green building? This section addresses how developers manage money and time, how the City intersects with these challenges, and highlights similarities and differences with their experiences.

Project Funding

While most of developers' funding sources are from private lenders or shareholders, city leaders have the power to influence the success and green building projects by helping developers to secure funding. City support for project funding can manifest itself in many different ways. For example, providing support or backing on developers' grant applications to external sources such as HUD can provide the developer with a measure of trust and legitimacy and communicate to HUD grantors that this developer is worth investing in. Cities can enact policies that decrease taxes, for a time, on green buildings, as in the case of tax abatements. Cities can actively petition potential grantors among groups with whom the city has important working relationships, such as authorities, community development corporations, and state and federal officials. Cities can also make land deals with green building developers, thereby decreasing overall project costs. This is not an exhaustive list that cities can be involved in the process of facilitating the funding of green building projects, but it is an important reminder that they are not divorced from a process that is often viewed as one that is happening between developers and private lenders, or between developers and their shareholders.

One of the first things developers need to address when initiating a project is, of course, how they are going to pay for it. While Sustaincity does not always get public money for its projects, they actively compete for it when they can. There is a niche market, of sorts, in competing for public money for building generally, but green building in particular offers developers pursuing public money for

development projects an edge. In fact, Michael pointed out that Sustaincity might not exist without having had an initial influx of HUD funding for their first project:

I had nothing – and I mean *nothing* – in my pockets. And [my business partner] had like 20 grand. And we had no real experience, not really with development, anyway. So the great thing about HUD is that they're out to transform cities. That's what their mission is, to rebuild cities and ultimately, you know, the country. But in doing so, they lend money to people that commercial lenders would never touch. They, you know, they'll take risks. And they took a huge risk on us (personal interview 5 July, 2012).

This example, a direct grant application between a developer and a federal grant, wouldn't seem to have any connection with the City, so what is the City's role in helping developers obtain federal money? One very important way is to offer their backing when developers approach federal agencies – especially if the project is in any way associated with the City or its authorities. In one on-going project, Sustaincity won an RFP through the Philadelphia Redevelopment Authority and one employee of Sustaincity told me that, when it came time to apply to HUD to try to get funding for the project, the support of the PRA was “huge.”

Beyond the occasional federal funding, Sustaincity can occasionally get land through the Philadelphia Redevelopment Authority that may have cost more on the open market. But, they have to work for it. In order to purchase land from the PRA, developers must submit RFPs that indicate, in detail, their development plans for the site:

In order to be successful as the purchaser, you have to go to the PRA with a *huge* document in which you completely design the building. I mean, you have to have everything in there: renderings, the entire financial pro forma, address context in the neighborhood – you know, how your building fits in. You have to address how you're going to hit equal opportunity targets, you have to fill out whole sections about campaign disclosures. You even have to list the entire team that you'll

be working with – the engineers, the architects, the builders. You have to tell them where your money is coming from. And all this is even before you know if you’re going to get the land, so it’s a lot of time and money to put into something you don’t know will even pan out.... I mean, it’s just so much shit it’s unbelievable. But, you know what? I’m ok with it because we’re usually able to get the land for less – sometimes a lot less. But the other thing is that, when we can show them that this is what we’re delivering, the city knows something good when they see it – often, we’re some of the only green developers in the process. And they say “we want that in our city,” and so we can negotiate better terms (personal interview, 5 July 2012).

For the small-scale developer, then, direct funding from federal agencies or state grants is not the only public-funding answer. Cities have the power to influence the success or failure of development projects through competitive processes that, while complicated and arduous, reward green building innovation through *land* deals. In fact, Scott points out that, in the process of competing for these parcels, he “kind of like[s] the fact that it’s burdensome because if it was easy, you would just pull a lot of crappy developers in. So it weeds them out.”

While city governments have a powerful role to play in facilitating green building, powerful actors in cities can also prevent funding in the development politics of large-scale development. For example, one large development battle involving public funds and the City’s tallest building – the LEED-certified Comcast Center – was waged in 2004.

In 1999, Keystone Opportunity Zones, or KOZs, were implemented in Pennsylvania as a means of encouraging businesses to locate in blighted areas by eliminating state and local taxes for those businesses. Liberty Property Trust, the developer of the Comcast Center, applied for a KOZ with the support of former Philadelphia mayor-turned Pennsylvania Governor Ed Rendell. However,

opponents, which included the owners of large office buildings that were leased to businesses downtown, argued that the downtown location was far from blighted and that awarding KOZ status to that property would allow Liberty to charge higher rents to its tenants, which would be offset and subsidized by the tenants' non-existent tax payments.

In the end, the Pennsylvania General Assembly Republicans – mostly representing more rural areas of the state and, therefore, generally not interested in providing development subsidies to large urban centers – prevented a vote on the bill. It seemed, for a time, that powerful downtown business and property owners had won. However, Governor Rendell was ultimately able to support the project by allocating \$30 million in state Redevelopment Assistance monies to Liberty Trust (ostensibly to help connect the Comcast Center with underground SEPTA transit lines) and an additional nearly \$13 million to Comcast, the building's biggest tenant, for job training assistance grants and job creation tax credits, among other things. Despite the hugely political nature of supporting the development of the Comcast Center, the governor of Pennsylvania, a man who many have referred to as Philadelphia's greatest cheerleader, found ways to provide state financial support to a development firm that had more than enough money to cover the costs of development. In part, this was about responding to a threat that, without state subsidies to offset development costs, the Comcast Center would be unable to attract or keep major tenants and employers. But this was also about the construction of place; the development of the Comcast Center – the tallest building in the Philadelphia skyline – would not only be a stately addition to the city, but it

would also have the side-effect of being a highly-visible marker of the City's efforts toward green place-making.

Later, Michael told me that while Limestone actively pursues large sums of public money when they think they can get it, "we're lucky enough because we're a public company and we have shareholders' money, money is less of an issue for us. Because we're self-funded, we don't have to go borrow money from a bank." Shareholders also tend to want a predictable return on their investment, and to avoid risk. So, companies like Limestone Trust are "very cost conscious, so we're not cutting edge.... We never want to be first. We want to be second. We want to learn from the first guy, and see how it works out."

This is not true for Sustaincity Development. When supplying a potential lender with a pro forma for a project, Scott told me that his company typically aims for a Loan-to-Value Ratio, or LTV, of 2:1, meaning that they expect their return to be 2 times the costs that went into the project.

If we can hit that ratio, that's our dream coefficient. Meaning we have room to screw up – but even better, we have room to play. We can experiment. We can test new ideas.

The focus on experimentation and innovation that companies like Sustaincity embody can make securing private funding difficult and cities' support even more important. Scott describes the process:

You put together the pro forma for the lender and then they look at you. Who are you? What have you done before? Then they start asking you to take your clothes off, and bend over. They look inside you. "Show me your bank accounts. Show me everything that you are – everything – and then we'll decide whether you're a risk or not." And we're, like, the riskiest guys in the world!

Me: How are you the riskiest guys in the world?

Scott: Because we're doing things that nobody's ever done before. So, I was invited to talk to the Entrepreneur's Business Society, or something like that, at Temple University a few years ago. I was standing there in the middle of all these MBA students and it just occurred to me in the middle of my talk that "oh my god. I'm staring at my future lenders." And I said, "You know what? Some of you need to understand this: lenders' whole life is to find a way of taking no risk. And I just realized that I do the exact opposite." I mean, I don't try to take on risks but, to me, taking risks is about living. It's, like, that's where life gets exciting. And *that's* where businesses are born. But entrepreneurs and lenders are fundamental opposites (personal interview, 5 July 2012).

For cities interested in green place making, green building developers' ability to secure funding – especially for small-scale developers who cannot rely on shareholders' money – is an important reality to consider. In these case studies, the green label seems to be especially important when city support through land deals, for example, can truly make or break a project given private lenders' aversion to risk. Most private lenders don't much care about the ideological benefits of green building; at the end of the day, they want to know that a project is financially viable. When firms like Sustaincity engage in green building innovation, lending firms see risk. Innovation, for them, is simply another word for "untested."

However, there is a market for green building innovation – that is, making green buildings more efficient and more sustainable – as it is attractive to those to adhere to an ideology of sustainability. Cities trying to position themselves for growth based on green place-making, or the commodification of their city as a green place – may find that land deal, tax abatements, and the like are important tools in their green-growth toolbox.

A comparison of these firms – one small, one large – seems to indicate that the green label is especially helpful for the small-scale developer when trying to secure city assistance for building projects. The large-scale developer has access to private financing and, for them, cities are already likely to help in any way they can – green building or not – simply because of large projects’ size and stakes. In other words, while the green status of a large-scale building project is important for a city’s green image, the green label on a small-scale project will likely be more influential than the green label on a large scale project in securing city support. This is because large-scale developments are likely to have a city’s support regardless.

Developer’s costs are not only about money. Representatives of both large- and small-scale developers told me that time is the biggest challenge. When I asked Michael from Limestone Trust what he thought of the state KOZ debate and the grants that were ultimately awarded, he said,

You know, grants are great. \$30 million is great. And you’re not going to walk away from something like that, which you will only get when you have powerful supporters like Rendell. But, to be fair, many times there’s a lot of hair attached to incentives and grants. I mean, you do whatever you need to do. But... at a certain point, you know, \$30 million adds up to a certain amount of time (personal interview, 28 September 2012).

Similarly, Scott said that, going into the development business, “one of my colleagues told me that ‘there’s only one enemy of a developer, and it’s not money. It’s time.’ And he was totally right.” The following section will examine the role of time and negotiating city departmental silos in project success and completion.

Racing Against Time: The Role of City Government Bureaucracy in Project Success

Developers who are racing against the clock to finish projects so they can either sell the properties or begin to lease them become very frustrated with the City's bureaucratic processes and conflicting policies that slow them down and eat into their profit margins. In other words, cities' desire to create a green sense of place may be hampered by their own institutional ineffectiveness. The frustration surrounding confusing and conflicting bureaucratic policies was evident for both large- and small-scale developers that I spoke with, and while their means of dealing with the problem differed, both were very frustrated with the City's inadequate systems.

So what exactly is the frustration? A large part of the problem is that City departments are in silos, with little or no communication across departments. Thus, despite a desire to engage in green place making at the highest levels of City government, the implementation is full of barriers. Bureaucrats who have worked in City government for years and are most comfortable with maintaining the status quo, as it is the path of least resistance for them within the context of their individual departments. According to Michael from Limestone Trust:

It's just that the alphabet soup of agencies we have to deal with is pretty horrendous. There's a project I'm working on right now and there were about 20 different approvals I had to get – and these were long before I could even look into building permits – just to get the thing moving. I went to people in the Streets Department, the Fine Arts Commission, the Redevelopment Authority, City Council – and that's just the tip of the iceberg. So you're going through many of the agencies in the City. And that is many, many months to get all of this happening. And you just – you and your lawyers and your design team – you just spend a lot of time in just going through the process.

And, the thing is, you start talking to people and most of the people, I want to say the bureaucrats, are really very well-meaning and they want to help you. But they're reading from a manual that says "well, you've gotta do this, and you've gotta do that." And you have to go along with it, even if it doesn't make any sense! It's not like it's one size fits all (personal interview, 28 September 2012).

Scott from Sustaincity expressed the same sentiment, even while recognizing that the work being done by each of the City committees, agencies, or departments he is working with is important:

That façade, that rendering we made for the project, I had to show it to at least 4 or 5 different City agencies. They are all reviewing the same thing. You know? I mean, come on. Committee A likes the façade. Committee B doesn't like the façade. Committee C mostly likes it but wants you to make some changes. And what Committee C tells you about what they like conflicts with what Committee B wants you to change! So you have to go back to the drawing board and make the changes, which is fine, but then we have to bring it back to *all Three Groups*. Again! And I understand that they have important jobs, and the city needs to look at certain things. That's fine – I live here and I don't want pieces of crap that don't match my neighborhood being built, either. But, I'm trying to help this place. You know? Yeah. So, it's like, it should be one agency. One place (personal interview, 5 July 2012).

It turns out that there *is* actually one place in the City that developers can go to. The "Developer's Services Operations Team" includes representatives from a number of different City departments and agencies; the team meets once a month, and developers can attend these meetings to ask questions about their development projects before formally beginning the permitting process. The problem, though, is that the team is only available to developers of "large scale projects," which they define as buildings with 50 or more units, "who," according to their website, "face more complex permitting and infrastructure needs." Small-scale developers like Scott who believe that the permitting process *is* a very complex one, are left to figure

the system out for themselves. And large-scale developers like Michael say that “for a large project like [our flagship building downtown] and some of the other projects we’ve done, it just hasn’t been helpful.” So, while the City seems to have recognized the problem of a confusing permitting process, their solution, while likely “well meaning” (as Michael put it,) isn’t adequately helping developers.

