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Cultivating Cities: A Comparative Analysis of Urban Agriculture Programs and Policies

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Cultivating Cities: A Comparative Analysis of Urban Agriculture Programs and Policies

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Cultivating Cities: A Comparative Analysis of Urban Agriculture Programs and Policies

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Abstract

This dissertation focuses on the ways that grassroots activists and urban gardeners in three United States cities have advocated for and organized the cultivation of urban land over the last half century. Since the 1970s, organized gardening activities have been sustained in many large cities across North America and beyond. However, community gardens continue to be viewed as temporary land uses in almost every case. Drawing on 55 interviews and thousands of pages of historical documents, I demonstrate how urban agriculture has come to be seen as a legitimate long-term land use in Milwaukee, Philadelphia, and Seattle in different ways that relate to key organizational decisions as well as to the local culture, economic conditions, and policy context. Comparing the cities' cultural contexts, I highlight the importance of local civic conventions for organizational advocacy and social movement organizing by illustrating how civic conventions in the form of policy infrastructure have created important leverage points and interfaces between community-based organizations and the local government, while civic conventions in the form of widely shared ideas have been important to movement formation and mobilization. Comparing the political-economic conditions of each city, such as the availability of public resources and policy at larger scales of government, I demonstrate how the evolving role of gardens in the urban milieu has interacted with distinct growth strategies and political processes at work in each locale. In all three cities, the main garden organizations came to emphasize an economic framing—employment in Milwaukee, blight removal in Philadelphia, and neighborhood amenity creation in Seattle. I show how the different organizations' economic frames have succeeded to varying degrees in convincing city officials that garden sites deserve long-term land access, funding, and other

forms of public support. Even though all three frames have been effective in lengthening land tenure, however, economically focused arguments cohere with processes perpetuating inequality in urban environments, which has set the stage for present and future conflicts. Building on my qualitative historical analysis, I use a unique longitudinal dataset of organization-affiliated gardens to demonstrate how the different priorities emphasized by each city's main garden organization are reflected in the changing locations of their gardens over time. I show how across the cases, specific sustained organizational priorities are connected to different outcomes in the proximity of gardens to low-income residents, immigrants, and people of color. As cities become increasingly important sites of contestation over governance and resource allocation in the 21st century, understanding how community-based organizations such as urban agriculture organizations interact with local government is critical—not only how these organizations secure resources from public sources, but also how they win policy victories in the face of elite opposition. In developing and defending community gardens, the urban agriculture organizations that are the focus of this dissertation provide instructive cases for understanding both the constraints imposed by organizational environments and the potential power that everyday people have to reshape land use patterns and urban systems.

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Introduction

The Potential and the Paradox of Urban Agriculture

Growing and preparing food are fundamental to virtually all human societies, forming the basis of both cultural traditions and social relations. In contemporary society, urbanization has produced a historically wide rift between the production and consumption of food, with an unprecedented share of the population far removed, geographically and psychologically, from the production of the food they consume. However, this distance has never totally defined the urban population. Some level of food production has always taken place in cities, with important implications for the growers, their communities, and urban systems overall (Morris 2018, Lawson 2005, Lovell 2010, Vitiello and Brinkley 2014).

The phrase "urban agriculture" seems, at first blush, to be an oxymoron. This is because, conceptually, "the urban" and its association with dense housing and limited space contrasts strongly with "the rural," which is associated with open land, crop cultivation, and farming generally (Millington 2013). While urban agriculture is more historically ubiquitous than is commonly conceived, with rare exceptions such as the Victory Garden movement during World War II, urban agriculture in the US context has mostly been small-scale and supplementary rather than a prominent feature of making urban life (Vitiello and Brinkley 2014; Lawson 2005). The seeming oxymoron of "urban agriculture" points toward a critical tension that infuses food production in the city: urban land is expected to serve a purpose other than growing food.

This dissertation focuses on the ways that grassroots activists and urban gardeners in three United States cities have advocated for and organized the cultivation of urban land since the 1970s. Over this time period, alongside a general shift in governance away from social support and toward more free-market economic policies, a series of economic crises have brought increased attention to urban food production. Across the country, organized gardening activities have been sustained in many large cities, but the gardens continue to be viewed as temporary land uses in almost every case. Drawing on historical documents and interviews, I demonstrate how urban agriculture has come to be seen as a legitimate long-term use of urban land in Milwaukee, Philadelphia, and Seattle in different ways that relate to key organizational decisions as well as to the local culture, economic conditions, and policy context.

In all three of these cities, and, I argue, in cities around the world, urban agriculture advocates must navigate modern urban political economy in order to sustain spaces that go against typical land use patterns; in the process, they make use of limited resources to build legitimacy for their organization and for agriculture's place in the urban milieu. Legitimacy, or an audience's sense that a given entity's actions are acceptable and appropriate, is an essential feature for the survival and success of any organization. While the importance of organizational legitimacy may seem self-evident, I argue that organizations pursuing their own legitimacy can play an important role in shaping public discourse around the activities they undertake or promote—especially when those activities are not readily seen as legitimate on their own. In this regard, efforts to legitimize and preserve urban agriculture resemble other movements in which less powerful groups seek to transform urban life through the reallocation of resources and decision-making, such as the contemporary drive for community policing and calls to shift

public safety funding toward mental health and social services (Legal-Miller 2022). Regarding urban agriculture, the current resurgence in interest is also part of a wider socio-environmental process in which the ecological limits of modern industrial society are forcing a broad conversation around urban sustainability and resilience (While, Jonas and Gibbs 2004, Heynen, Kaika and Swyngedouw 2006, Walker 2016). Urban agriculture organizations therefore have an important role to play in negotiating how cities will change in the 21st century. Given the ongoing challenges of feeding urban populations, fostering economic activity, and promoting social cohesion that endure alongside increasing concern for urban environmental health, garden advocates have a range of social problems to draw on in constructing their claims to legitimacy and advocating for greater land access. My dissertation shows that the narratives advanced about urban agriculture's value have implications for what advocates achieve both in policy and in practice.

Using urban land for agriculture (and maintaining that use over time) has typically required a concerted effort on the part of community members and organizations to secure the land—that is, to protect it from other potential uses such as housing or commercial development. With the higher density of urban areas, demand for space can put pressure on any land use that isn't maximizing a site's potential. Of course, what is considered a site's maximum potential is socially constructed; as predicted by the urban growth machine theory, land uses are largely determined by the alignment of interests among powerful growth entrepreneurs, investors, simple property owners, and local government regulations and regulators. However, when none of these parties takes a lead role in determining a site's use, local residents often determine a use themselves for underutilized, interstitial spaces in order

to fill a need or realize the potential most important to them; this is how many urban agriculture projects begin (Galt et al. 2014).

In general, with or without institutional and landowner support, urban agriculture tends to proliferate in times and places where crises leave land underutilized and more people in need (Lawson 2005, McClintock 2010). Especially during a crisis, such as an economic crisis, war, pandemic, or local social instability, urban agriculture receives increased public attention as a potential solution to many of the problems that the crisis has brought on. This is because urban agriculture can provide numerous benefits—economically, nutritionally, environmentally, and socially—that vary with how the sites are structured and managed (Kurtz 2001, Slocum 2007, Passidomo 2014, Ramírez 2015, Reynolds and Cohen 2016, Sbicca and Myers 2016, McClintock 2018a). While growing food in cities has many potential benefits, the notion that it can serve as a panacea to urban problems is misleading; because of physical and social constraints, no individual program or project can provide the full range of benefits that urban agriculture is commonly associated with (Alkon and Mares 2012, Daftary-Steel, Herrera, and Porter 2015, Classens 2015, Biewener 2016). Nevertheless, urban agriculture seems frequently to be rediscovered at the onset of any new crisis – such as economic disruption brought on by war, recession or inflation (Lawson 2005). Activists, residents and/or the media contribute to a surge of excitement around the many potential benefits—healthy food, social connection, education, equity and justice, urban beautification, green space, blight removal, and/or economic development—that they envision urban agriculture will bring.

Indeed, urban agriculture can provide valuable means of addressing common social problems that arise in cities—particularly when implemented in the form of community

gardening, a practice that has been widely celebrated in the discourse around urban agriculture in the United States since the 1970s. While the anonymity, impersonality, and inequity of urban life can become alienating, community gardens can provide a place where residents can connect with one another (Hite, Perez, D'ingeo, Boston and Mitchell 2017), bridging socioeconomic, racial and generational divides (Shinew, Glover and Parry 2004, Aptekar 2015, Glennie 2020a) and/or developing a greater sense of self-sufficiency and agency (White 2011a, White 2011b, Reese 2018). In cities, many low-income residents and people of color are burdened with insufficient access to affordable, nutritious food as a result of racial segregation and economic dislocation, but community gardens have shown the potential to increase food security and sovereignty for these communities (Meals 2012, Hoover 2017, LeDoux and Conz 2017, White 2017). Furthermore, while most of the produce grown in community gardens is eaten by the gardeners and their families or donated to others for free, community gardens and other forms of urban agriculture can also spur local food retail, economic development, and employment in neighborhoods blighted by decades of disinvestment (Hagey, Rice and Flournoy 2012, Hagan and Rubin 2013, Walker 2014). Additionally, community gardens and urban farms function as a type of urban greenspace that helps ameliorate geophysical and ecological problems common to urban landscapes, including stormwater runoff, urban heat island effect, habitat loss, and poor air quality (Lovell 2010, Gittleman, Farmer, Kremer and McPhearson 2016). With all of these documented benefits, it is no wonder that urban agriculture engenders much excitement during times of crisis.