Michael, Scott, and representatives of a green building advocacy group I spoke with all discussed the Philadelphia Water Department (PWD) as an example of a City department that is making positive changes in their permitting processes that specifically target, encourage, and incentivize green building. In their “Green City, Clean Waters” plan, the PWD discusses establishing a “Fast-Track Stormwater Plan Review Project Review.” This fast-track process allows developers whose projects address stormwater runoff that goes into the City’s sewer system (by installing green roofs, for example) to enter into a “Green Review” process. This review accelerates the permitting process within the department, guaranteeing a five-day turn-around.

While kinks in the process are still being worked out, large- and small-scale developers I spoke to have been impressed with its results so far. Michael and Scott both used adjectives like “forward-thinking” and “visionary” to describe the new PWD director who, according to Michael, is “really drinking the Kool-Aid with all this sustainability stuff.”

So why is the City’s water department, in particular, focusing on making the process easier for green builders? The answer here likely lies in the nature of their work. The water department can easily see the connection between environmental

sustainability and its everyday operations. The macadam, cement, and concrete so prevalent in cities mean that rainfall doesn't sink into the ground; rather, it runs into the cities' stormwater and sewer systems. As more and more of these water impervious materials are used, both within the city and outside (water doesn't recognize municipal boundaries), water infrastructure, including sewage lines and treatment plants, is strained. In other words, the PWD is paying attention to sustainability in a way that other City departments aren't because they are in the business of natural resource management, and it is clear to them that paying attention to it is in their interests. In addition, though, there may be something to be said for strong leaders who believe that the green way is the right way – in other words, someone who not only follows green practices but someone who also “drinks the Kool-Aid.” Where green developers and city departments can establish shared interests, then, the process has the potential to run more smoothly. The problem rears its head again, however, as soon as multiple departments need to be involved. The water department is just one part of the process.

Some cities interested in green place making are finding ways around this. Some cities have established green building liaisons who walk developer proposals through the multiple departments and help to accelerate the process. This is illustrative of how the production of green place can not only be hampered by institutional ineffectiveness, but the production of green place can also be accelerated and given institutional priority. Michael worked with one of these liaisons in Scottsdale, Arizona:

I built the first LEED Gold commercial building in Scottsdale. What they have done – now, *they* are an enlightened city – is if you have a

LEED project, they assign a person that will be your advocate within the city government. And I can't tell you, since then, how many people I've tried to talk to in Philadelphia about this. But in Scottsdale, all submissions went through this person, they would keep checking on the progress, and they guaranteed that you would get a response back at 30 days.... By having that kind of advocate, or that "fast lane," if you will... well, for developers like us, time is money. We achieved our permits there roughly two months *earlier* than what we had anticipated. By getting those, we could start construction two months earlier. That meant we finished the building two months earlier. And, by doing that, they had a tax-paying business with tax-paying workers in town two months earlier than they expected *and* we got two months more rent than we expected. So, we didn't have to pay an extra nickel for that. But it was a commitment that the local authorities had made and it was an absolutely huge incentive for us (personal interview 28 September 2012).

Meanwhile, developers in Philadelphia, despite the City's commitment to sustainability and growth, have to find ways to manage or work around the onerous development process.

Making the Best of It: The Importance of Relationships in Project Success

While both large- and small-scale developers experience similar roadblocks to development in Philadelphia, their ways of handling them varies according to the resources they have available to them. This section highlights some of these differences.

In trying to deal with some of the challenges I discuss above, the small-scale developer described three ways he's able to make it all work: he resigns himself to the process, so that he knows what to expect and can plan accordingly; he relies on cultivating relationships with clerks in City departments that he has to frequently work with; and he is persistent in staying on top of the process, acting as a "bulldog" to make sure it gets done.

First, when I asked Scott to give me examples of what the City does that works well for his business and for green building in the city more generally, he seemed resigned:

Me: You've already told me about the water department fast-tracking your permits. What else can you tell me about how the City or any of its departments or authorities is doing to help developers or green builders here?

Scott: Um... You know, I don't even know whether... I guess I just don't think about it that way. It just is the way it is. It's not helpful or... well, I mean, it just always seems to take way more time than it should. You always seem to talk to one person in zoning and get one answer and then talk to another person and get a different answer. It's happened on every single project I've done. It's just... *[sighs]*. It's just the way it is. I have to accept it as part of the process. I have to anticipate it (personal interview 5 July 2012).

While Scott anticipates mixed messages and a long process, the second thing he does to make the process easier is to develop and foster contacts in various city departments. He describes a friendly relationship with a clerk he has worked with in the City's zoning office, and told me that he tries to make sure he can talk to her if he has an issue with something.

She might not have any real control over what happens there, but at least I know she won't just blow me off. When she says there's nothing she can do, it's the truth. She's not just saying that because she wants to get back to watching You Tube videos or something (personal interview, 5 July 2012).

This cultivation of weak ties in a number of City departments helps Scott get accurate information within a department, even if it is conflicting across departments. It also gives him peace of mind to feel that his concerns are being heard, even if they aren't being addressed. And when the clerk in the zoning office

calls him with a response to a question, he feels like the work he puts into cultivating that relationship has paid off.

Finally, besides counting on these contacts, Scott credits much of his success with his own tenacity. When describing one request for proposals process he had gone through with the Philadelphia Redevelopment Authority, Scott said

They originally said no to us, because they said our project didn't fit the sort of thing they were looking for. But I knew that it did. I could just see it. And this was after we had submitted a two-inch binder to them with site designs and a pro forma and campaign contribution information and all the rest. It was a lot of work to put into it just to be turned down. And I knew ours was the best proposal. And so I pushed and pushed and pushed. I wouldn't let go. And they bought it – finally (personal interview 5 July 2012).

Scott credits his perseverance with a couple of things: first, his business is in building and development. He has to “be a bulldog, because I've gotta get the thing built, and I'm the one who's motivated to connect the dots.” Second, Scott seems to genuinely care about green building not just as a business, but as a cause. When discussing getting access to public monies for housing projects, he pointed out that his bids compete with those of non-green builders:

We have to fight for the same pot of money that these shmoees all over the city have access to. And they get it and go out and built shit. And then they put that money in their pocket, you know? And so, if you don't really go out there and be aggressive and demonstrate to people that [building affordable green housing] is possible, then everyone thinks it's not. It's bullshit. You just need to be creative and you need to be committed and you need to be rigorous about how you take your ideas into the world (personal interview, 5 July 2012).

Conversely, large-scale developers like Michael can afford the “armies of lawyers and consultants” that will help push a project through. Unlike Scott, who serves as developer/builder/accountant/marketer/real-estate agent for his

business, larger-scale companies can outsource this sort of labor. In addition, the politics of large-scale urban development allow for a different set of tools to be used when trying to deal with the challenges of development. I asked Michael with Limestone Trust what the City is doing well to help facilitate green building development, and his answer again highlights the importance of relationship building:

Me: What can you tell me about things that are working well with the City with regard to green building and your development projects?

Michael: A lot of it is very basic. It's dealing with people. You find the people who are willing to help you, who then become your advocate within the bureaucracy. For example, you need the Mayor – we used to meet with Rendell a lot, but the same is true for Nutter or Street. I mean, you need the Mayor to help with whatever you're doing, with projects of consequence... you can't underestimate that. That has always worked well for us. You've got to have the buy in. Because if you have the Mayor's support, then that helps you get the City Council person's support. And that, in turn, helps get you the Planning Commission support. That helps you in all of these other avenues (personal interview, 28 September 2012).

Interestingly, his answer ends up being a description not so much of what the City is doing well, but rather of how well Limestone Trust is able to cultivate high-level contacts. Michael continues with a description of a project in which Limestone Trust pursued the support of the City Council representative for the district in which they were building:

If it wasn't for our Council person in District 1... Well, he's not the Councilman any more, but it used to be Frank DiChico. But he was really instrumental with helping us navigate through that system. So you have these people of authority who are able... I mean, they're not doing anything illicit or wrong, but they are making the phone calls. They're gathering people together (personal interview, 28 September 2012).

Both the large- and small-scale green building development firms emphasize the importance of fostering relationships in order to make their development projects successful. However, the scale at which each group is operating influences what influential players they will have access to. For Scott, it's the clerk in the zoning office. For Michael, it's the Mayor. In other words, the ideology or values of green development don't change the traditional politics of growth. The notion that "it's all in who you know" (or all in who you have access to) still applies. For the case of the small-scale developer, active and thoughtful cultivation of weak ties (Granovetter 1973) proves an indispensable tactic for facilitating project success. For the large-scale developer, though, participation in the local growth coalition is critical (Logan and Molotch 2007; Molotch 1976).

Conclusion

At one level, the work of sustainable development – illustrated in this chapter with the example of green building projects – is about focusing on the politics of green policies. In Philadelphia, the success of green building projects has been helped by laws and policies specifically designed to promote green building, such as the green roof legislation passed in 2007 and the Philadelphia Water Department's green review process. In other places, providing liaisons that will specifically assist green building projects (such as the one in Scottsdale described by Michael) seems to help further encourage green building projects.

At another level, though, the work of green building is not unlike the work of non-green building. In other words, an examination of green policies also involves

an investigation into the nature of green politics as they relate to land and growth. This research indicates that green growth is no different from any other type of growth. The only difference is that green growth comes packaged in an ideology that makes it more appealing and more marketable. Some might argue that whether or not a development is “green” must matter in a city that has placed so much emphasis on sustainability. However, the Mayor’s Office of Sustainability was not seen by either development group I spoke with as having much power over the challenges they described. A developer from Limestone Trust told me that, while people in the Office of Sustainability are well-intentioned, their lack of resources, including money and power, inhibits their ability to make meaningful change.

The extent to which green building projects are successful does not seem to depend much on the extent to which their city embraces sustainability. Philadelphia has actively embraced sustainability, especially since the election of the most recent Mayor. Despite this, the complaints of both large- and small-scale green developers aren’t focused on the City’s green policies. Rather, it is the overall process of development and its associated costs that frustrate developers. As I have tried to show here, developers see positive transformations and good models for change, such as the Water Department’s fast-track “green review” process and Scottsdale’s green building liaison. However, these solutions, while better than what the developers typically experience, do not fully address the issues of conflicting policies and information between City departments. They do not get to the root of the barriers. So, what developers fall back on, instead, is establishing relationships and exerting influence.

The significance of these observations lies in two main points. First, while the process of green growth in the case studies here indicates that there is no meaningful difference between green and standard development, green building does contribute to a production of place. Buildings and, by extension, the City, become connected with the values and ideology of sustainability. Second, this place making adds to the appeal of cities, which ultimately makes them more marketable. The place making of development has taken a green turn but, when it comes to green building development, maintained the course of traditional growth politics. The following chapters will examine the extent to which this is true for green open spaces.

CHAPTER 5:
THE HISTORICAL PRODUCTION OF GREEN OPEN PLACES IN PHILADELPHIA

Introduction

“The City” often evokes images of densely placed buildings. The bricks and mortar of cities are front and center and often all we see. Yet there is space in-between those buildings. And those vacant spaces in-between can be overlooked.

How are these spaces in-between constructed and contested, and what role, if any, does the City play in creating, maintaining, and supporting these spaces? The production of space in cities is often conceptualized in terms of structures, like housing, stadiums, and high-rises. The previous chapters have discussed how the process of green building ultimately helps to create a commodification of place – physical beacons of the sustainable city. But place making is about more than the construction of buildings. Place making is also about these spaces in-between.

In a context of urban development patterns that prioritize what Logan and Molotch have called “value free” development (2007), or the idea that economic markets should determine land use, how is open space produced? What are the implications of urban greening in areas of high land-value versus areas of lower land-value? This chapter looks at how green space has been produced in Philadelphia. It argues that the production of green space has traditionally been based on economic benefit for members of the urban growth machine.

I lay out my case for this argument in the following way. First, I create an operational definition of green open places by injecting sociological understandings of place into traditional definitions of green space. I then examine how green places

have historically been understood and used both in the United States and then in Philadelphia in particular. Third, within my examination of the history of Philadelphia's green spaces, I examine the role of public-private partnerships in the creation of some of Philadelphia's earliest green spaces, and then at the efforts of these partnerships to use greening as a strategy to combat urban blight.

Green Open Places

Some urban in-between spaces – but not all – are what I will call green open places. This section examines some of the ways that researchers and theorists have attempted to understand green spaces in urban areas build an operational definition of green open places. I begin by examining research that examines the functions of urban green space.

Open Spaces

Literature on open spaces conceptualizes them in a duality. Open spaces in cities can be considered either “green” or “gray.” In an attempt to architecturally conceptualize sustainable neighborhoods, Al-Hagla (2008) uses this dual typology to understand open space – that is, space not already occupied by buildings. Examples of gray spaces include squares, markets, or other such “hard,” paved spaces (Al-Hagla 2008:164). Green spaces, on the other hand, are open spaces that include vegetation and/or water (Al-Hagla 2008:164).

While this duality is perhaps simplistic, the gray/green visual is one that can easily be applied when thinking about urban spaces. And urban planners and new

urbanists, while not always using this language, have employed the general concepts in their own thinking about how to structure or think about existing urban spaces. For example, landscape urbanism, a theoretical approach to urban planning, encourages practitioners to adopt a perspective where “landscape replaces architecture as the basic building block of contemporary urbanism” (Waldheim 2006:11). This view argues that the best way to plan in cities is to start with their ecological landscapes rather than the design of their buildings. Moreover, new urbanist Andrés Duany employs the gray/green model in his conceptualization of transect zones, where the dense, urban core (primarily gray) slowly transitions out to rural (primarily green) zones (Duany, Speck, and Lydon 2009).

Green Spaces

If green space is not gray space, then what is it? Before that question can be answered, it is essential to understand that research regarding green space presents these areas as desirable spaces. The green city is argued to be “an ideal of universal appeal that transcends temporal, spatial, and cultural divides” (Jim 2004:311) and “for centuries, natural settings have been associated with enhanced health and well-being in urban environments of the industrialized North” (Jennings, Johnson Gaither, and Gragg 2012:1). These are broad and sweeping statements that beg the question: what’s so great about green space?

Green space research describes a number of benefits. For example, green spaces provide recreational opportunities (Payne et al. 1999; Zhou and Rana 2012:175), promote physical health (Bell et al. 2008; Mitchell and Popham 2008;

Sugiyama and Thompson 2007; de Vries et al. 2003), enhance social ties (Coley, Sullivan, and Kuo 1997) and social interaction (Rasidi, Jamirsah, and Said 2012; Tzoulas et al. 2007), provide space for local food production (Stanley et al. 2012), and increase property values (Bark et al. 2011; Tajima 2003; Voicu and Been 2008) and business revenues (Waits 2008).

All of this research generally relies on a definition of green space like this one from the Centers for Disease Control, which defines green space as “open land with natural vegetation” (Centers of Disease Control and Prevention 2014). The broad gray/green distinction is helpful as a typology for classifying open spaces, but definitions like this one for green space are underdeveloped for sociological application.

A more thorough definition is necessary for two reasons. First, in addition to parks, tree-lined streets, private yards, plazas and courtyards with planters, playgrounds, and preserved wooded areas, this definition must also include many vacant lots. Abandoned lots are often overgrown with weeds and are, according to the definition, green space: open with natural vegetation. The effects of these vacant properties (including structures and open spaces) on people around them, though, are the inverse of those beneficial outcomes described in green space research (Kraut 1999; Shlay and Whitman 2003). An effective definition of green space, then, must have some way of parsing out the bad from the good.

Second, while green space research as a whole certainly understands the role of both private and public organizations in creating and maintaining green spaces, the research tends not to see the politics of green spaces. Not enough is done to

understand these spaces as part of a large-scale land management and development process that is guided by elites' prioritization of exchange value over use value. The urban sociological perspective is helpful because it addresses the power dynamics involved in creating, maintaining, and controlling spaces.

An Operational Concept: Green Places

Shifting From "Spaces" to "Places"

Current conceptualizations of green space rely on a definition that sees green space as "open space with vegetation." Yet part of the problem with this definition for understanding green spaces in an urban sociological context is that it does not allow us to separate the "good" from the "bad" space. This definition addresses the material form that a space can take, but does not address how space is emplaced. Gieryn argues that places are comprised of three things: geographic location, material form, and investment with meaning and value. For Gieryn, a place is not just a backdrop against which things happen, but places actively shape and are shaped by human activity (Gieryn 2000).

The ways in which places affect individual people are debated. On the one hand, Gieryn along with Zukin argue that place should be seen as an "agentic player in the game;" that is, places can be seen as variables with explanatory power all on their own (Gieryn 2000; Zukin 2002). On the other hand, though, Gans argues that we should not see places as causing things, but rather, we should understand that the people who create spaces cause things (Gans 2002). In this view, place is seen as more of an intervening variable. Place should not be conceptualized as being

separate from the people that create it. Doing this helps to emphasize the power of elites and their propensity toward making decisions that favor capital over people.

Green urban spaces are those that including just one or two of Gieryn's three criteria: geographic location and material form. By shifting to place-based language we can begin to understand how land is invested with meaning and value. When people talk about "urban greening," they aren't talking about the creation of vacant, trash-strewn lots. They are talking about spaces that have been imbued with positive values: places that are positive and desirable. Understanding the distinction between space and place is useful for infusing an urban sociological perspective into the conceptualization of green spaces. The ways in which we collectively have come to assign positive value on open green spaces like parks and gardens in urban areas means that we have emplaced these spaces, thereby turning them into what I am calling green open places. On the other hand, we place negative value on abandoned lots overgrown with weeds. In this example, lots still meet Gieryn's three criteria for place, but the values assigned to these spaces – especially by those who have to live near them – are negative. It is the differential investment of meaning and value across these two different types of green places that helps us separate them in this analysis, and this helps to address the first problem with current definitions of green space.

Power and Green Place Creation

The second problem with popular definitions of green open space is that they do not incorporate questions about the power dynamic around these spaces. In

other words, if we see urban land management and development as a process guided by elites to control capital in a way that emphasizes exchange over use values, how do green open spaces fit into this?

Green places are associated with a number of benefits – health, recreation, beauty, and increased social interaction are just a few. The fact that the benefits of green space are discussed in sweeping, positive declarations indicates that we engage in what Harvey (2009:12) calls a “cultural appraisal” where “individuals...possess value systems which motivate them to want to make use of these resources.” For example, our collective valuation of green spaces means that those who are able are willing to pay more for properties that overlook a park, for example. We monetarily pay for access to these resources. Accessibility can always be obtained at a price, whether through increased land prices, rents, or time spent to get to them (Harvey 2009:57). This accessibility to green places is one example of a fringe benefit, inasmuch as it is a hidden mechanism that affects one’s “real income” (Harvey 2009:53), which can be defined not just in terms of earnings, but also available resources (like access to green places.)

What is the power of green place creation? Developing, creating, and maintaining green open places should be seen as an important part of increasing the value of surrounding properties and, therefore, as an important part of the secondary circuit of capital. Investing in green places is a process that ultimately increases the value of surrounding spaces so that capital can both flow and accumulate through the place-making process. In addition, while green space is generally regarded as positive, the creation of green space is often contested and not

always regarded as beneficial for everyone. As we will see, the process of green space creation raises questions about how, why, and for whom green space happens.

Green Places: A Working Definition

My definition of green places builds on the traditional green space definition while rooting it in an urban sociological perspective.

Green places have three important characteristics in the urban context. First, green spatial *form* includes open space with vegetation. Examples could include parks, playgrounds, plazas with planters, community gardens, or private yards. Second, green places should be understood as socially constructed (versus naturally existing), inasmuch as 1) we engage in a cultural appraisal and imbue them with positive value, and 2) they are created and maintained by actors. Third, green places have effects – or externalities – that are spread unevenly across the urban landscape.

The History and Context of Green Places

The Commons and the Right to the City

Discussions of the history of green space often begin with a description of the historical importance of the commons. The commons are “a resource, most often land, and refers both to the territory and to the ways people allocate the goods that come from that land. The commons has traditionally provided food, fuel water, and medicinal plants for those who used it – it was the poorest people’s life-support

system” (Patel 2010:92.) Commons in the area of England and Wales are frequently discussed as examples of the historical development of commons spaces and their importance for the people who used them. Indeed, records exist indicating the presence of commons areas in this region as far back as the 7th century, and archeological research indicates their presence as far back as prehistoric times (Wall 2014:24.)

While England is often referred to in these historical discussions of the commons, other areas of the world, including ancient Roman territories, India, and Mongolia also have evidence of societies that made use of common areas (Wall 2014:23). All of this indicates that, while access to open spaces in urban areas is a relatively modern contestation, the importance of these common spaces is as old as human societies themselves.

Yet there is some debate as to whether the commons are about access, ownership, or something else. According to Wall, commons are about access: “Commons can be unowned and accessed by all or owned by a community and accessed collectively. Property can also be owned by an individual or institution but may be open to others to use *under certain conditions*” (emphasis added) (Wall 2014:6.) According to this perspective, commons could be privately owned but publicly accessed. But the regulation of these spaces may be concern to some.

For example, during the Occupy Wall Street protests, a group of protesters marched to the Comcast Center in Philadelphia. The spaces in front of this building and inside the main lobby are billed as public-use space – people are welcome and even encouraged to gather, socialize, and listen to free public music performances in

these spaces. Protesters showed up and engaged in a sit-in designed to highlight a large corporation with “massive amounts of property” that doesn’t pay property taxes due to Philadelphia’s tax-abatement program (O’Brien 2011.) Within an hour, the protesters were arrested.

Yochai Benkler argues that the commons can be broken into different types based on 1) accessibility and 2) regulation (Benkler 2007.) So while the privately-owned Comcast Center may qualify as a commons in one sense (accessibility) the regulation of the space tempers the extent to which that space can be used as a resource. This intersection of accessibility and regulation, of course, highlights the role of private property. Private property can be conceptualized as “the concept of a system of rules governing access to and control of material resources” (Waldron 1990:31.) This system establishes not only access and control but also, ultimately, social relations. Rights to access and control property are quintessentially about power. They determine who gets what and who is excluded.

The History of Green Space in U.S. Cities

Birch and Wachter argue that modern urban greening efforts can be traced as far back in American culture to the likes of Thomas Jefferson, whose interest in horticulture was renowned (Birch and Wachter 2008:1.) Yet modern interest in greening cities is really more likely linked to urbanization, to a concern for what was perceived to be the deleterious effects of increasing density in urban areas as industrialization took off. For example, early sociologists who struggled to explain the effects of the rapidly increasing size of cities viewed the size and specialized

nature of work in cities as negative for individuals' mental health. Individuals living in cities were described as having "schizoid" personalities caused by a lack of close relationships and an increase in transitory, secondary contacts (Wirth 1930). Cities were also described as alienating, as people within them were thought to lose much of their individuality (Simmel 1903). Density was not favorably viewed by these theorists, who argued that the close physical contact combined with a process of alienation gives rise to loneliness and pathological behaviors.

Ostensibly in response to these sorts of concerns, cities began to actively set aside urban green spaces. For example, in Philadelphia, Fairmount Park (one of the largest urban parks in the world) was officially created in 1855 – the height of its industrial era (Brownlow 2006:212.) Some argue, however, that far from serving as a public health response to the challenges of urban density, urban parks were developed as tools of social control; parks were landscapes where "the values and aesthetics of nature, leisure, and recreation embraced by the country-dwelling, capital-owning middle and upper classes would trickle down to educate, placate, civilize, and (consequently) increase productivity of the city-dwelling working class" (Brownlow 2006:10.) This argument echoes Manuel Castells' discussion of collective consumption, whereby collectively consumed goods (in this case, parks) are provided through state intervention but ultimately serve to benefit capital by helping to support and reproduce labor power (Castells 1978.)

The development of park systems was one important piece of the greening of US cities. Programs designed to promote urban renewal and redevelopment are also connected to U.S. greening activity and the production of green space. Less

than a century after the creation of large urban parks, like Fairmount Park in 1855 and New York's Central Park in 1857, the Housing Act of 1949 served as a catalyst for the reshaping of US cities (Von Hoffman 2000.) This act provided federal funding to cities to acquire "slums," which were then turned over to private developers to build new housing. Right on the heels of this act was the Housing Act of 1954, which provided mortgages backed by the Federal Housing Administration (FHA) (Jackson 1987.) This was quickly followed by the Federal Highway Act of 1956, which gave state and federal government the power to build new highways and, since a goal was to facilitate the movement of commuters from the newly-developed suburbs into and out of urban centers for their commutes, the people who lived where urban freeways were built (mostly poor and people of color) were frequently displaced (Jackson 1987.)

These three acts of federal legislation changed the landscape of US cities and beyond. But for cities in particular, "urban renewal" or "urban redevelopment" programs are known chiefly for large structural changes – demolished neighborhoods, inner-city freeways, modernist high-rises, and the displacement of poor people of color. Urban renewal strategies also, though, included plans for open space. The Open Space Grant program was created in 1961 to provide funding to cities to include open space as an element of renewal planning (Bryson 2013:497.) So open space, if not always green, was an important and intentional piece of urban redevelopment strategies.