Marxist theorists have long held that crises are inherent to how capitalism functions (Marx 1978 [1867], Harvey 1978). Heightened attention to urban agriculture during crisis has

highlighted its paradoxical relationship with capitalism, too. At its core, urban agriculture holds the potential for producing and consuming outside the capitalist market system (McClintock 2010, Classens 2015, Sbicca and Myers 2017). Thus, urban agriculture can take on a "radical" character as a form of resistance and transformative practice (White 2011b, Galt et al. 2014, McClintock 2014). Yet urban agriculture can also serve as a "relief valve" (Galt et al. 2014) that keeps a dysfunctional system just bearable enough, reducing suffering without solving the underlying issues, and thus propping up the dominant system rather than working against it (Pudup 2008, McClintock 2014). In this way, the paradox of urban agriculture today is similar to the broader problematic of civil-sector social service provision under roll-back and roll-out neoliberalism (Brenner and Theodore 2002). Moreover, in some cases, as urban agriculture comes to be defined as a neighborhood amenity, it increases local property values (Voicu and Been 2008, Quastel 2009, McClintock 2018b). When this happens, urban agriculture ultimately puts low-income residents at risk of displacement, nullifying any benefits the spaces may have provided for them. Community gardens and other forms of urban agriculture hold significant potential as means to improve the lives of marginalized residents, but improvement is neither inherent nor guaranteed; there are contingencies in how urban agricultural practices are designed and implemented.

Since urban agriculture goes against the typical uses of urban land, those advocating for community gardens and urban farms often face resistance from urban growth entrepreneurs and the city government officials who support them. Schmelzkopf (1995) conceptualizes gardens as politically contested spaces, where multiple potential uses that would be social goods (such as food production or housing) are pitted against each other. In 1995, Schmelzkopf

predicted that urban gardens across the United States would continue to be challenged until gardeners could frame their efforts in ways that demonstrated the benefits of their work, or that asserted the right(s) of residents to open spaces in their communities. Since that time, gardeners across the country have indeed worked to frame the value of their garden spaces in ways that legitimize their efforts and that increase the odds that they will retain control over them. As Schmelzkopf (1995) predicted, these arguments often do highlight the social and environmental benefits of urban agriculture, while others build a more rights-focused case for community access and control of urban lands. Urban agriculture advocates across the US have been contesting land in various ways, yet few studies of urban agriculture have focused on the land-tenure question and no prior research appears to use a comparative approach to analyzing these struggles.

By examining how advocates for community gardens create and defend these spaces, and in particular how they engage in the social construction of urban agriculture's value, we can learn a great deal not only about the benefits that urban agriculture can provide different communities, but also about the dynamics of legitimation and political-economic constraints involved when community-based organizations (CBOs) hybridize from service provision to social movement work. In the last 50 years, urban agriculture organizations in major US cities have come to oversee and formalize activities on vacant lots, over time building up the legitimacy required to attract the necessary resources for organizational maintenance. However, vacant lot use remains precarious, and when political and/or economic changes threaten the organization's access to land, a new kind of legitimacy is required in order to recast urban agriculture as a permanent facet of the urban landscape rather than a temporary use of

marginal land. These moments present a theoretically interesting situation in that CBOs are hybridizing to take on social movement work, and in the process are innovating legitimacy by introducing new narrative frames that can change perspective on their activities (justifying long-term rather than temporary gardens) in order to shift public policy and mitigate the threat. Previous scholars have studied how organizations respond to challenges to their legitimacy, whether due to internal missteps or a change in the external environment (Deephouse et al. 2016). However, less consideration has been given to how existing organizations innovate new forms of legitimacy to buffer their activities against exogenous changes.

A sociological perspective encourages us to ask: How do garden organizations legitimize urban agriculture? When vacant-lot gardens face development pressure, who mobilizes to preserve them? What strategies and (re)framing processes do they use to mobilize in defense of threatened gardens? Why do these strategies succeed or fail, and what do they achieve in practice? Ultimately, who benefits from the creation and preservation of urban agricultural spaces? These questions require that we assess garden efforts by considering who is in charge, who will have access, and which of the gardens' many potential functions are legitimated and thus prioritized. Investigating organizational dynamics is critical for understanding the impact that gardens may have on surrounding communities, since contradictions inherent to modern urban governance and resource allocation can yield garden programs that don't ameliorate but reproduce inequality, prop up failing systems, or otherwise fall short of the benefits the gardens can produce (McClintock 2014). In advocating for urban agriculture as a long-term land use, garden organizations participate in the ongoing renegotiation of both ideas of urban nature and the material ecological conditions in cities, which distribute the benefits and

burdens unevenly among different social groups (Heynen, Kaika and Swyngedouw 2006). Advocacy for urban agriculture is also similar to other efforts underway to transform urban life, such as calls for community policing, which attempt to relocate resources and decision-making for critical urban systems in potentially radical ways. In general, studying the distinct challenges that community-based service organizations face when they hybridize to take up social movement work is important because social movements are often the best way to overcome elite opposition and accomplish substantive transformation of any collective feature of social life.

About this Project: A Study of Urban Gardening Programs

In order to better understand the strategies grassroot activists and urban agriculture advocates use to secure long-term land access, I conducted a comparative historical analysis of three U.S. cities. In Milwaukee, Philadelphia and Seattle, well-established multi-site gardening organizations have engaged with city officials to win policies that secure land for community gardens. The strategies used to legitimize urban agriculture, the configurations of the programs themselves, and the wider political-economic context of each city vary significantly. Through a qualitative analysis of 55 interviews with key informants and archival material from each city (including newspaper articles from 1970 to 2010 and thousands of pages of organizational documents), I show the relationships between legitimation strategies, program configurations and political-economic context as well as their impacts on local discourse and policy related to

urban agriculture[1]. Employing spatial regression analysis to assess the spread of each program's gardens across their respective cities, I also demonstrate the ways that movement strategies and organizational aspects of the community garden programs have impacted the outcomes achieved and populations served by each organization over time.

For the remainder of this introduction, I provide background about each of the three cities, their major gardening programs, and the local policy victories that have helped to secure more land for urban agriculture, followed by a brief outline of the chapters in this dissertation.

The Case-Cities

My research is a comparative historical analysis of the characteristics, preservation strategies, and outcomes achieved by community gardening programs in Seattle, Milwaukee and Philadelphia. All are large US cities (with over 500,000 residents, and each the largest city in its state), and all have been cited as exemplars for their thriving urban agriculture activities (Lawson 2005, Mazur 2017). The cities are also similar in that community gardeners in each locale have experienced at least one major development challenge and responded with political engagement that resulted in favorable policy changes. Further, all three cities have passed urban planning frameworks that incorporate urban agriculture. In each city, I gathered documents from the early 1970s to the present—decades in which community gardening has undergone several surges in both local and nationwide interest and attention—but my

[1] See Appendix A for a detailed description of the research design and methodology.

qualitative analysis focuses on specific periods during which gardeners overcame development threats and those in which gardens were written into the cities' urban planning frameworks.

Whereas much of the existing literature on urban agriculture is based on individual case studies of a single garden or program, my project builds new insights through comparative analysis. Examining the historical process of land use contestation in multiple cities in which urban agriculture has come to be seen as a legitimate long-term land use, I show that the process of securing land for urban agriculture varies considerably from case to case, yet some key similarities are evident—namely the perceived need for garden advocates to build an economic argument for the value of urban agriculture. While advocates in all three cities have been relatively successful in their efforts, I show that the different political and economic conditions in which land use contestation has unfolded and the strategies used to build urban agriculture's legitimacy are related to important differences in the outcomes achieved (both policy victories and the physical distribution of gardens across each city). I selected Milwaukee, Philadelphia, and Seattle for comparison because these cities are diverse in geographic region, political and economic features, degree of site permanence achieved by garden advocates, and the characteristics of each city's main urban agriculture organizations. The data I collected were then used to illuminate the strategies that garden advocates and organizations used during the process of developing and defending urban agricultural sites, the evolving public discourse around urban agriculture in each city, the internal considerations important to each organization as they built gardens and sought to defend them, and the historical development of gardens affiliated with each program. The following sections provide a brief history of each

city's main community gardening programs, the political and economic conditions in which they have operated, and the policy victories they achieved.