While urban redevelopment programs intentionally included open space in their designs, there were also negative consequences of urban redevelopment for

open and green spaces. All open spaces are not equal in cities where race and class are so heavily linked to the production of space. Where razed neighborhoods were not redeveloped or where there was disinvestment in places (such as FHA's refusal to back mortgages in places where minorities lived because of redlining,) open spaces left by vacant and deteriorating structures cropped up. These spaces were far from desirable green spaces, of course, but their creation opened the door for cities to engage in more purposeful greening activities.

A History of Green Space in Philadelphia

Philadelphia has seen an important history of urban greening activities. This section examines highlights of this history in three primary sections. First is an examination of the role of the Pennsylvania Horticultural Society in early urban greening efforts. Second, this section looks at Mayor John Street's Neighborhood Transformation Initiative. Third, I discuss how this initiative was important for the creation of green spaces in Philadelphia.

Pre-Neighborhood Transformation Initiative Greening Efforts of the Pennsylvania Horticultural Society:

An important player in the history of the greening of Philadelphia is the Pennsylvania Horticultural Society (PHS,) which was originally formed in 1827 as a botanical interest group. As revenues to the PHS increased from its annual Philadelphia Flower Show (which began in 1829 and continues to this day,) PHS decided to use the money to address urban blight in Philadelphia. Their

“Philadelphia Green” program was thus created in 1974 (Bonham and Smith 2008:228). The program’s first project – a partnership with the City’s Department of Recreation – helped create ten community gardens on vacant lots throughout the city. In the 1980s, PHS expanded their Philadelphia Green program to do urban greening work. Their goal was to green urban areas and to use the greening and beautification process (such as planting flower pots and boxes in run-down neighborhoods) as a way to build neighborhood cohesion (Bonham and Smith 2008:229).

In the mid-1990s, there was an interesting shift in the scope of work the Philadelphia Green program was engaging in. In 1995, the Pennsylvania Horticultural Society partnered with the New Kensington Community Development Corporation (NKCDC) to help them “clean and green” the many vacant lots that existed in the neighborhoods of Fishtown, Olde Richmond, and East Kensington. While the work of the Philadelphia Green program had previously been designed to address blight and stem neighborhood decline through beautification and community building, their work with the NKCDC directly connected their greening efforts with economic development. As Sandy Saltzman, then-director of the NKCDC said, “Our vacant land work with Philadelphia Green has been an amazing success... Today, it’s a totally different picture. People are buying into the neighborhood, vacant land is being sold for considerable prices, and people feel good about the remaining open space” (Bonham and Smith 2008:230) The goal, then, was not just to turn old, vacant, trash-strewn lots into beautiful green spaces. Rather, the goal was to green spaces to spur economic investment. The primary beneficiaries of this

investment were property owners and, in particular, speculating property owners whose lots – cleaned and greened through no investment of their own – were now a financial windfall. This economic motivation was confirmed in a number of interviews I conducted with individuals who had been involved with PHS and the NKCDC during the clean and green efforts...

Bonham and Smith (2008) note that the efforts to clean and green Philadelphia neighborhoods have four primary benefits: visual (green spaces are more aesthetically pleasing than vacant lots used for dumping and “provide relief from congested urban surroundings,”) environmental (because of increased air quality and better water runoff,) social (through providing social spaces and recreational opportunities,) and economic. And while the greening of vacant lots had non-economic benefits for the residents of these neighborhoods the economic benefits to property owners were remarkable (a point I will expand on more in Chapter 6.) Philadelphia had more than enough vacant lots to clean and green, though, and this was readily apparent when John Street campaigned for mayor in 1999 on a platform of addressing blight in neighborhoods.

The Neighborhood Transformation Initiative: More Space for Green

One of the effects of housing and urban redevelopment policies of the mid-1900s for cities like Philadelphia has been loss of population and, by extension, increased vacant lots and buildings. Between 1950 and 2000, for example, the city lost 25% of its population (Gurwitt 2002.) It had 26,000 abandoned buildings and 31,000 vacant lots (McGovern 2006:529.) And so, in 2001, Mayor John Street

announced his Neighborhood Transformation Initiative (NTI,) which was a large-scale effort undertaken by the City administration to combat blight in Philadelphia through the wholesale demolition of neighborhoods strongly impacted by blighted, abandoned, or vacant properties. Street's announcement got a lot of attention and was seen as a bold new policy move, in part because it marked a shift in local policy-making that had focused on downtown revitalization efforts at the expense of peripheral neighborhoods. Having run for office on a neighborhood-centric platform, this was Street's effort to make good on his promise.

An important thing to consider here is the idea that "blight," while having very real physical manifestations and consequences, is a social construction. It does not have an objective definition. So while some may visualize blight as abandoned buildings that are falling apart, others may think of abandoned vehicles, broken sidewalks, or the overgrown weeds in their neighbor's yard. Context is important. Gordon (2004) argues that the ways in which we think about blight tend to be tied to the ways in which policy has been developed to respond to it.

So, when Mayor Street announced his intention to combat blight in neighborhoods, he presented a plan of varying strategies, depending on the extent of blight in a neighborhood, ranging from removing dead trees in low-blight areas to demolishing dilapidated structures in high-blight areas. This strategy helped get city councilors from all over the city on board with the \$275 million plan. In practice, though, NTI focused on the extreme end in neighborhoods with high rates of abandonment (Adams et al. 2008:98-99.)

Blight can be understood as arising from one of two factors: market forces (the natural neighborhood transition/decline model) versus structural forces (where the quality of a place can be directly tied to decisions being made by institutions that guide the market) (Metzger 2000.) If one adopts a market-based approach to understanding blight, then solutions will also be market-based. According to Shlay and Whitman “seen through a market lens, blight is mitigated through concentrated demolition and vacant land assembly where blight is concentrated and strategically located, a process epitomized by early urban renewal policy” (Shlay and Whitman 2003:158.) Keeping this market-driven perspective in mind, it makes sense that, despite push back from residents, demolition focused on neighborhoods like Mantua (near Drexel University, the University of Pennsylvania, and center city) and Brewerytown (which has easy access to Fairmount Park) (Adams et al. 2008:98-99.) Not only did these neighborhoods have high rates of blight, but they also were deliberately selected by city officials because of their marketable locations. Demolitions in these areas paved the way for private capital to be lured into the city.

Because the architects behind earlier urban renewal programs and the Street administration’s Neighborhood Transformation Initiative both understood blight as an inevitable manifestation of market forces, their approaches to addressing blight were very similar: both focused on demolition and assembling large tracts of land for private redevelopment. Understanding policy makers’ perspective of blight as a market – versus structural – manifestation is important for understanding how green space has been constructed and contested in Philadelphia.

The NTI/PHS Green Space Partnership

How did the Neighborhood Transformation Initiative impact open and green space in Philadelphia? In June 2001, soon after the announcement of the Neighborhood Transformation Initiative, John Street created the Vacant Lot Clean-up Program (VLCP,) which was given the task of cleaning 31,000 vacant lots within one year. The City successfully met this goal, and has since continued to clean vacant lots in addition to stepping up efforts to clean graffiti and prevent illegal dumping. However, Mayor Street recognized that the VLCP itself would not be enough; simply removing trash from a site does not make that place appealing. So, he decided to partner with PHS's Philadelphia Green program. Where the City could cover the cost of clearing the lots, Philadelphia Green could draw from their experience greening lots "to turn abandoned vacant lots into community assets" (Bonham and Smith 2008:234.) Thus, the NTI's "Green City Strategy" was born.

The purpose behind the Green City Strategy echoes the results of Philadelphia Green's "clean and green" strategy with the New Kensington CDC. With the Green City Strategy, Philadelphia Green was to do enough greening to stabilize vacant lots as a temporary space to make the attractive for more permanent investment. Further illustrating the market-based motivations behind these urban greening projects, only lots in specific neighborhoods were targeted by the Green City strategy: those that had been identified as having a strong likelihood of future investment and development.

The negative impact of vacant and abandoned properties on surrounding areas has been illustrated in a number of studies. For example, Wachter and Gillen

found that vacant lots next to properties reduced their value by 20% (Wachter and Gillen 2006:4.) Similarly, Shlay and Whitman found that just one abandoned property on a block lowered sales prices for other homes on the block anywhere from \$3,542 to \$7,627 (Shlay and Whitman 2003:162.) And, as indicated in the above experience of the New Kensington CDC, vacant lots that are not maintained slow property sales and investment in that area.

Thus, the data indicate a tremendous economic cost of abandonment. But the reverse is also true: in New Kensington alone, “a \$1 million investment translated to property value gains of \$4 million through tree planting and \$12 million through lot improvements” (Bonham and Smith 2008:242.) And Wachter and Gillen found that cleaning and greening vacant land not only recaptures the 20% loss of value mentioned above, but also adds 17% to the worth of adjacent homes (Wachter and Gillen 2006:4.)

The market-driven approach to urban greening during this time was also apparent in interviews I conducted with individuals who had worked with the Pennsylvania Horticultural Society and with the New Kensington CDC at the time of their partnership. Jason, who worked with the CDC, said that they wanted to use the Philadelphia Green clean and green approach:

We wanted to use that approach to cleaning up land – even though we didn’t own it – because it improves the neighborhood and improved values in the neighborhoods.... When we worked in Kensington, we were looking for places to target where there was a lot of traffic and where, by getting rid of an eyesore and transforming it either into a clean and green lot or a community garden, we would change the dynamics for the people that lived around it. But – and this was key – you would also change the views of hundreds of people as they drove by everyday” (personal interview, 2 November 2012.)

The New Kensington CDC was certainly conscious of the benefits to neighborhood residents in the clean and green program. But it also was very tuned in to the idea that others' perception of place would be an important consideration in determining where to target their efforts. This perception of place would be important in marketing the value of the neighborhood to potential investors. This strategy was deliberate, as illustrated in this quote from Reema, who was involved with the PHS's Philadelphia Green program: "In New Kensington, we concentrated on corridors like Frankford Avenue, and it made a huge impact. The idea, though, was not that those lots would be open space forever. The idea was they needed to have that look until their future was decided. And hopefully they would be rebuilt for other things." Both the data regarding the economic impact of urban greening and these quotes indicate that, while urban greening is universally recognized to have positive health, environmental, and social impacts, the economic benefits take priority in decisions about urban greening.

Conclusion

From the history of the creation of Fairmount Park to the efforts of the NTI/PHS partnership, urban greening efforts have always been about their potential to 1) attract investment, and 2) capture value for private property owners. When he first announced the NTI/PHS partnership, Street talked about transforming vacant lots into community assets. But to what extent were these assets really for the community if they were only ever designed to be temporary placeholders for "real"

investment? And with Street's successor, who ran for mayor on a platform of sustainability, does the market-driven approach to urban greening change?

This historical analysis displays an important connection between public-private partnerships and green space development. The history of green space in Philadelphia is a history of the development of a city's in-between spaces. Not accidental or forgotten, these spaces between buildings have been produced and guided in a way that supports urban growth. Mayor Street's successor ran on a platform of sustainability. Has this market-driven approach to urban greening changed?

CHAPTER 6: PRODUCING AND CONTESTING GREEN OPEN SPACES

Introduction

This dissertation examines how sustainable development projects can happen (or not) within the context of an urban growth agenda. Given cities' focus on growth and development, how do both large- and small-scale green open space projects fare? Philadelphia has primarily been rooted in the desires of growth machine players (such as politicians, community development corporation directors, and large, well-established non-profits like the Pennsylvania Horticultural Society) to increase the marketability of space. The Neighborhood Transformation Initiative, with the support of the Pennsylvania Horticultural Society, converted vacant lots in neighborhoods outside of Philadelphia's Center City into beneficial green spaces for community members. But these community assets, which included parks, gardens, and open spaces, were never designed to be permanent. Rather, they were strategically placed to draw developers and business owners to those areas.

What this strategy communicates is that green space, while desirable, is more often a means to real development than an end in itself. That is, green space has typically been a means to attracting development that is profitable and yields direct financial benefits to specific groups and individuals.

Yet as Philadelphia begins to more deliberately consider green open places and their role in the creation of the sustainable city, does green space creation look different – less market-driven – than before? How do urban politics of growth and

development intersect with a city's sustainability agenda for those interested in green open places? These are the questions that this chapter seeks to address.

This chapter has three parts. First, I present two urban greening projects in Philadelphia and examine the ways in which they discuss sustainability as an important concept for the production and operation of those places. Next, I examine how actors involved in these projects – one small project and one large project – view the purpose of the spaces they are creating and how this fits into the notion of urban greening as either ideological or market-driven. Third, I address the importance of land access and tenure for these projects, and illustrate that policies encourage a market-driven approach to green space development, even in a city that touts an ideology of sustainability.

Large- and Small-Scale Green Open Places in Philadelphia

I interviewed a number of individuals who were all somehow involved with green open places, including high-level City bureaucrats; representatives of urban development groups like the Philadelphia Redevelopment Authority, the Center City District, Central Philadelphia Development Corporation, and the Pennsylvania Horticultural Society; resident members of neighborhood associations; and directors of three different urban farm and gardening projects. In this chapter, I focus on two groups in Philadelphia with recent projects publicized as sustainable green open place projects. The first is a large-scale organization focused on downtown development efforts; I call them the “Downtown Development Corporation” (DDC.) DDC is regularly engaged in business and real estate

development, transportation management, and general downtown cleanliness and vitality.

The second organization is a small-scale urban farm in West Philadelphia, who I call “Forge Wash Urban Farm” (FWUF.) FWUF’s primary focus is on providing the community with access to fresh produce as well as community building through gardening and nutrition-based education. While Forge Wash’s mission is more explicitly focused on urban green space, the Downtown Development Corporation also has extensive experience managing, producing, and developing open green space. This chapter will describe the Forge Wash Urban Farm and one of the Downtown Development Corporation’s projects.

In presenting green building development in Chapters 3 and 4, I discussed the idea that people involved in sustainability place-making projects typically conceptualize their work as both altruistic and profit-driven. People involved in these projects seldom discuss them in purely ideological or market-based terms. Rather, people typically lean toward motivation or the other. I believe that the same is also true for the production of open, or in-between, spaces.

Open spaces in urban areas are not occupied by buildings. Open spaces are, however, constructed – both physically and socially. Open space is constructed through our ideas of what it should look like, where it should be, and how and by whom it should be used. This is because all space is mediated through the social world. Everything that we see is filtered through a lens. The landscape that we see is, as soon as we see it, imbed with human judgment. For example, we examine a landscape and make judgments about spaces that are safe versus unsafe and

desirable versus undesirable. The individual and, ultimately, collective social judgments that we make about spaces are a means of constructing space that goes beyond physical bricks and mortar construction.

Open space is also constructed in a process of development that allows it to exist – or not. And actors in the urban environment – from the owners of land to those who design and use the space – stand to benefit in a number of ways from the creation of green space. The distribution of green open place benefits can be monetary or, more indirectly, can offer more indirect place-based benefits. In this way, the production of green places distributes benefits – monetary or in terms of real income (Harvey 2009) – that are unevenly distributed across the urban landscape. In this chapter, I will examine these green space benefits within the context of ideological and profit-based motives and explore some of the themes that emerged from the interviews I conducted.

Defining Sustainability for Large- and Small-Scale Urban Greening Projects

Green building is a phrase that is always connected to an ideology of sustainability in the design, building, and development world, but green open place does not have the same automatic connection to the sustainability ideology. This could certainly have to do with our collective and often limited notion of what sustainability is. When discussing this project with people, most of them immediately associated sustainability with environment. But, as I discuss in Chapter 1, sustainability is most often theorized as a concept that includes environmental, social, and economic factors. But if, for most people, sustainability

equates to environment and environment equates to green and nature, then it is not a giant leap to see urban green space as indistinct from a sustainable urban project. In other words, green open place projects are assumed to be sustainability projects as a matter of course.

How do those involved in the creation of these green open places – people who use the word “sustainable” in descriptions of their projects – conceptualize sustainable green places? My interview respondents who were connected with the creation of the Forge Wash Urban Farm were very conscious of what they perceived to be the overuse of the word sustainability and were very clear in their efforts to communicate their knowledge of sustainability as more than an environmental concept. For example, Josie, one of the founding members of the farm highlights the environmental importance of their farming practices:

So even though our focus as a farm is on food, we wanted environmental sustainability to run throughout In terms of our farming practices. So we don't use any chemical pesticides or fertilizers. We are not certified organic but we are using organic practices, which to me, small-scale organic agriculture is in line with sustainability (personal interview, 20 June 2012.)

But Josie and others involved in the creation of Forge Wash Urban Farm also see sustainability as more than environmental practices and so they were careful to highlight some of the other areas of sustainability they try to target with their project. For example, Josie also pointed out the importance of what she called “social sustainability” when she told me about their educational gardening workshops that are open to the community: “I think that’s a piece of sustainability, too – bringing people in a community together or giving people the skills that they

can use to then have a garden at home if they want to” (personal interview, 20 June 2012.)

At the same time, Josie points out that they try to be a sustainable urban farm in all senses of the word and they struggle to maintain a sustainable operating budget. When I interviewed Josie, they were only able to afford one full time and one part-time staff member. She told me that her dream would be to hire more people from the community, but their income is small and unpredictable:

It’s something that we’ve actually struggled with a lot – that is how to use the word sustainability – because I think so much of the sort of hype around sustainability has been ‘greenwashing.’ For us, it’s a real issue because we are not right now economically sustainable... How do we make this something that can survive and not be too dependent on grants and donations and volunteers overworking themselves? (personal interview, 20 June 2012.)

The farm’s dependence on volunteer labor was readily apparent when I went to interview Josie at the farm. When I arrived it was about 11:00 in the morning, and temperatures were already at about 93 degrees. Josie was hot, but after a group of volunteers failed to show up earlier that morning, she’d resigned herself to weeding by herself. I let myself in through the gate, and her eyes lit up. “I know I said we’d chat at 11, but would you mind helping me for a bit first?” I felt that I certainly couldn’t take her time without giving her some of mine –especially given that she was now so far behind. I knelt down between rows of strawberries and got to work, chatting to her about Forge Creek as we pulled weeds.

An hour later, we were drenched in sweat, I was sunburnt, and my arms were covered in hives from an allergic reaction to one of the weeds. As we moved to a shaded area under a pavilion and I plunged my arms into some ice water, it hit me:

she does this everyday. She brings home very little money and puts in long, grueling hours. But, through her exhaustion, her passion for her work was apparent. She clearly believes in the potential for sustainable urban farming projects in creating increased access to healthy foods, developing community, and “increasing resiliency.” She subscribes to an ideology of sustainability, but also worries that walking the walk might not be enough for the farm to survive.

These types of sentiments were communicated to me in other interviews I conducted with people involved in urban farming projects in Philadelphia, as well. What this says is that small-scale green space projects tend to place high value on many aspects of sustainability, and they use language that illustrates their awareness of the three-legged stool conceptualization of sustainability.

The urban farmers I spoke with also display conscientiousness in working toward the environmental, social, and economic aspects of sustainability; however, they all had trouble with this third, economic piece. Josie’s discussion of sustainability also illustrate the difficulty of urban farming projects to be financially successful, a theme that is intricately tied to stable access to land, which will be discussed later in this chapter.

How do large-scale urban greening projects discuss the role of sustainability for their projects? Two main points developed in the course of my discussions with people connected to large-scale projects. First, sustainability is not conceived of as a multi-faceted concept; rather, sustainability is, for the developers of large-scale projects, really about greening. Inasmuch as this is connected to environmental concerns, such as stormwater runoff, environmentalism was sometimes discussed.

But, for the most part, sustainability as a project development tool is, for them, about greening. Aesthetically, this translates to a distinction between the concrete-based designs of the past and more modern designs that incorporate greenery. The Downtown Development Corporation developed Winthill Plaza – a space in the middle of downtown Philadelphia – which is making the transformation from this concrete-based design to a greener one. Edward, the President of the Downtown Development Corporation sees this transformation as a shift in cultural design aesthetics more than a design built around an ideology:

If you look at Winthill Plaza, it wasn't the greenest of spaces. Far from it. That design was a product of the '60s and '70s – it's like somebody got a really good deal on concrete. But it was a different design culture then. Designs for public space today are very much about green and sustainability (personal interview, 8 October 2012.)

For Edward, sustainable green open space is about adding green to the aesthetically unpleasing spaces. Both large- and small-scale projects are concerned with making spaces more appealing for people to be able to use them. However, people involved in the creation of small-scale projects are much more likely to see them as spaces that create opportunity for community building, a sentiment that highlights their understanding of a social aspect of sustainability.

The second way that people involved in the creation of large-scale greening projects discuss sustainability is by acknowledging that sustainable design of these spaces is not a primary driver initially, but becomes one when they understand that it increases marketability of the space. When the Downtown Development Corporation hired Oleander, a landscape architecture firm specializing in sustainable designs, it was because of a pre-existing relationship with the firm and

not because of their sustainability focus. By hiring a firm like Oleander – I mean, it was not my directive to Oleander to make it sustainable – but their focus is on landscape sustainability. And by hiring those people, sustainability became the framework of the project and the value structure of the design team... So, I say sustainability wasn't the prime directive of the project, but "greening" was important from the start and by the very culture and values of the design team, we began talking about a sustainable element. So, if you see our materials, there is a lot of reference to sustainability now, because that's what the design team is talking about (Edward, personal interview, 8 October 2012.)

Edward also noted that once sustainability became a part of the discourse surrounding the new Winthill Plaza, it became quickly apparent that marketing the construction of the new plaza to potential funders and other stakeholders became easier.

Developers from each of these projects see sustainability as integral to their mission, and small-scale greening projects are more inclined to see sustainability as an important ideological motivator. On the other hand, sustainability in large-scale greening projects is secondary to "greening" more generically, but important as a marketability tool. This indicates that small-scale projects are more likely to lean toward ideological motivation while large-scale projects are more likely to see greening projects as an important development tool.

The Purpose of Green Space

The remainder of this chapter will develop an understanding of who the stakeholders are in the development of large- and small-scale green spaces, how this influences project success, and how actors in the City, within the context of a sustainable development plan, influence the process. In order to do this, I will discuss 1) how my respondents conceptualize the purpose of green space and 2) how land access and tenure enter this debate.

In my interviews, green space was discussed as important for one of two primary reasons. Those involved with small-scale greening projects (including farming, gardening, and small pocket parks) primarily discussed green space as important for its public engagement and community building benefits. This echoes the inclination toward thinking about social sustainability (or thinking about social equity) that Josie mentions above. More specifically, though, proponents of green spaces in communities saw the benefits to community by first involving children. For example, Nelson, a Nutrition Educator for a food security organization in Philadelphia also spends his free time helping communities set up small community garden spaces. He emphasizes the importance of educating children so they'll bring their parents out to learn, too:

Health is not just about what people put into our bodies. It's also about healthy relationships with others – community. Growing food is a great way to bring people together. People are always working, or they don't trust their neighbors, and so they aren't outside making connections. But when we can get kids come out to work in the gardens, their parents gradually come out too. And then the parents get talking, and we start to grow community at the same time that we are growing food. (personal interview, Nelson, 3 July 2012.)

When discussing the education component of the Forge Wash Urban Farm, Josie also emphasized the importance of involving children to build community:

“It expands their classrooms, especially for the kids who are in the neighborhood. Once they know we are here they can then stop by on their own after school or in the summer or on weekends. And, eventually, they bring their parents, too. And when they start getting to know each other and talking it really helps. It’s a community investment.” (personal interview, Josie, 20 June 2012.)

Interestingly, both Nelson and Josie also communicated the importance of helping children to understand that this is “their” space. Nelson says, “these kids have the right to feel some ownership over where they live and play. Maybe they rent or whatever, but they should still be able to understand that we are all here together and even if they don’t own it, they are stewards of it and they have a right to it on some level.”

Eleanor, a high-level City bureaucrat who works in the Planning department shared with me how opening up a review of the City’s Zoning Codes illustrated that people who have urban farms or community garden spaces spurred a mobilization among these interest groups from across the city that surprised her.

Usually when we start talking about things like zoning, residents tune out, but we hear a lot from businesses or developers or whatever. But with this, the urban agriculture area was a huge one where all the community gardeners kind of rose up and said “we absolutely have to be a part of this. This is our space.” But what was interesting is they cared about other gardens, too, even if they didn’t exist yet. It’s like they had this idea that people in the city should have the right to have space to grow food and, yeah, there should probably be rules about composting near houses or whatever, but they wanted to be a part of that process to make sure that people would have the ability to do it – you know, helping to define the types of community gardening that they do, what the impacts are and thinking about those on neighbors. (personal interview, Eleanor, 9 November 2012.)

The battle over how space is used is fundamentally one between what Lefebvre refers to as abstract space versus social space. Whereas abstract space is produced to maximize its exchange value, social space is the use value of an area, or how residents of that area create that space through their interactions and collective needs and desires. Lefebvre's notion that residents have a right to the city, or both the right to prioritize how spaces are used and the right to be an active part of the process that creates those spaces, is illustrated well in Eleanor's observation of residents coming together to demand a political voice in the zoning process. These quotes illustrate that those involved with small-scale urban greening projects emphasize the importance of how space is used by members of a community. Their emphasis is on the non-monetary benefits of these spaces and, in particular, on their potential for community building. This focus on how the space is used for community is in direct opposition to the economic (or exchange) value of a space (Logan and Molotch 2007.)