Milwaukee

Like many cities in the US, Milwaukee has faced economic challenges from the 1960s onward related to globalization and the loss of manufacturing jobs. The challenge has been particularly acute in Rustbelt cities such as Milwaukee, which lost over 100,000 residents between 1960 and 1980—a decline of almost 15%. The city won federal funding to support urban gardening in 1978, and the resulting Shoots n Roots program expanded upon earlier city-led efforts with a focus on making use of vacant lots to mitigate the growing urban blight that had become a visible symptom of the city's economic decline (Carriere and Schalliol 2021). The city permitted Shoots n Roots gardens on a year-by-year basis, wanting to ensure that the lots remained available for redevelopment; many sites were only part of the program for a few years. Shoots n Roots was ultimately housed in the University of Wisconsin Milwaukee County Extension, and like other public entities, the Shoots n Roots program was not positioned to engage in contentious politics, which precluded pressing the city for long-term land access. The program gradually came to focus on large, county-owned parcels outside of the city limits as its federal funding (allocated for gardens within the city) was reduced over time. Consequently, while the Extension still supports community gardening activity in and around the city of Milwaukee, this program is no longer the primary administrator for urban gardens in the city.

Milwaukee's primary community gardening program, Milwaukee Urban Gardens (MUG), was founded in 2000 by local residents who had lost their gardens to development following a

period of relatively stable and gradually improving economic conditions in the 1990s. Originally created to purchase community garden sites and advocate for long-term garden and greenspace preservation, in 2013 the program merged with an environmental programming organization, Groundwork Milwaukee, and now serves as a single point-of-contact for anyone in the city looking to get involved with a garden or start a new one. Through the MUG program, renamed Milwaukee Grows in 2017, the city grants leases of generally 1-3 years for use of its vacant lots for community gardens. Groundwork Milwaukee also provides liability insurance, educational programming, and a paid youth work force to help residents build and maintain gardens.

While the City of Milwaukee does not guarantee that its land will remain permanently available for the roughly 100 MUG community gardens, it has agreed to sell a few lots for urban agriculture projects in the years following the 2008 financial crisis. Furthermore, with an electoral mandate for progressive and environmental policies in the 2010s, the city government became actively involved in developing the local food system through the HOME GR/OWN program. Created by Mayor Tom Barrett in 2013, this initiative seeks to streamline the legal process for residents and groups wanting to build gardens, commercial farms, or new parks on city-owned vacant land. The city partners with a wide range of local organizations to carry out sustainability and economic development projects through this initiative. However, the HOME GR/OWN program could come to an end at the whim of a subsequent administration. Perhaps because the city has been so supportive and not inclined to sell off any of the garden sites, MUG and Groundwork Milwaukee have not been actively advocating for a more permanent legal basis for their gardens in recent years. While the city's political climate is fairly liberal and

recent green initiatives have been popular with the public, local economic conditions remain challenging; the city retains control of vacant parcels in case opportunities arise to generate tax revenue and employment on most of the land that is currently permitted for MUG's gardens.

To build a more comprehensive and historical understanding of urban agriculture in Milwaukee, I interviewed 18 key informants with firsthand knowledge of activities in the city's main community garden organizations and those who were directly involved in forming and implementing city policy related to urban agriculture. I gathered archival documents from MUG and Groundwork Milwaukee, the City of Milwaukee, and other organizations that interviewees identified as having contributed to the local popularity of urban agriculture. I also built a historical database of relevant articles from the city's two main daily newspapers, the Milwaukee Journal and the Milwaukee Sentinel (which merged in 1995). Combining data from these sources, I gained an up-close perspective on the process of contesting urban agriculture's value as a land use in Milwaukee, and I developed a unique dataset of Shoots n Roots and MUG-affiliated gardens in order to map their locations over time.

Philadelphia

The Pennsylvania Horticultural Society (PHS) was already nearly 150 years old when it began its community gardening program, Philadelphia Green, in 1974. Originally centered around the appreciation of ornamental plants and landscape design, PHS grew into "a more holistic understanding of plants as a tool for urban transformation" when it took on the role of greening Philadelphia in the 1970s. At this time, similar to both Milwaukee and Seattle, Philadelphia's population was shrinking and the economy was under strain from high

unemployment and inflation. PHS helped residents set up food-producing as well as horticultural gardens on vacant lots across the city. Over time, the Philadelphia Green program evolved to offer a range of greening services, and PHS played a role in shaping the larger policy debate around vacant land in Philadelphia. Today, the organization contracts with the City of Philadelphia to maintain parks, greenbelts, and museum grounds, in addition to supporting many of the city's community gardens. For decades, these functions coexisted as part of the Philadelphia Green program; PHS has recently rebranded the work as a range of initiatives including City Harvest (community garden coordination), Neighborhood Gardens Trust (landowner for about 50 of the gardens), Civic Landscapes (greenspace development), and LandCare (maintaining vacant lots as "park-like settings"). The program's urban agriculture network includes 140 current community gardens and urban farms across Philadelphia.

The City of Philadelphia has long supported PHS's greening work on vacant lots, but over decades of collaboration the community gardens were generally viewed as a temporary land use. Philadelphia's population hit its lowest between the mid-1990s and the mid-2000s, yet this period was also one in which many gardens were lost. Between 1996 and 2008, more than half of the city's gardens were lost to parcel development or other changing conditions (Vitiello and Nairn 2009). PHS was involved in some land preservation efforts, but the organization did not pursue a blanket policy to preserve community gardens. As the discouraging trend of garden loss became apparent, and especially when a 2012 zoning amendment threatened the security of 20% of the remaining gardens, the city faced growing pressure to support and preserve its community gardens. Advocates from organizations including PHS, the Garden Justice Legal Initiative, and others sought changes to the city's land disposition system, which at the time

considered lots with gardens to be “vacant,” in order to improve the flow of information between gardeners and the city. They succeeded in halting the zoning amendment and then secured passage of the Philadelphia Land Bank Act in 2013. In the process of streamlining vacant lot disposition to spur economic development, the Land Bank must give gardeners priority to acquire their sites rather than listing these sites as vacant and available for developers. Today, PHS has a mostly indirect role in advocating for garden preservation. Its close affiliate Neighborhood Gardens Trust maintains a voice in policy debates while raising money to purchase and save gardens facing development threats as the city undergoes a period of rapid gentrification.

In the last decade, in a context of gentrification and displacement heavily affecting low-income residents and communities of color, other organizations—most notably Soil Generation, a Black-and Brown-led coalition of growers—have taken the lead in the citywide efforts to organize and advocate for garden preservation and land use policy. Soil Generation and allied groups continue to press the city for more socially just land dispensation through the Land Bank and for broader responsiveness to resident priorities regarding urban agriculture and other community-oriented land uses.

To assess the organizational dynamics and decisions involved in securing land for urban agriculture in Philadelphia, and to enable comparisons with Milwaukee, I collected data from similar sources. I interviewed 20 key informants with firsthand knowledge of activities in the city’s main community garden organizations and those who were directly involved in advocating for or implementing city policy related to urban agriculture. I gathered archival documents from the Pennsylvania Horticultural Society and the City of Philadelphia. I also built

a historical database of relevant articles from the city's two main daily newspapers, the Philadelphia Inquirer and the Philadelphia Daily News. Integrating these data for my analysis, I gained a detailed understanding of the historical process by which urban agriculture's value as a land use has been constructed and contested in Philadelphia, and I developed a unique dataset of PHS-affiliated gardens in order to map their locations over time.

Seattle

Since 1973, the City of Seattle has managed a network of community gardens through its P-Patch program. Like Philadelphia and Milwaukee, in the early 1970s Seattle was struggling with high unemployment and inflation, and the P-Patch program was created as a way to make unused urban land available for food production. Unlike Milwaukee and Philadelphia, however, Seattle's P-Patch program is administered by the city itself. For almost 50 years, gardeners have succeeded in convincing city officials to maintain the program's funding through municipal budget cuts and to avoid selling garden sites when development pressure increased during periods of economic growth (especially the mid-1980s and mid-1990s). Today, the city devotes many acres of its own land to the P-Patch gardens, including some lots that were purchased specifically for new P-Patches. The city program's staff assign garden plots, organize events, and train the volunteer site leaders who maintain gardens.

Early in the history of the P-Patch program, volunteer site leaders organized a nonprofit to improve communication and pool their expertise. This nonprofit took on an advocacy role in the mid-1980s when Seattle saw a period of economic growth and gardens began to face development threats. The nonprofit reorganized as a land trust to take ownership of a saved

garden, Pinehurst, which became the city's first permanent community garden. The nonprofit continued to advocate for stronger protections for the P-Patches, winning their inclusion in the city's 1994 Comprehensive Plan, and passage of the Protect Our Parks initiative in 1997, which makes community gardens and other recreational spaces on city land virtually permanent. This policy ensured that the city could not sell any land used for P-Patches as the local economy has grown, fueled by its strong technology sector, even through a feverish real estate market in the mid-2010s. Today, the P-Patch nonprofit continues advocating for the gardens and providing administrative support to the P-Patches (including liability insurance and fiscal sponsorship), while expanding out from Seattle to help promote community gardening across the region.