People involved with the creation of large-scale green space projects never discussed the space as being a place for community building. Actors involved in large-scale greening projects were much more likely to explain the importance of green space as an economic one. For them, the question is about the monetary value of space, both for the space itself and for other spaces around it. Vince, who works for the Philadelphia Redevelopment Authority, summarized this approach nicely when he said,

I know that greening has many values that are not measured economically very easily. But we can measure the economic effects of greening. And especially for urban farming – as a business approach, I have to tell you, I'm one of the chief skeptics... I mean, land in cities is

far more valuable than a piece of ready, arable land 30 – 50 miles outside the city. I just don't see how it makes sense here unless you're growing pot or poppies, and neither of those is going to get you very far right now." (personal interview, 2 November 2012.)

For Vince, who helps to manage the largest collection of available land in the City, green spaces like urban farms and gardens are not economically viable; they do not represent the "highest and best use" of the land. But many people I interviewed who are involved in making either space and funds available for small-scale urban greening projects continued to see these projects as useful temporary fillers of space inasmuch as they make the neighborhoods around them more valuable and more attractive for investment. This approach, which was a popular one during Mayor John Street's Neighborhood Transformation Initiative, continues today despite an institutional directive (the Greenworks sustainability plan) to increase access to open space. Greenworks progress reports indicate that gains have been made in increasing green space access for most Philadelphians. However, the continued focus on highest and best use of land among city bureaucrats, heads of public/private partnership organizations, and large non-profit organizations was clear in my interviews. This indicates that many influential actors, while adopting sustainability as a buzzword, continue business as usual. For them, sustainability is more commodity than ideology.

What does this mean for support of a downtown greening project like Winthill Plaza? Edward points out that this project has garnered the support of many of the surrounding property owners:

The immediate champions of the project are the self-interested adjacent property owners. I know one is building residences – condos

– inside the building across the street. And half of his marketing strategy right now is “you’re going to be looking out the window at Winthill Plaza when it’s finished.” And we also have the support of folks who own the buildings on the other corner, because they know that their property value goes up when this happens. I mean, there’s a ton of research out there showing that buildings do better if they are adjacent to green spaces and they can market that as an amenity. It has a transformative effect on real estate. (personal interview, 8 October 2012.)

In the example of Winthill Plaza, we see a powerful group of actors in urban growth – downtown real-estate developers – who stand to benefit from the creation of this green space. And the property owners and developers know this; the development of a green plaza across the street will increase the value of their buildings, which will increase the amount they will charge for rents, which will increase their profits. Thus, the creation of green space is not valued for its own merits; rather, green space production reveals itself as another means by which property owners, developers, and investors support the greening and, therefore, commodification of a “sustainable” green space through the secondary circuit of capital. Capital investments in space further support the commodification of land – especially these areas with fringe benefits (such as access to both downtown amenities and green space) (Harvey 2009.)

Powerful urban actors interested in increasing the value of their properties through external investments like these understand this, and as such will actively lobby in support of these projects. Edward continues:

And then, of course, it helps us get public funding when you have pretty big downtown property owners going to politicians – from City Council to Mayor Nutter on up to Governor Rendell when he was still there and we were trying to get funding together – it makes a big difference when you have these big property owners calling them, saying “we really want this.”

Places are expressions of powerful actors with interests in land development. Places are produced through a process where “land-based elites” (Logan and Molotch 2007) compete to guide resources to place-based investment. From property owners and developers to politicians, to utility companies and transit authorities, many are interested in downtown place-based development. It’s no wonder, then, that Edward described Winthill Plaza as a project that “was expedited in a lot of ways. It was a project that a lot of people wanted to see happen.”

Ultimately, then, the question of the purpose of green space comes down to questions about who has the power to produce that space. The following section will examine how access and control over land has impacted project development both the Forge Wash Urban Farm and Winthill Plaza.

Land access and tenure

Access to land is a crucial component of creating green open places. Both large- and small-scale urban greening projects have relied on the use of privately-owned land. For example, as I discuss in the previous chapter, the City’s Neighborhood Transformation Initiative under Mayor John Street targeted privately-owned vacant and abandoned parcels for their greening efforts. Similarly, those interested in small ground-up greening efforts in their communities often use privately-owned parcels, sometimes with the permission of the owner and sometimes not. Without formal land-use agreements, though, these arrangements

can be very tenuous. Nelson, the community nutrition educator who also helps communities set up small gardens in abandoned lots, says

If people are going to have ownership over their space, it has to come down to the land, too. I helped make a small community garden in a run-down neighborhood that was very successful...We had an arrangement with the owner of the property; he was ok with us using it. But that arrangement went south. We put a lot of work into it, and the property owner - he saw that his lot had gone from old tires, trash, weeds, and poison ivy - now he saw something that looked beautiful. There was a fence around it that he had given us the keys to a padlock. But he changed the locks so no one could get in. They couldn't even get tools out of the shed they had put on there. He put the property up for sale. So all their work just went into making him more money (personal interview, 3 July 2012.)

This illustrates that, even with an agreement with the private land owner, these sorts of small-scale greening projects are at risk.

In the case of Forge Wash Urban Farm, their access to the land was granted by a public landowner - the Philadelphia Redevelopment Authority. In 2005, the Philadelphia Water Department (PWD) announced that it would make grants available to organizations that would be able to decrease storm water runoff. Runoff is a major problem in areas with water-impermeable surfaces where water then runs into sewer systems and puts a heavy strain on the infrastructure. As such, PWD was interested in targeting vacant land parcels as places of research and experimentation (Philadelphia Water Department 2011). They partnered with the Philadelphia Redevelopment Authority (PRA) and when the founders of Forge Wash submitted a proposal in 2007 that would integrate an urban farm with already-existing community garden space on an adjacent parcel, their project was chosen. Thus, Forge Creek's access to the land is through the PRA, but was made possible in large part due to the water department's interest in sustainable water management.

Despite this, the lease between Forge Wash Urban Farm and the Philadelphia Redevelopment Authority was tenuous; Forge Wash could get kicked off with just 30 days' notice. As Josie points out, losing their land access would mean the end of the farm: "the farm is the land. We have all the plants here, the infrastructure, the fruit trees. It's not like we can just pick it up and move it to another parcel if they decide they want this one back." The uncertainty of Forge Wash's access to the land is purposeful, though, and illustrates that urban greening policies under an administration that purports to value sustainability have not meaningfully changed from those in the Neighborhood Transformation Initiative under the Street administration.

In a report for the Philadelphia Redevelopment Authority, researchers for the Penn Institute for Urban Research and Econsult Coporation (a private firm that does economic development, real-estate, and policy research,) recommended that the PRA "pursue temporary urban agriculture arrangements on its low-value parcels, regardless of whether it represents the final highest and best use of those parcels, when agricultural uses increase the value of those parcels and of neighboring parcels" (Wachter et al. 2010:vii.) Elsewhere, the report acknowledges that "urban agriculture naturally intersects with a number of important initiatives and objectives of the Nutter administration, [including] the Greenworks Philadelphia Sustainability Plan" and that "the attractiveness of urban agriculture lies in the ways in which it intersects with a myriad of economic and social agendas" (Wachter et al. 2010:2, 18.) The focus on economic agendas is clear at the level of

individuals who have power to make decisions about land, though. As Vince from the PRA said, “growing food in the city is not going to be profitable.”

So, for small-scale urban greening operations, land access and tenure are shaky and uncertain whether they’re working with private or publicly-owned land. On the other hand, the Downtown Development Corporation, which is in charge of the development of Winthill Plaza, was able to obtain a 30-year lease of the plaza space with the City of Philadelphia in exchange for taking over operating costs. Why such a short-term, tenuous lease agreement with Forge Wash Urban Farm and a long-term agreement with the Downtown Development Corporation? Edward argues that the long-term lease was essential for the project’s success because funders had to be able to see that the DDC had site control in order to get funding. But this is one of the primary reasons that Josie is not able to secure funding through some of the grants she has looked at. “In order for us to get these urban farming grants from the USDA, for example, we have to be able to prove site control. If we show them a lease that says we could get kicked off the site with just 30 days notice, they don’t want to give us that money.”

Access to public land can make or break these projects, and the ability to prove site control is, clearly, crucial for the ability of both large- and small-scale projects to secure funding. But I argue that public landowners and members of the growth machine (like, in these cases, the City and the Redevelopment Authority) adopt policies that encourage a market-driving approach to green space development. Studies of the economic impact of Dilworth Plaza indicate that it will increase nearby property values by \$130 million. Nearby property owners

immediately understood this and lobbied people in positions of power to make it happen, including project funders and politicians at the local and state levels. But City officials could immediately see the potential monetary impact, as well. The kickback to the city, in terms of taxes captured by increased property values, is slated to be an increased \$2.6 million per year (Harris 2014).

Conclusion

In 2009, when the Michael Nutter's mayoral administration was ushered in, his newly-formed Office of Sustainability got right to work on a plan that showcased the administration's commitment to a sustainable city. The plan includes a number of targets in its "Equity" section, such as increasing access to local food and parks for all Philadelphians (City of Philadelphia Mayor's Office of Sustainability 2009). Ideologically, it seemed as though the new administration had jumped on board the sustainability bandwagon.

But when we look at the actual work of producing green spaces and when we consider the interests involved, the implementation of green open place projects becomes more complicated. Based on the reported experiences of large- and small-scale greening efforts, access to land – and especially land tenure, or the relative certainty that projects will be able to stay in the spaces they have chosen – is a crucial component in the development of green open places. However, decisions about land access and tenure are made by powerful actors in the urban growth machine and, as we've seen here, factors guiding their decisions revolve around how

the placement of green space will impact the exchange value of that space and others around it.

The production of green open space is a process that happens due to a mix of motives, including embracing an ideology of sustainability and pursuing profit. But the production of green spaces is more heavily guided by the commodification of green space and, ultimately, the market-driven decisions of the growth machine. Within this framework is a clear tension between those who want to create green space because of its use-value – those economically immeasurable impacts on community and health, for example – and those who produce green space because of its impact on exchange value.

These observations about sustainability, land access, and the production of green space illustrate two points. First, these examples also help us to address the question about the extent to which the adoption of an ideology of sustainability within a city's administration is helpful for supporting small-scale projects. Many people I interviewed expressed their belief that some city bureaucrats were well intentioned and genuinely care about an ideology of sustainability. But respondents also doubted that this ideological positioning, without power to influence how development happens, would be enough to change the City's development dynamic. This illustrates that the impact of adopting an ideology of sustainability in the City administration is minimal for the creation of small-scale urban greening projects. Second, what all of this emphasizes is the notion that urban in-between spaces – those spaces unoccupied by buildings – are contested spaces. Open spaces are produced, and their development should be understood as a process where urban

actors – from people in positions of power within the urban growth machine to residents – compete for control over these resources.

CHAPTER 7: CONCLUSION, IMPLICATIONS, AND FUTURE RESEARCH

Introduction

For decades, cities have lost businesses and population due to patterns of suburban sprawl and globalization. As a result, many cities have been left to figure out how they will be able to reinvent themselves and bring these businesses and people back. At the same time, there has been increasing awareness of the effects of excessive natural resource consumption. This resource consumption has been an integral part of an economic model that relies on an ever-increasing cycle of production and consumption of consumer goods. Cities have responded by examining how they can incorporate more sustainable approaches to urban growth and development.

There are two sets of tensions that arise in this notion of sustainable development. The first tension is one between groups and institutions over the actual development itself. The second is more conceptual, over what is development and what is sustainable.

The first tension is conflict between powerful urban actors who guide growth and less powerful residents who are affected by the development process. Actors who have the power to guide urban development – members of the growth machine – subscribe to an ideology of free-market development that assumes that the benefits of growth will benefit everyone; the exchange value of a place is, therefore, what should determine how that place is (or is not) developed.

The idea that economics guides development, under the guise of the free market, may be in direct conflict with those whose lives are most affected by these development projects: members of the community who may want the space to be used in a more community-friendly way. This tension between those who value the economic growth potential of urban development and those who fight against it in favor of projects that may be more useful to a community is the competition of use versus exchange value.

The second tension exists between the terms sustainable and development. In many ways, development and sustainability are contradictory concepts (Krueger and Gibbs 2007). On one hand, economic growth relies on the ever-increasing cycle of production and consumption that requires an endless supply of natural resources to maintain. On the other hand, sustainability is rooted in the recognition that we do not have an endless supply of resources.

This dissertation has been about how people involved in the implementation of sustainable development projects in cities reconcile growth and sustainability in what we have come to call sustainable development. It has investigated how sustainable development projects play out in the context of a city that has both rhetorically and practically embraced a sustainable development agenda. Development decisions tend to favor the exchange- versus the use-value of a place. But does the process of sustainable project development differ from unsustainable development in the context of a city interested in both growth and sustainability?