To compare the movement strategies, organizational dynamics and decisions involved in securing land for urban agriculture in Philadelphia, Milwaukee, and Seattle, I collected data from similar sources in all three cities. For Seattle, I interviewed 17 key informants with firsthand knowledge of activities in the city's main community garden organizations and those who were directly involved in advocating for or implementing city policy related to urban agriculture. I gathered archival documents from the P-Patch program office and the City of Seattle Municipal Archives. I also built a historical database of relevant articles from the city's two main daily newspapers, the Seattle Times and the Seattle Post-Intelligencer. Integrating these data for my analysis, I traced the historical process by which urban agriculture gained recognition and security as a land use in Seattle, and I developed a historical dataset of P-Patch gardens in order to map their locations over time.

Overview of the Dissertation

In chapter 1, I survey prior research on urban agriculture and relevant theoretical frameworks, including food justice, political ecology, urban political economy, community-based organizations under neoliberalism, organizational legitimacy, and social movement processes. Situating my work at the intersection of these literatures, I highlight the limited attention paid to land use contestation for urban agriculture, on the one hand, and the broader need for more understanding of how community-based organizations contribute to urban social movements on the other. In the context of intertwined, increasingly urgent social and environmental problems, I argue that knowledge of how community groups secure long-term use of urban land for gardens has practical as well as theoretical significance. My research underscores the political and economic constraints that community-based organizations face and the potential pitfalls of framing the value of urban agriculture in various economic terms.

In chapter 2, my analysis begins with an examination of the role that organizational structure and decisions have played in determining the trajectories of urban agriculture in each city. Once their garden programs were initiated, the main urban agriculture organizations in each city sought legitimacy for their activities as a requisite for maintaining their funding and land-use permissions. I show that in pursuit of legitimacy for their specific programs, these organizations also had to build legitimacy for urban agriculture more broadly; that is, they had to justify the unexpected presence of gardens and farms on urban land. As they interacted with funders, city officials and the media in pursuit of necessary resources, leading garden advocates in each city learned what these gatekeepers were most concerned about and framed their work accordingly. Selecting from among the many potential benefits of urban agriculture to frame its

value in ways that would resonate with such gatekeepers, the organizations legitimized urban agriculture for some of its potential benefits rather than others. These frames would then influence organizational activities, grant applications, and policy deliberations going forward. I find that in all three cities, the main garden organizations came to emphasize an economic framing—employment in Milwaukee, blight removal in Philadelphia, and neighborhood amenity creation in Seattle—while placing relatively less emphasis on potential social and ecological benefits. I demonstrate how the different organizations' economic frames have succeeded to varying degrees in convincing city officials that garden sites deserve long-term land access, funding, and other forms of public support. At the same time, I note how these frames leave unquestioned the assumption that economic concerns should have primacy over social and ecological ones, setting the stage for future conflicts as the political-economic system has continued to produce inequality and environmental degradation. In discussing Philadelphia, I highlight the role that Soil Generation has played in producing a counter-narrative that reframes the value of urban agriculture as a facet of community self-determination. Soil Generation's framing subverts economic arguments and calls attention to the need for more just urban land use policy writ large. This chapter reveals how an organizational imperative—gaining and maintaining legitimacy—can inadvertently structure the subsequent framing process that is so important for a social movement's scope, strength, and success. Thus, I provide new insights into the challenges that community-based organizations are likely to face when they attempt to hybridize into social movement work, and I offer practical lessons for urban agriculture enthusiasts seeking to build and legitimize new garden programs.

Chapter 3 considers the organizational environments within each city, particularly the locally shared expectations around governance and policymaking, or "civic conventions," which have differently constrained or enabled various kinds of garden advocacy, movement organizing, and land-use governance in each locale. In this chapter, I build on the concept of civic conventions theorized by Beamish (2015) and others by reconceptualizing civic conventions as a facet of both political and discursive opportunity structure at the urban scale. My analysis of interview and archival data shows that local civic conventions conducive to bottom-up governance in Milwaukee and Seattle have supported the legitimation of urban agriculture as a land use by bringing resident interests to the attention of policymakers and by facilitating the development of garden projects in line with broader public priorities. In contrast, in Philadelphia many gardens have remained informal because gardeners see no benefit in engaging with the city government. Local civic conventions hold that the government is often ineffective, and gardeners are also wary of top-down interventions that could threaten their use of the city's vacant land. Compared to Milwaukee and Seattle, garden informality and suspicion of the government in Philadelphia may have hindered gardener organizing efforts and the public legitimacy of gardens; however, in the last decade, widely shared cynicism about Philadelphia's city government has provided a discursive opportunity structure in which urban agriculture advocates have effectively framed the loss of gardens in terms of perceived injustice and lack of access to decision-making. This frame, advanced by Soil Generation and its coalition partners, has become a rallying cry for broader mobilization around community control of land and resistance to gentrification. A similar discursive opportunity structure exists in Seattle, where local civic conventions include a distaste for back-room deals and a narrative regarding

the need for ongoing public participation in order to hold city officials accountable. In the 1990s, garden advocates effectively leveraged this narrative to mobilize broad public support for their land use initiative and win the long-term preservation of P-Patches. In this chapter, I highlight the importance of local civic conventions for organizational advocacy and social movement organizing by illustrating how civic conventions in the form of policy infrastructure have created important leverage points and interfaces between community-based organizations and the local government, while civic conventions in the form of widely shared ideas are important to movement formation and mobilization.

Chapter 4 considers the organizational environment of local governments as they make decisions about land use policy and budget priorities. Comparing the political-economic conditions of each city, such as the availability of public resources and policy at larger scales of government, I demonstrate how the evolving role of gardens in the urban milieu has interacted with distinct growth strategies and political processes at work in each locale. Across all three case-cities, the globalizing competition to attract capital and "win" at urban growth looms large in city officials' decision-making. Although the cities vary in their recent histories of "winning" and "losing" the competition for growth, all three cases show how urban growth machine logic and the political-economic pressures on municipalities influence the ways in which urban agriculture has been legitimized as a long-term land use. In Milwaukee and Philadelphia, capital flight has limited the public resources available for social services and urban agriculture investment. Many of the cascading challenges and social maladies are similar for all cities coping with capital flight, but Milwaukee and Philadelphia have diverged in how they construct the role of land in reversing the city's fortune. In Milwaukee, due to state laws limiting the city's

tools for revenue generation, land is a lifeline that needs to be reserved for badly needed property tax revenue. In Philadelphia, reflecting the narrative advanced by PHS, vacant land is seen as a liability that has burdened the city budget and deterred development. In Seattle, where the local growth coalition has been "winning" in the competition to attract capital and the creative class, land has served as a selling point for the city's livability. Seattle currently has the most public resources available to invest in its community gardens—but upon close inspection, the benefits still accrue unevenly. In this chapter, I illustrate how pervasively market logic is applied to land use in American cities and how variations in this commodification are connected to the local growth coalition's status in the global competition for capital. Urban political ecologists (Classens 2015, McClintock 2014) have proposed that urban agriculture offers radically transformative potential by nourishing non-capitalist material flows (that is, people producing and consuming outside of the market). However, I demonstrate through the varied examples of Milwaukee, Philadelphia, and Seattle that urban agriculture's radical potential is limited so long as the gardened land remains commodified. Gardens without permanent status are vulnerable to removal in favor of a more economically productive use; furthermore, whether or not gardens are permanently preserved, they may be used as tools to attract high-income residents and new capital investment, displacing low-income residents and perpetuating rather than mitigating urban inequality.

In chapter 5, I present a spatial-historical analysis of the accessibility of gardens for marginalized communities in each city. Using a unique dataset developed through my review of historical documents, I demonstrate how the changing locations of gardens reflect the different priorities emphasized by each organization as they pursued legitimacy, and I show how these

different priorities led to different outcomes in the proximity of gardens to low-income residents, immigrants, and people of color. Specifically, my spatial analysis indicates that the main citywide programs in Milwaukee, Philadelphia, and Seattle have generally developed gardens closer to marginalized communities than to more privileged ones. Overall, gardens in each city have been located closer to neighborhoods with higher poverty rates and greater proportions of Black and Hispanic residents than to more affluent, whiter neighborhoods. In the 1990s and 2000s, Seattle's P-Patch program sought to counteract concerns about fairness in the use of public resources by prioritizing new garden development in lower income areas, an effort that worked to flip the relationship between income and garden proximity over time such that communities with higher poverty rates are now likely to be closer to the nearest garden than otherwise similar communities with lower poverty rates. However, over time Seattle's gardens appear to be growing less accessible for immigrant communities. Across all three cities, garden proximity to Asian Americans and foreign-born residents has been mixed, despite the significant labor that immigrants (especially Southeast Asian immigrants) have contributed to the development and maintenance of each program's gardens. In Philadelphia, high rates of garden attrition reflect the Pennsylvania Horticultural Society's emphasis on greening as a tool for economic development. Indeed, numerous gardens have disappeared in neighborhoods where housing costs have increased and poverty rates have decreased, while garden proximity to neighborhoods with a higher share of Black residents has decreased over time. The examples of Seattle and Philadelphia show how programs can achieve clear outcomes by prioritizing a certain benefit that they want urban agriculture to provide in their city. In contrast, Milwaukee's historical garden distribution does not show significant changes in accessibility

over time, other than a gradual increase in the distance to the nearest garden for all neighborhoods. In this chapter, I show how decisions at the organizational level can impact urban forms and the distribution of growing space across the urban landscape, and I highlight the apparent impacts of the different strategies observed for marginalized groups.