This chapter concludes this dissertation by laying out the following: First, it presents the findings of this research. Second, it examines its methodological

limitations and challenges. Third, it explores opportunities for future research. Last, it explores policy implications and the way we think about the relationship between sustainability and growth.

Findings

This research has examined the process of sustainable development in Philadelphia. This dissertation has described a journey of how sustainable development projects come to be, and has introduced us to actors involved with the creation of four sustainable development projects. These people ranged from the underpaid, overworked urban farmer who is at constant risk of losing her land to the corporate development executive with a corner office on the top floor of a downtown skyscraper. Beyond the people directly involved in the creation of these projects, I also spoke with people who have the power to support them: high-level government bureaucrats, heads of public-private partnerships, and community members.

The research process itself was emblematic of the way sociological analysis moves from the micro-level stories to build to a more macro-level understanding of how a system works. For example, in one interview I was, quite literally, in the weeds at an urban farm in 90-degree weather with my skin reddening from heat, sunburn, and an allergic reaction to the plants. A couple months later, I found myself in a service elevator, accessible only by special key and clearances, which took me to the top of the tallest skyscraper in the city. As I carefully moved around the scaffolding (this was a space designed for service and repairs, not visitors,) the

sunset cast a warm glow over Philadelphia. Both of these perspectives – the down-in-the weeds and the birds'-eye-view perspectives – have been crucial for understanding how sustainable development projects happen in Philadelphia.

This research uncovers four primary themes. First, the motivation for green development is not purely ideological or completely profit-driven. Rather, these two motivations converge in varying ways based on the scale of the project. Second, sustainable development projects support what I call green place making, which is an important tool for urban growth inasmuch as it serves to sell the values of sustainability along with place. The green city can be commodified as one means of increasing growth. Third, those with the power to see green building projects succeed prioritize the projects' exchange value over any interest in sustainability. Last, those with the power to see urban greening projects succeed frequently see greening projects as a means to a growth-oriented end.

The motivation for green development is driven by both altruism and profit-motive. These motivations converge in different ways for large- and small-scale projects.

On one side, the ideology of sustainable development emphasizes the importance of using resources responsibly and ethically to ensure quality of life for current and future generations. On the other side, sustainable development can be seen purely as the commodification of a value system designed to support the cycle of urban land production and consumption. In this view, green buildings are important only inasmuch as they are financially beneficial, both for the developer (who can market it as green) and the tenants (who can save money on energy bills.)

Those involved in sustainable development projects are not solely motivated by either sustainability or growth alone. But in practice, sustainable project developers, politicians, city bureaucrats, and others involved in urban land production discuss their motivations in terms that are both ideological and profit driven. In this way, green development projects can be seen as both embodying social values (manifest through their physical structures) and their construction as economic commodities.

For example, the project developers I spoke with from the large-scale development firm Limestone Trust and the small-scale Sustaincity Development both discussed their building practices in ideological terms, highlighting their desire to use environmentally responsible building methods and materials to “save the planet.” On some level, their responses were rooted in a belief that green building is the right thing to do. However, both also framed their building practices in a way that emphasized their financial benefits. For example, they highlighted the energy-savings benefits of their buildings by talking about the decreased energy costs for their tenants, and not the inherent value of consuming fewer natural resources. Perhaps unsurprisingly, respondents from the larger-scale Limestone Trust were more likely to discuss the financial benefits of green buildings while respondents from the smaller-scale Sustaincity Development were more likely to highlight the ideological motivations of green building. Both ideology and profit motive are important pieces of the sustainable development process.

This observation that sustainable development is both ideological and profit driven is important because it adds value to the notion of value free development.

Value-free development is the premise guiding the actions of the urban growth machine. The doctrine of value-free development argues that, when it comes to land development, the free market should decide what is produced and where it goes. Neighborhood residents may protest a development decision because of its perceived social consequences. But powerful actors in the growth machine support it, because implicit in this is the notion that growth is good. Regardless of immediate social consequences, the argument goes, development will bring value to a community because the benefits of development (such as increased job availability and tax revenue) will be spread across the urban landscape.

The doctrine of value-free development is, therefore, problematic for two reasons. First, there is no such thing as completely free-market development. Cities enact zoning laws and government at all levels provides tax breaks and other incentives for development projects to locate in cities, thereby diminishing any benefits that would be distributed across the urban landscape. Second, the notion that growth is good is itself value-laden; growth, and the pursuit of profit that is wrapped up in it, is a value.

There are two layers of value in sustainable development. The first is the counter-intuitive value of growth implicit in the doctrine of value-free development. This value exists in all development projects, sustainable or not. The second layer of value lies within the project itself, where the value of green is manifest through the creation of the project. In other words, sustainable development is good because 1) development is good, and 2) green is good.

The production of green buildings and green open places supports green place making, which is a crucial component of the commodification and growth of the green city.

Thomas Gieryn (2000) argues that a place includes not just material form and geographic location, but also the meanings and values ascribed to it. Place making is a process in which space is purposefully infused with value in order to create place-based identity. This can happen at many levels (neighborhood, city, region) but for the city, place making can be a tool to attract growth and reverse the trend of decades of urban disinvestment.

Like other cities, Philadelphia lost population and businesses during post-World War Two suburbanization. Urban sociologists have long argued that this process was not accidental (Jackson 1987; Wilson 1997). Rather, devalorization, or the disinvestment of urban areas combined with investments in the secondary circuit of capital, is a critical element of both the hollowing out of urban areas, and the “sprawl” of suburban areas (Harvey 1978; Smith 2008).

“Sprawl” is a descriptive term used to explain the process of increasing suburban development. Sprawl is characterized by three primary traits, including: 1) the unlimited outward expansion into previously underdeveloped areas, 2) relatively low density, and 3) a “leapfrog” pattern of development (Burchell et al. 2005:12). The costs of sprawl include environmental degradation, energy/fuel consumption, the monetary costs of infrastructure expansion and maintenance, and even costs to community well-being. As a result, the term “sprawl” has also taken on a pejorative tone.

Powerful actors in urban areas understand the importance of land's exchange value for potential investors. But because they are operating within larger regional systems created by sprawl (not to mention systems of globalization,) urban growth machine actors find it necessary to develop practices and policies designed to make cities more attractive places for investment. These policies and practices may include opportunity zones for development, tax abatements, and land banking, which are all policies aimed at attracting large development projects.

Similarly, cities have tried to increase investment, businesses, and developers through other place making initiatives. For example, some cities have focused on the creation of the creative city (Florida 2003) by attracting a creative class of people to fuel growth. Other cities have supported neighborhood development to help create the image of authentic spaces; that is, spaces that are gritty, hip, and "real," as opposed to the corporate chain-store vibe of suburban spaces (Zukin 2009). At the heart of this is the understanding that growth is good at all costs, even if interests in exchange values of places come into direct conflict with their use values. Like the creative city and the authentic city, the sustainable city is another place making tool designed to commodify the city and increase growth.

For example, interests in "smart growth" and "new urbanism" have recently provided a way for urban areas to increase their appeal. The spirit behind the closely related concepts of smart growth and new urbanism is that we should be able to live, work, and shop in communities that are compact enough to facilitate such demands. As such, communities should be walkable, public transit should be easily accessible and efficient, housing choices should be varied, and development

should be mixed-use. Smart growth and new urbanist planning offer a more sustainable approach to unchecked, leapfrog style sprawl by focusing development in areas that are already built up (although some communities using smart-growth principles are brand-new developments that simply focus on mixed-use planning.)

Smart growth and new urbanist practices are not synonymous with urban growth, as these planning and building techniques can be applied to almost any area. However, the interest in these development strategies combined with an interest in sustainability does serve to make urban areas look more attractive than they were at the height of post-WWII suburban development. Thus, cities may see the increasing interest in sustainability and anti-sprawl efforts to be in their best interests. These pro-sustainability arguments ultimately serve elite place making interests and, as with other efforts to support growth, can have significant environmental and social justice consequences (Curran and Hamilton 2012; Quastel 2009; Wolch, Byrne, and Newell 2014). Sustainable development may be another tool in the toolbox for the growth machine.

A city's interest in green place making does not dramatically affect or alter the development process for green buildings versus non-green buildings. What continues to matter most is the perceived benefit of development to urban growth interests.

People involved with sustainable development projects care about responsible resource use and, to some extent, the social equity dimensions of sustainability, while also caring about growth and development. But for green

building construction, the process continues to be primarily driven by growth-oriented development.

When it came to the development of green buildings, city officials, bureaucrats, and other powerful actors looked primarily at their potential for growth -- the same old growth desired by any developer. Any sustainable design features were like a beautiful green bow on an already wrapped gift. . The city's commitment to being more sustainable did not impact the development projects studied here. For the large-scale green Bilbo Building, any back-and-forth negotiations that happened with the city were negotiations that would have happened regardless of the building's LEED certification. Nothing was made easier, cheaper, or faster by virtue of the green designation. Powerful political actors procured millions of dollars in tax breaks, abatements, and other subsidies for the developers of Bilbo Building, all of which would have been available had the building been standard (not LEED) construction.

For these large-scale development projects, powerful actors secure tax breaks and other public aid and large projects are actively courted. On the other hand, developers of small-scale sustainable development projects often spend a lot of time and money on just the chance that they will come out on top. More often than not, what the city has to offer these developers is access to land. Cities and public land authorities have the power to influence the success or failure of small-scale green developers through these competitive processes. Interestingly, despite the city's embrace of sustainability, no effort has been made to give these green

builders an edge through fast-tracking⁹ or priority in proposals for land development.

The lack of priority for sustainable building projects, large and small, indicates that the city's approach to pursuing growth is divorced from its planning for long-term sustainable development as a whole. Sustainability is, by many in positions of power, seen as an add-on to the business-as-usual growth politics of urban development, rather than a new way of doing business. Even when powerful urban actors subscribe to the idea that sustainability is good, right, and worth pursuing, the process of building a green building is not significantly distinguishable from the process of building a non-green building. In a city where values of growth have reigned supreme for so long, there seems to be little room for the values of sustainability in practice. The place making of development has taken a green turn but, when it comes to the development of green buildings, place making has remained very traditionally rooted in urban growth politics.

Urban greening is not valued by powerful actors primarily for its inherent benefits. Rather, the focus of those who maintain control of green spaces is on using greening to attract investment and capture value for owners of surrounding properties.

⁹ In this research, the exception was with the Philadelphia Water Department, which developed a fast-track application system for new projects needing department oversight or approval. However, in the bureaucratic silo system of the City of Philadelphia, this was just one of the many departments developers need to interact with, including zoning, streets, licenses and inspections, etc.

Research on green spaces in urban areas has highlighted their benefits for health, safety, community cohesion, and property values, among others. The spaces discussed by researchers, though, are not accidental green spaces, like vacant lots. Rather, they are purposeful, like parks, plazas, and community gardens. Through the construction of these spaces and the positive value we attach to them, these green open places are important and purposeful elements of the urban landscape. Green open places are important in as much as they contribute to a better quality of life for residents, but also because of their very real profit-making potential. Green open places are purposeful in that those who have the power to guide their development also have the power to create them and to determine whether they will remain green open places or be developed.

The two greening projects discussed in this research illustrate the tensions that can result over who controls green open space and who benefits from it. The creators of the Forge Wash Urban Farm, which provides education and fresh, organic produce to surrounding community members in West Philadelphia, feel the pressure of their lack of site-control. Their inability to command a long-term lease impacts their ability to secure grants, and the threat of development has already loomed over them once. Wintworth Plaza, on the other hand, is located in central downtown Philadelphia. A 99-year lease was easily secured, with the support of real estate agents and nearby property owners. Land tenure for these greening projects is very closely wrapped up in growth politics.

The importance of green open places highlights the tension laid out by growth machine theorists between use and exchange value. The residents

surrounding the Forge Wash Urban Farm enjoy the green space, the fresh, accessible produce, and the opportunity the space provides for fostering community. For the community, there is value in the space beyond what might be captured in a purely economic sense. On the other hand, the development of Wintworth Plaza is supported not because of the inherent benefits of green space, although they are a bonus. Rather, the development of the plaza is good because it adds value to surrounding properties and facilitates access to downtown businesses. These examples make it clear that these urban in-between spaces are also contested spaces. Cities are becoming increasingly interested in sustainability, and urban greening is an important and highly visible part of their efforts but, like green building development, the creation of green space is still rooted in traditional “value-free” growth-oriented politics.

This research has shown that the production of green open places has been, and continues to be, guided by longer term development plans that prioritize traditional development over the benefits of spaces like pocket parks, urban farms, and community gardens. In these cases, urban greening is often meant to be transitional and to attract developers. Meanwhile, green spaces in areas of relatively high land-value are supported because they encourage foot traffic for businesses and increase the desirability of adjacent business and living space, thereby increasing rents. Green space is valued as a tool for growth inasmuch as it increases profits from development.