Finally, I summarize my major findings and discuss their implications for social scientists as well as urban agriculture advocates and planners. As cities become increasingly important sites of contestation over governance and resource allocation in the 21st century, understanding how community-based organizations interact with local government is critical—not only how these organizations secure resources from public sources, but also how they win policy victories in the face of elite opposition. In developing and defending community gardens, the urban agriculture organizations that are the focus of this dissertation provide instructive cases in the potential power that everyday people have to influence urban land use patterns. At the same time, they demonstrate various ways that organizations are constrained by their environments: insufficient funding led Milwaukee Urban Gardens to shift from preservation to programming; in Philadelphia, two organizations with vastly different relationships to the city's elite have put forth competing narratives for urban agriculture's value; and in Seattle, the P-Patch program's public nature has forced its accountability to democratic priorities but has also left blind spots around outcomes like gentrification that were not widely anticipated. In an era of compounding socio-environmental crises, efforts to build recognition, legitimacy, and security for urban agricultural space have implications for the broader conversation around urban sustainability and environmental justice (While, Jonas and Gibbs 2004, Heynen, Kaika and Swyngedouw 2006, McClintock 2018, Glennie 2020a). My analysis highlights the multiple ways

that legitimacy figures in the process of contesting urban land, providing empirical support for theories that conceptualize an ongoing interplay between organizational legitimacy and the social forces shaping organizational outcomes (Suchman 1995, Deephouse et al. 2016, Gray et al. 2015). Extending these theories, I discuss how an organization's pursuit of legitimacy as a community service provider comes to structure its possibilities for hybridizing into a social movement organization, and I highlight ways in which the organizations studied here also shaped the local legitimacy of urban agriculture as a land use by influencing public discourse and the physical landscape to remake human-environment relationships in urban space.

Chapter 1: Literature Review

Investigating movements that advocate for gardens and the institutions that support and regulate urban agriculture is valuable, both because of farming's potential to meet important human social and material needs and because of the paradoxical political and economic forces that are exposed when urban land is set aside to be farmed rather than developed. How do advocates secure long-term use of garden and farm sites in cities? How do the organizations involved and the local political economy influence what is valued, and what is considered possible, for these spaces? What are the outcomes of preservation efforts in terms of policy, program characteristics, and garden accessibility? In this chapter, I take up what urban agriculture research has suggested about forms of urban growing, urban development processes, and the impact that community gardens can have on the urban landscape, as well as what remains to be understood about these dynamics. To illustrate what is at stake and what forces shape the possibilities for urban agriculture, I then summarize the research on key aspects of the urban context including food system inequalities; the politics of shaping and understanding urban nature; urban development and its contestation; and the role of community-based organizations in making urban life. Next, I discuss the research on how social movements effect structural change, a critical question for urban agriculture advocates looking to win favorable land use policies. I close the chapter by highlighting the major contributions of this dissertation, addressing the uncharted nexus of organizational sociology and political ecology and discussing the limited research on the shifting relationship between community-

based organizations and social movement organizations, whose blurring is especially pronounced among groups working to preserve urban agriculture sites.

Urban Agriculture

Organized efforts to grow food in cities have a long history in practice, but they have only recently caught the attention of researchers. Following a handful of studies in the 1990s and early 2000s (Schmelzkopf 1995 and 2002, Hynes 1996, Altieri et al. 1999, Brown and Jameton 2000, Kurtz 2001, Ferris, Norman and Sempik 2001), Lawson's (2005) history provided a comprehensive picture of the long history of community gardening in the US. Urban agriculture can take many forms, including private gardening and animal husbandry in backyards, balconies and rooftops; community gardens; edible landscapes such as food forests and community orchards; gardens at schools and other institutional sites; demonstration gardens; and commercial urban farming operations of various sizes (Ferris et al. 2001, Hodgson, Campbell, and Bailkey 2011). Community gardens are the most common sites for urban agriculture research in the developed world, perhaps because of their rich social relations, commonality and ease of accessibility. This dissertation touches on many forms of urban agriculture, because policymakers and the public often tie them together; however, the primary focus is on community gardens, because these multifunctional sites offer the most potential benefits and are often at the center of collective action in defense of urban agricultural space.

Much of the research on community gardens to date has taken the form of case studies about individual gardens or programs (Aptekar 2015, Kato 2013, Myers 2022, Reese 2018), needs assessments (Drake and Lawson 2015, Cohen and Reynolds 2014, Surls et al. 2015), and

measuring or estimating potential contributions to food security, urban redevelopment, political mobilization, or other aspects of social life (Altieri et al. 1999, Brown and Jameton 2000, Kurtz 2001, Saldivar-Tanaka and Krasny 2004, Mougeot 2006, McClintock, Cooper and Khandeshi 2013, Travaline and Hunold 2010, McClintock 2010, Mares and Peña 2010, Corrigan 2011, Meenar and Hoover 2012, Tornaghi 2014, Ackerman et al. 2014, Galt et al. 2014, Haberman et al. 2014). While several researchers have noted the vulnerability of gardens to urban development pressure (Schmelzkopf 1995, Lawson 2005, Ferris et al. 2001, Barraclough 2009, Alkon, Kato, and Sbicca 2020), few studies have focused directly on the land use issue. Studies about the threat of garden removal and resistance to it have almost exclusively taken up the case of New York City's urban agriculture movement (Schmelzkopf 1995 and 2002, Martinez 2010, Eizenberg 2013). This local movement coalesced in response to a major land transfer plan in the 1990s, a conflict that received a great deal of coverage at the time. Though they have received less attention in the literature, similar dynamics have played out in cities across the US, creating an opportunity for comparative research regarding the social movement activities, organizations and outcomes in different cities.

Following Allen et al.'s (2003) distinction between alternative and oppositional food movements, scholars of urban agriculture have begun to analyze variation in community gardens according to their political orientations and outcomes. Some grassroots projects are described as radical because they take an oppositional stance toward existing social structures, explicitly challenging industrial agriculture and the political-economic system that has virtually abandoned many urban communities (White 2011, Galt et al. 2014, Tornaghi 2014, Reese 2018). Others are more reformist, seeking to provide urban residents with new opportunities

for environmental connection and self-provision, without confronting the structural context in which these needs have arisen (McClintock 2014). Still others serve to support the existing social system by signaling the type of neighborhood change that benefits elites.

Counterintuitively, while gardens often become vulnerable to removal when land values increase, they are also an attractive neighborhood amenity and can themselves contribute to gentrification. Urban real estate tends to increase in value when community gardens are built nearby, especially in areas with initially low land values (Voicu and Been 2008). Community gardens sometimes receive support from developers and other elites because of their potential impact on the exchange value of urban land (Quastel 2009, Kremer and Hamstead 2015). However, increasing real estate value also contributes to displacement of vulnerable populations, and/or the destruction of gardens themselves to make way for development (Ferris et al. 2001, Lawson 2005, Ghose and Pettygrove 2014). Thus, gentrification can serve as a source of elite support for gardens, but it can also threaten low-income residents' access to a garden and even the garden's very existence (Cahn and Segal 2016). Scholars who approach gardens as "contested spaces" (Schmelzkopf 1995, Barraclough 2009, Martinez 2010) have noted that community gardens tend to proliferate in declining urban areas, yet they can also have an appreciating effect on neighborhoods which then increases the garden's vulnerability to development.

Even if gardens remain secure as the surrounding neighborhood gentrifies, their internal character may be contested. As a social and recreational activity that produces green spaces and healthy food, community gardening is associated with a range of individual and collective benefits: community empowerment (McCutcheon 2013, White 2011, Galt et al. 2014),

economic opportunity (Draus, Roddy and McDuffie 2014, Galt et al. 2014), safety and security (Martinez 2010, White 2011), neighborhood development (Hynes 1996, Voicu and Been 2008, Quastel 2009, Draus et al. 2014), environmental health and sustainability (Ferris et al. 2001, Girardet 2004), cultural preservation (Schmelzkopf 1995, Brown and Carter 2003, Baker 2004, Saldivar-Tanaka and Krasny 2004, Minkoff-Zern 2014), food security and nutrition (Mougeot 2006, Alaimo et al. 2008, Corrigan 2011, White 2011, Draus et al. 2014), alternative medicine (Barraclough 2009), rehabilitative therapy (Allen et al. 2003, Pudup 2008), and healthy recreation (Corrigan 2011). Community gardens vary widely in their form and function (Lawson 2005), and the benefits they provide are not consistent across all gardens. Scholars (Alkon and Mares 2012, Daftary-Steel, Herrera, and Porter 2015) suggest that attaining the full range of touted benefits at once is likely impossible, because community gardens and other urban agriculture initiatives are constrained by limited resources and market-based economic contexts.