Limitations

This research used an embedded case study design to compare the experiences of two large-scale and two small-scale sustainable development projects in Philadelphia, including green building and urban greening projects. The case is the process of sustainable development project implementation while the subunits described in this dissertation (that is, the large- and small-scale development projects) are nested within this case study.

To investigate sustainable project implementation, I used historical analysis and interview data from project developers, sustainability professionals, and government bureaucrats, among others. These interviews took place over the course of one year (2012) and in the context of Philadelphia, a city whose leaders had expressed their interest in making sustainability an important part of the City's success.

As with all methods, these methods have limitations that are important to describe in order to appropriately interpret and frame the above findings. One limitation of case studies is the ability to generalize findings to other situations. The scope of this project was small, with just one city under investigation, because the questions were exploratory. While readers may see similar processes at work in other cities, the results of this study are not generalizable to these or any other cities.

Another limitation relating to generalizability is that the results may only be applicable to land-based sustainable development projects. Because urban sociology primarily addresses questions about the politics of space, this project is

focused on land-based sustainable development projects¹⁰. The experiences of other urban sustainability efforts whose connection to land is not as obvious may be different than those described in this dissertation.

A third limitation has to do with the potential for selection bias. In studies with non-random samples, there is always risk for selection bias. Triangulating methods used to identify cases can mitigate this. Many attempts were made to ensure that the projects selected were representative of large- and small-scale sustainable development projects in Philadelphia. A triangulated approach was used for selecting the projects that were studied here, including examining media sources (newspapers and local sustainability magazines,) attending local sustainability events, and interviewing local professionals involved with green building and urban greening. Throughout this triangulation process, the same projects were identified, and these projects were ultimately chosen for study. As the research process moved forward, respondents concurred that the choice of projects was sound by continuously reaffirming them. Although unlikely, the selection of different projects might have generated different findings.

Future Research

The findings presented here, along with some of the limitations of the research process, bring up interesting questions for future research. Future

¹⁰ It could be argued that everything taking place within the urban political context is, at its core, land-based. However, the projects described in this research – green buildings and green spaces – are very explicitly about land-based development.

research should investigate these processes in other cities. Building from this, there are two general opportunities for future research. The first is to take a broader look to examine these issues in other places. Do these findings hold true in other cities? How do different cities compare, and what might be different about them?

Many cities in the United States have begun to incorporate sustainability into their development plans as Philadelphia initiated its Greenworks plan in 2009. For example, New York City introduced PlaNYC, the city's sustainability and resilience plan, in 2007 (New York City Mayor's Office of Long-Term Planning and Sustainability 2007). Chicago introduced Sustainable Chicago 2015 in 2012 (Weigert 2012). Other cities have developed (or are developing) plans, as well. Future research should not only replicate the exploratory, process-based questions and methods used here, but should also seek to use a multiple-case embedded unit design so that comparisons can be made between these places.

Second, there is an opportunity to look more systematically at the sustainability aspect of sustainable development projects. What is it about the process that, if changed, would bring the values of sustainability more to the forefront of urban development? Process tracing research, which allows researchers to determine the causal processes linking variables, would be one way to examine this. This type of research would be able to fine-tune policy recommendations for project developers and city officials interested in rethinking how urban growth happens and how sustainability can be a part of that.

Policy Recommendations

This examination of sustainable development projects in Philadelphia sheds light on how the process links growth politics with sustainability. The findings may be disheartening for those interested in advancing the urban sustainability agenda, as they show that sustainable development projects, while lauded for their environmental benefits, are treated very similarly to standard development projects. In other words, the story we see here has been a story of traditional growth politics viewed through green-tinted glasses. However, the story is not all cynicism. For the most part, actors at all levels – large- and small-scale project developers, city bureaucrats, and professionals – seemed to genuinely care about the values of sustainability.

At the level of city government and bureaucratic processes, one problem with effective sustainable development project implementation comes in where there are actors in positions of power who are not, as one respondent put it “drinking the Kool-Aid.” Bureaucratic actors who believe that sustainability is right, good, and worth pursuing are also more likely to lead their departments in a way that supports the mission of sustainable development, as in the case of the Philadelphia Water Department (discussed in chapter 4.) Thus, political leadership in cities interested in sustainable development would be wise to appoint heads of departments who are drinking the Kool-Aid; that is, people who believe in sustainability as a legitimate and important policy objective.

Another problem arises where there is inertia built into the bureaucratic structure that is city government. Even those bureaucrats who agree that

sustainability is good and worth pursuing encounter barriers when dealing with other city departments. Respondents in city government that I spoke to referred to this as the “silo” or “fiefdom” challenge, which happens when heads of large departments are so involved in the specifics of their work that it can be difficult to see how working with other departments can further urban sustainability more generally. Thus, cities interested in sustainability should appoint sustainability managers whose job it is to facilitate cross-departmental communication. Crucially, this person must be able to exercise authority. Respondents repeatedly noted that people within the Philadelphia Office of Sustainability are well meaning, but lack the resources – namely, power over department heads – to enact internal systematic change.

Cities may also consider prioritizing sustainable over standard development in many areas where they have control over awarding contracts and land. For example, projects considered “green” may be given priority over those that are not, green projects large and small may be given fast-track status and a liaison to help them work across different city departments, and cities could adopt legislation that would require developers to adhere to community benefits agreements that would require developers receiving public resources to employ local workers at living wages, use environmentally responsible materials, and include community input in development proposals.

These recommendations address how city policies might help support the success of sustainable development initiatives. What these recommendations do not address, though, are the theoretical complications of 1) addressing the larger

growth coalition and how it guides urban development, or 2) balancing the ideological tensions between growth and sustainability. These larger theoretical questions are much more difficult to address with recommendations, but their answers are important for thinking about what urban growth and development will look like in the 21st century.

Conclusion

Following decades of disinvestment, cities have welcomed capital investment, regardless of any associated financial or social costs. Growth-oriented development has been their mantra. In fact, growth has become so much a part of the dominant discourse of success that we often conflate the two concepts – growth and success – without question.

Urban growth has relied on the production and commodification of land. Harvey argues that the growth process in cities can be tied to land investment through an examination of two circuits of capital investment (1978). In the primary circuit, capital is accumulated through the production and, ultimately, the sale, of goods. When there is a crisis of overproduction, growth slows. During these slumps, capital can be channeled into the secondary circuit – land and property. Investment in land helps to spur more investment in the primary circuit by creating new markets for consumer goods such as building materials and household goods.

Through their role in facilitating this process of capital investment, powerful urban actors play an important part in supporting this model of economic growth. This model of growth undergirds the ever-increasing production and consumption

of goods. In the process, powerful actors in urban development reinforce the notion perpetuated in the doctrine of value-free development that growth is good (Logan and Molotch 2007; Molotch 1976).

Using the doctrine of value-free development, growth machine actors argue, in the words of John F. Kennedy, that “a rising tide lifts all boats.” But the benefits of growth are not evenly distributed across the urban landscape, and the costs of growth – “externalities” like pollution – often fall most heavily on historically oppressed groups like the poor, people of color, and women (Harvey 2009). The doctrine of value-free development serves as a justification for those who argue that the exchange value of place should be prioritized over those who may argue for a different use of the space.

The problem implicit in the growth is good ideology is not only the fact that the benefits of growth are unevenly spread across the urban landscape. The growth-is-good ideology is also problematic because it simply is not sustainable. Measures of success are tied to growth. Growth is fueled by the production of goods, and, ultimately, natural resources. We rely on fossil fuels to drive our economy forward and access to these energy sources is dwindling. As such, economic growth – or economic success, as we have become used to thinking about it – will slow. We will either have to find new ways to fuel urban growth or new ways to think about success.

Cities are increasingly adopting sustainability plans; more than ever, cities are interested in sustainability. This is in part because they see an opportunity to sell the city through the commodification of green place making, which attracts

residents and businesses in a new way. But there is also an element of ideological reckoning here: people understand that sustainable urban design will be important for the environmental and economic challenges to come.

The theoretical and practical implications for this are rooted in the reconciliation of sustainability as a value system with value-free development practices. The truly sustainable city would minimize growth to conserve resources while at the same time providing quality of life for its residents. This is in direct opposition to growth-oriented urban politics that adopt the value-free, growth is good doctrine. Perhaps the tension between adopting the values of sustainability and pursuing value-free development is the wedge needed to not only make cities more sustainable, but to help us all question growth in the new, sustainable city.

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APPENDIX A

WAVE ONE INTERVIEW GUIDE

- Tell me about the agency that you work for. What does your agency do?
- What are some of the ongoing projects your organization is working on?
- What do you think about when you think “sustainability?” What does this term mean to you and your organization?
- What are some of the most popular sustainability-related trends in your field right now?
- What are some interesting sustainability projects that your organization is aware of that are happening (or have happened) in Philadelphia?
- Can you tell me about an example of what you would consider to be a “successful” sustainable development project? In your opinion, what made this project successful? (probe for aspects of project developers, funding, city government assistance/processes).
- Would you consider this project to be a relatively large or small sustainable development project compared to others you know about? What makes it large or small?
- What about smaller/larger (depending on their answer to the above) projects? Can you think of an example of a successful (large/small) project? What made it successful?
- Can you tell me about a project that wasn’t as successful? In your mind, what prevented the success of this project? (probe for aspects at all levels – project developers, management, funding, city government assistance/processes).

- Would you consider this project to be a relatively large or small sustainable development project compared to others you know about? What makes it large (or small)?
- What about smaller/larger (depending on their answer to the above) projects? Can you think of an example of a failed/less successful (large/small) project? What prevented its success?
- Who, in your opinion, are some of the key players involved in the creation/implementation of sustainable development projects?
- What can the city of Philadelphia can do to improve the success of sustainable development projects? What are they already doing well?
- What advice would you give to just-starting projects? What are some things others have done well that you would encourage them to replicate? What are some things others may overlook that you would advise them to avoid?
- Anything else I haven't asked that you think I should know?
- Anyone else I should contact?

APPENDIX B

WAVE TWO INTERVIEW GUIDE

- Describe the background of [the project,] including germination of idea, and how sustainability may have been a part of this. Was there inspiration from other projects?
- Why make this project "sustainable?" Why not do the same thing in unsustainable ways (whatever that means?)
- Describe the resources you needed to get the project off the ground.
- Were any incentives offered to help make the project succeed, for example, grants or other monetary funding, or something else?
- If so, how did you become aware of these incentives? (probe for more detail.)
- What processes did you have to go through for codes, zoning, etc? What permits were needed? How easy/difficult was it to get these permits? Were there any snags along the way?
- What was easiest about the process?
- What was difficult?
- If you could change anything that would help to get your project moving along more quickly/easier, what would it be?
- Did you have to make any changes to your original vision for this project based on the processes you just described?
- If so, what did you have to change/give up? If not, what do you think it was about the process that allowed this?

- Is there anything else you would like me to know about that I haven't asked already?
- Can you suggest anyone else for me to contact?

APPENDIX C

WAVE THREE INTERVIEW GUIDE

- Describe your agency's (or department's) role in establishing or maintaining urban sustainability goals.
- Describe your position in the agency (or department.) How does your position, specifically, establish or maintain urban sustainability goals?
- What are some of the most recent initiatives you/your department have done to address sustainability in Philadelphia?
- What are some of the initiatives you/your department will be working on in the near future?
- What makes these initiatives "sustainable?" Why not try to accomplish goals in "unsustainable" ways?
- The projects discussed in the above questions should be referenced in the questions below:
- Describe the resources needed to implement the sustainability initiatives (in this section, ask respondent to use examples from initiatives discussed above.) Probe with the following:
 - Money: Securing new funding streams necessary? Where/how did this funding come from?
 - People: Who was instrumental in supporting the initiative? Did anyone stand in the way of its success, through their action or inaction? Who will this initiative benefit the most? Is there anyone "left out" by this initiative that might have to be targeted by others?

- Time/departmental directives: Do you feel that your department has enough resources (people, manpower) to adequately address the sustainability initiatives/directives that you have?
- Description of how government supports sustainability efforts being made by entrepreneurs and sustainability advocates living, working, and investing in Philadelphia.
- In what ways does the city's new focus on sustainability help those who are interested in creating building, or green space in Philadelphia versus before the Greenworks plan was in place?
- What challenges do you think people spearheading these projects still face? (probe: are these problems related to the Greenworks sustainability plan, or are they more about government processes that are unrelated to sustainability?)
- What complaints do you hear about any barriers these projects may face?
- What additional resources do you think the government could realistically - or ideally - provide to help them succeed?