The wide range of benefits envisioned for community gardens means that participants at a given site do not always agree about how the garden should look or what purpose it should serve (Kurtz 2001, Aptekar 2015). This is especially true in gentrifying areas or other neighborhoods undergoing demographic change, in which residents from different cultural and socioeconomic backgrounds bring different norms and expectations to the space (Zukin 2010, Aptekar 2015). Like other alternative and local food initiatives, community gardens fit well with a certain white, middle-class ethos (Maurer 2021), embodying a set of pastoral (Marx 2000 [1964]) or “green” values. When the dominant social group universalizes its own values, the meanings and perspectives held by other groups are obscured, which can lead to a sense of

exclusion (Allen et al. 2003, Slocum 2007, Guthman 2008, Alkon and Mares 2012, Reynolds 2014, Harris and Romero 2019). Yet food growing practices are important to every culture; people from all ethnic and socioeconomic backgrounds have built urban community gardens and find meaning in these spaces (Baker 2004, Saldivar-Tanaka and Krasny 2004, Barraclough 2009, Mares and Peña 2010, Martinez 2010, White 2011b). It is particularly important to interrogate the nature of community gardening programs before assuming that they are beneficial for those most in need, since community gardens can produce not only food, health, and community, but also displacement and exclusion, and since they are built amidst the inequality and uneven contexts of urban life.

Food (In)justice in American Cities

Inequalities in food access and health are large and growing problems in the United States. Across the country, food insecurity is significantly higher for Black and Latinx Americans than it is for whites (McCormick Myers and Painter 2017; Coleman-Jensen, Gregory and Singh 2014). In cities, access to affordable healthy food is constrained in both low-income neighborhoods and in predominantly Black neighborhoods of any income level, a problem that is most pronounced in low-income Black neighborhoods (Zenk et al. 2005; Baker, Schootman, Barnidge and Kelly 2006; Meals 2012; Miller, Middendorf and Wood 2015). With insufficient food access, individuals are unable to make healthy decisions about their diets and consumption (Morland et al. 2001; Baker et al. 2006). Not having access to affordable food is a problem on its own, and also because food insecurity is associated with diabetes and other chronic diseases among low-income Americans (Seligman, Bindman, Vittinghoff, Kanaya and

Kushel 2007; Seligman, Laraia and Kushel 2010). In low-income communities where nutritious food is less available, obesity, diabetes, and other diet-related health problems are more common (Treuhaft, Hamm and Litjens 2009). While proximity to an affordable food retailer certainly makes it easier to eat healthily, food insecurity is even more strongly correlated with income and race than with the food environment itself (Brinkley, Raj and Horst 2017). Whether measured as distance to a grocery store or as income and purchasing power, spatial inequalities in food access are so stark that the correlation between food insecurity and diet-related health problems is observable at the neighborhood level.

Food access inequalities are linked to disparities in the built environment and the legacy of urban racial segregation (Massey and Denton 1993; Williams and Collins 2001; Meals 2012). Food insecurity in Black and Latinx communities is perpetuated by interpersonal discrimination and structural racism, through inequitable access to education, employment, housing, and credit (Odoms-Young and Bruce 2018). Over the last century, processes of institutional racism including segregation and white flight have occurred simultaneously to the restructuring of retail food distribution and the closure of many urban supermarkets—producing an unequal food system with significant negative impacts for communities of color in American cities (Meals 2012, Deener 2020). Dimensions of structural racism such as redlining, discrimination in lending, zoning, and other real estate industry practices have concentrated Black and Latinx residents in lower-income, racially segregated neighborhoods with fewer opportunities for quality education, employment, and health (Massey and Denton 1993; Barker, Francois, Goodman, and Hussain 2012). With white flight to the suburbs, a new homogenous consumer base and large tracts of available land promoted a shift in food retailer models toward ever-

larger supermarkets and an increasing concentration of the grocery industry (Barker et al. 2012; Deener 2020). As this shift occurred, urban areas—especially inner-city Black and Latinx neighborhoods—saw themselves abandoned by grocery stores. Changes in food distribution and retail, coupled with discriminatory insurance practices and burdensome zoning requirements, made servicing these neighborhoods more expensive while profit margins grew slimmer (Barker et al. 2012). Today, low-income Black and Latinx neighborhoods are characterized by a high concentration of liquor stores and fast-food restaurants, along with a dearth of healthy food retailers (Morland et al. 2002; Block and Kouba 2006).

As affected communities and researchers have drawn attention to the race- and class-based inequalities in food access and health outcomes, calls have grown to ameliorate the disparity by adding more healthy food options in neighborhoods described as "food deserts" (Cummins and MacIntyre 2002; Algert, Agrawal and Lewis 2006; Walker, Keane and Burke 2010). The primary response has been government and nonprofit initiatives to incentivize new grocery stores or increase healthy food options at existing retailers (Cummins et al. 2005; Raja, Born and Russell 2008; Obama 2012; Wolf-Powers 2017; Brinkley, Raj and Horst 2017). However, such interventions aren't always successful, especially when the prices and food offerings are not well aligned with the needs of the neighborhood (Cummins et al. 2005; Elbel et al. 2015; Ghosh-Dastidar et al. 2017; Brinkley, Glennie, Chrisinger and Flores 2019).

Furthermore, activists have pointed out that injustices in the food system go beyond the spatial inequalities of food retail: ownership and control over farmland (Horst and Marion 2019), food processing and distribution (Howard 2009), and food retail business (Hendrickson, Heffernan, Howard and Heffernan 2001, Clapp 2019) are all concentrated disproportionately in

the hands of corporations and white Americans. Building a healthy and equitable food system therefore requires attention to food sovereignty—the right of all people to access healthy, culturally appropriate food *and* to determine how food is produced and distributed (Declaration of Nyéléni 2007; Alkon et al. 2013; Clendenning, Dressler and Richards 2016). Community gardeners determine for themselves what to plant and how to grow their crops, making this form of urban agriculture an especially promising vehicle for food sovereignty. More generally, by providing nutritious food for low or no cost, community gardens are seen as one way to improve the food offerings and environmental conditions in disadvantaged neighborhoods.

The Social Dimensions of Urban Nature

Constant but ever-shifting inequalities in urban environmental conditions are a focal point in the scholarship of urban political ecologists. Urban political ecology begins from the premise that society and nature are co-constituted through the process of urbanization, which alters material flows and transforms space according to discursive, cultural, economic and power relations at the local, regional and global scales (Heynen, Kaika and Swyngedouw 2006). Bridging constructivist and realist approaches, urban political ecologists examine the ways that both ideas and biophysical conditions work to structure "socionature" (Swyngedouw 1996). In other words, scholars in this area focus on the ways that spaces in the urban environment are produced, discursively and materially, in ways that benefit some groups and disadvantage others according to interconnected social relations.

Applying the lens of urban political ecology to the phenomenon of urban agriculture, McClintock (2010) argues that urban agriculture is a social response to distinct forms of individual, social and ecological strain imposed by the capitalist system of production. Urban agriculture is celebrated for multiple potential benefits because it is a comprehensible strategy that has arisen in different circumstances as a reaction to and an attempt to ameliorate hunger and social unrest in times of crisis, the alienation from nature that many come to feel living in cities, waste accumulation as populations grow and densify, and the ecological degradation from industrial processes and globalized agriculture. McClintock's framework helps explain the multifunctionality of urban agriculture, its wide resonance in an era of widespread individual, social and ecological strain, and its interconnectedness with numerous social, cultural and environmental processes. However, his invocation of urban political ecology stops short of tracing the ideological and material flows involved in urban agriculture's implementation in any given locality.

Like any other socio-environmental space, community gardens arise from the confluence of certain physical elements that have cohered as a result of social processes, relations, ideas, interests, and practices. In turn, these spaces have symbolic and material impacts on the social systems of which they are part. The soil, water, seeds, and materials used for garden tools and infrastructure are brought together by people holding specific ideas and marshalling resources available to them in order to (re)make urban nature. At the same time, certain physical elements must be absent from the space for it to continue as a garden; the gardeners must labor against ecological forces to limit the growth of life forms they don't wish

to cultivate (i.e. weeds and pests), and they may come up against political-economic forces seeking to grow capital by re-forming the space with entirely different physical elements.

The lens of urban political ecology can help unpack the interconnected social and ecological relations that come to bear on the creation and preservation or loss of urban agricultural sites and other urban socio-environments. While urban political ecology draws attention to uneven outcomes produced by power relations, however, much of the political analysis reaches abstract conclusions about the governance of space under the influence of capital. Traditional urban political economy provides a more concrete framework for understanding the actors involved in urban land use contestation, and political ecology can be further enhanced with attention to the specific organizations through which power flows as social relations, ideas, and practices reshape socio-environmental conditions.

Urban Political Economy and the Production of Spatial Inequality

While community gardens can provide social, nutritional, aesthetic, and potentially economic benefits to participants and nearby residents, they occur within and are unlikely to resolve large-scale disparities in neighborhood characteristics. Residential racial segregation, and the food-system and environmental inequalities that have arisen alongside it, can be seen in part as a result of the political-economic logic governing urban development. This logic, employed with consistency by powerful actors in most North American cities, tends to drive land-use decisions and policy in a way that leaves urban agriculture sites highly vulnerable.

In a dynamic process, power differentials manifest through competition to take the form of built-environment winners and losers across space. Logan and Molotch's (1987) urban

growth machine thesis explains this disparity by emphasizing that different localities are constantly competing against one another to attract capital, intensify land use, and thereby grow the economy. Because resources (i.e., capital investments) are limited, it is a zero-sum game with winners and losers. What is more, the growth machine logic is occurring at multiple scales: between different neighborhoods within cities, between cities and the surrounding suburbs, between different cities, and between regions or larger territories as well. Local growth coalitions—made up of politicians, businessmen, developers, small property owners, and other real estate interests—work together to structure their locality in a way that will attract capital investment and increase the area's overall "exchange value" and in so doing promote property value appreciation (Logan and Molotch 1987). The most successful growth coalitions win buy-in from higher levels of government, new construction projects, greater commercial activity, more intense residential development, and the benefits of rising property values that accrue to growth coalition members (i.e. tax revenues, rents, profits, and equity). Less successful growth coalitions may still attract capital, but in forms such as industrial activity, hazardous waste facilities, or other locally unwanted land uses (LULU's) with steeper health and economic downsides (Bolin, Grineski and Collins 2005; Brulle and Pellow 2006). Unsuccessful locales may lose out on investment altogether, and experience shrinkage rather than growth as economic opportunity dries up, properties are abandoned, and residents move away.

Even when growth coalitions succeed, the benefits of increasing exchange value are not evenly distributed amongst those in a given locale. Despite ideological assurances that growth is good for everyone, urban development often comes at the expense of residents' "use value," with increased traffic, pollution, noise, strain on utilities, and aesthetic decline reducing

residents' quality of life. Growth coalition members work to manage the public narrative so that growth is widely seen as desirable, or at least inevitable (Molotch 1979). However, if community organizations anticipate the harm to their quality of life and mobilize to resist unwanted change, conflict can arise between local residents and the growth coalition and its growth entrepreneurs.

Community organizations resisting development are rarely on an even footing with the growth coalition. Within a given locale, community residents opposing development usually organize their resistance *in response* to a particular threat, while a region's growth coalitions tend to remain consistently organized due to members' ongoing coordination and shared interests in growing the value of their properties. Because pro-development groups are usually better resourced and more organized, they tend to prevail (Logan and Molotch 1987). But not always—sometimes communities are able to mount effective opposition to forms of development that they see as undesirable. Which communities can successfully oppose unwanted development represents further inequality in the terrain of land-use contestation. Those with greater access to financial and social capital are far more likely both to attract capital investment for desired forms of development and to mount effective opposition to development proposals they oppose (Been 1993, Brulle and Pellow 2006). Thus, already-disadvantaged communities are the most likely to either experience capital disinvestment and neighborhood blight, or to undergo steep declines in use value from LULUs as the growth machine drives on.

Mirroring patterns in the urban food environment described above, the residential neighborhoods with the most blight, and those closest to LULUs, tend to be low-income Black

or Latinx neighborhoods. Considering the challenges these neighborhoods often face—including limited access to affordable, healthy food; vacant and blighted land; slumping property values; poor air quality; and social problems such as crime and low collective efficacy—the potential benefits of community gardens are especially meaningful for residents in such areas. Indeed, many community gardens are started informally by residents seeking to address community needs and add use value to vacant land in low-income neighborhoods. Yet if these residents don't own the property they garden on, it remains vulnerable to the gears of the growth machine.

The dynamics of the urban growth machine have influenced land use in the United States for well over a century; in recent decades, urban governance and political economy more broadly have also been strongly shaped by the prevailing logic of neoliberalism. Since the late 1970s, neoliberal ideology has gained traction among political decision-makers across all levels of government. Standing in contrast to Keynesian economic theories about the role of government in stimulating and regulating the economy, neoliberal ideology posits that the main role of the government is to prop up free markets and otherwise get out of the private sector's way (Shliefer 2009, Wacquant 2012). This has translated into accelerated privatization of public assets, more regressive tax codes, and the rescission of social services (Harvey 2007). Culturally, neoliberalism has taken shape in an ideological shift that emphasizes individual responsibility for one's economic wellbeing and health, a shift that has occurred alongside the structural fraying of the social safety net (Centeno and Cohen 2012, Hasenfeld and Garrow 2012). The rhetoric extolling free markets and spotlighting the role of individuals in their own fate serves to distract from the ways that individuals are connected in society and "free"

capitalist markets accumulate ever-greater wealth for a privileged few while burdening everyone else (and the environment) with the downsides of private profit-making (Piketty 2014, Wacquant 2012).

In the United States, city budgets have become more strained since neoliberal ideas gained political traction. Public spending cuts at the state and federal level have reduced capital flows from higher levels of government into city coffers, and cities have not been able to make up for the shortfalls through general taxation (since raising local tax rates would disadvantage the city in its competition to attract growth. In the urban context, Brenner and Theodore (2002) describe the dual processes of "roll-back" and "roll-out" neoliberalization: public systems of social service provision are dismantled, and their former functions are devolved onto private and third-sector organizations, which take on a larger share of the work to feed, house, educate, and otherwise care for citizens in times of need. The organizations that manage formal community gardens have been part of this roll-back and roll-out process.

The Role and Roll-Out of Community-Based Organizations

Through the roll-back and roll-out of neoliberalization, urban governance arrangements are becoming restructured. Nonprofit human-service organizations have had to focus more on local service provision and engage less in advocating for policy that protects the rights of the poor (Hasenfeld and Garrow 2012). With less money being distributed from the federal and state governments to city agencies, local governments have had to scramble to find alternative funding sources. Public-private partnerships are often formed in this context, but their viability as a replacement for the aid offered by the prior welfare-state remains in question (Van

Kersbergen and Van Waarden 2004). In this newfound and neoliberal context, local nonprofit organizations often have greater control of resources than local elected officials (Levine 2016). However, community organizations may not operate as defenders of "use-value" as the urban growth machine model suggests. Instead, community-based organizations may operate largely in the interest of their own survival and growth—even if they appear to organize local residents politically. To this end, community-based organizations that partner with local government may craft their clientele as a reliable constituency and trade votes for government service contracts (Marwell 2004). Alternatively, they may deploy technologies of participation that stall resident opposition rather than addressing it (McQuarrie 2015). Thus, in the neoliberal era, community organizations cannot be viewed simply as representatives of civic and therefore local resident interests; it is important to look more closely, investigating how such organizations engage in local politics—especially as it relates to whether and how they cultivate civic participation among their members.

Urban agriculture organizations are no exception; community gardens in particular require the coordination of many individuals, whose participation may or may not extend into civic action. Lyson (2000 and 2012) has developed the concept of "civic agriculture" to describe the strengthening of local food systems, and at the same time community social ties, through operations such as farmers markets, community supported agriculture, and community gardens. Participants in these projects tend to be more involved in politics and their communities than the general population (Obach and Tobin 2014). Food-based organizations with a justice orientation can act as places of learning in which participants gain civic skills and critical perspectives (Levkoe 2006). Civic agriculture initiatives build conscientious alternatives

to the corporate-dominated industrial food system (DeLind 2002), and community gardens can further orient participants to challenging development models that exploit their neighborhoods (White 2011). However, Passidomo (2013) cautions that more research is needed to understand how and when such projects promote greater civic participation in disinvested communities specifically. This focus is especially important in light of the finding that many urban agriculture projects actually work to support existing socio-economic structures and the neoliberalization of cities: by promoting a neoliberal ideology of individual responsibility (Pudup 2008), bolstering narratives used to justify reduced city services (Clement and Kanai 2015, Walker 2016), filling in gaps left by the roll-back of the social safety net (McClintock 2014, Classens 2015), or helping to brand a city as "green" and "sustainable" in the global competition to attract tourists and wealthy residents (Quastel 2009, Tornaghi 2014, Walker 2016, McClintock 2018). Simply put, some urban agriculture projects organize participants to challenge and change prevailing socio-economic structures, and others do not.

Attending to these distinctions is important because community-based organizations can in fact do a great deal to increase civic participation among their members and clientele. Community-based organizations (CBOs) can use civic participation as a resource in their efforts to survive and succeed, both as a source of legitimacy (Suchman 1995; Walker and McCarthy 2010) and as a base of power from which to seek funding, contracts, or favorable policies (Marwell 2007; Onyx, Armitage, Dalton, Melville, Casey and Banks 2010). The outcomes of successful civic participation may benefit the organization, the individuals involved, or both.

As urban agriculture organizations must establish legitimacy for their unconventional spaces, attract resources needed to maintain the sites, and win favorable land use policies, they

may come to view the civic participation of their gardeners as a valuable resource. Many community gardens are located in low-income neighborhoods, and like other CBOs that provide services in these neighborhoods, they may stabilize their own operation by teaching neighborhood residents skills to interface better with bureaucracies. For instance, Marwell (2007) describes how some housing cooperatives teach low-income residents to manage meetings and interface with the city as well as the private sector, such as by paying taxes and collectively managing their utilities. In this way the organization's overhead is reduced, some of the residents learn valuable skills, and the organization simultaneously builds its legitimacy as a site where residents learn such skills. Other CBOs promote democratic participation among their members by teaching them to flex collective power and engage directly with funders and decision-makers. This democratic participation may be conceptualized narrowly for the organization's specific purposes, or it may be developed more broadly as a "public-goods politics" that seeks to educate voters on defining problems and demanding new, more community-based solutions if the current system isn't working for them (Marwell 2007). In other words, there are multiple logics through which community-based organizations like gardening programs can promote "civic engagement" among their constituents, and researchers should be careful to assess the nature of political participation at work rather than treating it as a flat, present-or-absent feature (Lee, McQuarrie, and Walker 2015).

Regardless of their strategies for engaging members, attracting resources, and building legitimacy, civil-society groups such as garden programs and other CBOs must navigate a challenging organizational environment. While many of these organizations have expanded in size and scope under roll-back/roll-out neoliberalization, funding for the work of social service

provision is still limited and the competition for it is strong. For organizations based in low-income communities, tension may develop between maintaining legitimacy in the local community and building a professionalized reputation with funders and policy-makers (Abzug and Galaskiewicz 2001; Walker and McCarthy 2010). In a local political environment unresponsive to grassroots community pressure, organizations are unlikely to engage in efforts at civic participation at all (Silverman 2009). Furthermore, receiving funding from government sources may lead nonprofits to moderate their advocacy tactics, engaging in more insider and less outsider strategies (Mosley 2012, Lu 2016) [though see also Fyall and McGuire 2015]. Thus, a study of community gardening programs should examine the extent to which garden organizations hew to the priorities of funders versus gardeners themselves, and analysis should also pay close attention to the tactics chosen for engaging with city leaders.

The same dynamics have been identified for social movement organizations (SMOs) at various scales, which have been found to survive and succeed in their goals by navigating shifting political opportunities while continuing to mobilize resources from their environment (Jenkins 1983, McAdam, McCarthy and Zald 1996, Suh 2001). Especially for movements of the poor, the choice to formalize an organization may bring greater access to resources, but it can also constrain protest tactics (Piven and Cloward 2012 [1971], Staggenborg 1988, Cress 1997, Minkoff and Powell 2006). Systems that control power and resources largely function to conserve the existing institutional arrangements that afford them this control (Walker and McCarthy 2010, Onyx et al. 2010), in part through the influence they exert directly on policymaking, and in part through their role in resource allocation (Newman and Lake 2006). Ultimately, any organization working to shift the balance of resources and power in society—

such as revising land use policy in a way that limits development—must navigate the constraints of an organizational environment in which better-resourced and more powerful entities will resist such change.

Social Movements and Structural Change

In spite of the inertia imposed by powerful forces in the organizational environment, social relations do change over time, and social movement organizations are influential to this process. As it relates to urban gardens, community groups have organized to challenge the urban growth machine, bring equity to the food system, or counter other processes they perceive as harmful to them through activism and social movements. Sidney Tarrow (1994 [2016]) defines a social movement as contentious action by a group of less powerful people who use "dense social networks and effective connective structures and draw on legitimate, action-oriented cultural frames" (16) to maintain their collective action toward desired ends even as they come up against more-powerful opponents. This definition serves to distinguish social movements from elite political manipulations and from less confrontational forms of organized civic participation—all of which are forms of action that occur in the varied landscape of urban agriculture and the organizations that promote it.

In studying the effectiveness and long-term viability of social movements, theorists have identified several important analytical dimensions. Political and discursive opportunity structures, resource mobilization, and framing interact in both the emergence and development (or decline) of social movements (McAdam, McCarthy and Zald 1996, Benford and Snow 2000, Cress and Snow 2000, Tarrow 1994 [2016]). Conceptualizing the socio-political

environments in which movements must operate, "political opportunity structures" describe the legal and institutional infrastructure that enables or constrains various forms of political action (McAdam 1982, Kitschelt 1986, Tarrow 1994 [2016]), while "discursive opportunity structures" refer to cultural understandings of what is reasonable and legitimate, forming the context in which social movement claims and actions will be received by the wider public (Koopmans and Statham 1999; McCammon, Muse, Newman and Terrell 2007; McCammon 2013). Social movements are more likely to succeed when they can take advantage of favorable opportunity structures, but they also need to draw in sufficient resources to maintain their functioning such as material support, legitimacy, information, leadership, and active participation from movement supporters (Jenkins 1983, Cress and Snow 1996, Edwards and McCarthy 2004). One critical strategy for a movement to attract supporters, elicit active participation, and sway decision-makers to support their agenda is through strategic framing. "Framing" refers to the negotiation of meaning and the deployment of collective action frames that work to persuade a greater share of the public and/or decision-makers that the social movement's goals should be met (Snow and Benford 1988, Benford and Snow 2000, Cress and Snow 2000). While opportunity structures are largely exogenous conditions that structure movement possibilities, social movement leaders and participants can significantly influence resource mobilization and framing processes through their choice of actions.

Research has shown that the success and survival of both CBOs and social movement organizations (SMOs) is partially contingent upon the organizational environment in which they operate, and that an organization's ability to attract resources from its environment – including both material resources and legitimacy – has a significant influence on outcomes (Cress and

Snow 1996, Edelman and Suchman 1997, Edwards and McCarthy 2004, Walker and McCarthy 2010). The quality and decisions of leadership also matter for harnessing the opportunities and resources that exist in the organization's environment.

Legitimacy for Organizations at a Crossroads

Legitimacy is a critical resource for all types of organizations, not just those that are part of social movements. Initially, organizations seek legitimacy to gain credibility with their target audience and organizations in their environment; to do so, they need to establish a clear meaning for their activities (Meyer and Rowan 1991). Legitimacy that builds credibility is necessary for organizations to gain passive support for their existence, and organizational scholars argue that a conceptually distinct aspect of legitimacy is that which affords continuity as organizations work to motivate "affirmative commitments" from at least some people—employees, customers, grantors, and others who keep the organization functional (Suchman 1995). Thus, motivating action that will sustain the organization requires not just gaining but maintaining legitimacy—processes requiring different strategies that must be tailored to the organizational environment (Suchman 1995; Deephouse, Bundy, Tost and Suchman 2016). For urban agriculture organizations, both gaining and maintaining legitimacy present challenges. Since the act of growing food in cities has fallen outside many people's expectations, gardening organizations have needed to engage in public-facing efforts to make their activities legible and legitimate. Once they have credibility, urban agriculture organizations must employ additional legitimation strategies to ensure continuity, as gardens require consistent labor to maintain to keep up their legitimized appearance as a garden rather than a weed patch. Critically, building

and maintaining legitimacy is a process "dependent on a history of events" (Suchman 1995: 574), which decreases the possibility for organizations to change their own practices and narratives of meaning without risking a loss of legitimacy. While organizational scholars have articulated the challenges involved in gaining and maintaining legitimacy, as well as in challenging and responding to challenges of legitimacy, little research investigates what happens when changes in external conditions necessitate new forms of legitimacy to maintain existing activities and operations. For urban agriculture organizations, this is especially relevant when real estate conditions change and gardens that have been legitimized as temporary spaces are threatened with development. If organizations seek to overcome elite interest in repurposing the land, they face the challenge of reshaping themselves from community-based organizations (CBOs) providing services into social movement organizations (SMOs) staking new claims and demanding change in a policy or paradigm.

While both CBOs and SMOs have been defined and widely discussed in the literature, little research exists that explores the extent to which their activities overlap. Minkoff (2002) develops the concept of "hybrid organizational forms," but does so specifically in the context of identity-based organizations born of social movements that adapted to an increasingly partisan environment. The concept has not been applied or analyzed for organizations with other origins, such as those that begin as service organizations and take up social movement work later on. Similarly, Sampson et al. (2005) urge the use of a social movements lens to analyze civic participation, describing an increase in "blended social action" that combines protest with civic action. While this research finds that collective action events tend to occur more often in neighborhoods with a higher density of nonprofit organizations, the authors do not examine

the role of organizations in mobilizing blended social action. More research is needed to investigate the dynamics involved when organizations blur the lines between community-based and social movement work.

When they have gotten involved in land use contestation, organizations that coordinate and advocate for urban agriculture illustrate a variety of strategies by which community-based organizations can work to assert resident interests and achieve political victories for less powerful groups. Urban agriculture reflects the on-the-ground blurriness between community-based organizations and social movement organizations, as the groups that practice and advocate for community gardening and urban farming take many forms. A range of organizations exists to direct activity at a single garden or farm, to oversee citywide networks of community gardens, and/or to advocate for the political interests of urban agriculture practitioners—particularly legal status and land access.

This dissertation provides a comparative historical analysis of urban agriculture organizations in three US cities, focusing on their efforts to secure land for gardens by promoting various benefits of urban agriculture and organizing pushes for municipal policy change, and providing insights about the dynamics of urban political contestation and the nature of hybrid organizational forms that work at the boundary between CBOs and SMOs. This work also addresses Scanlan's (2009) call for sociologists to engage more with the issue of food (in)security. Situated in the context of multifaceted environmental degradation, state retrenchment, market primacy, and widening inequality, the urban agriculture organizations described herein provide insight into emerging possibilities for counter-hegemonic action at the local scale. Gaining permanent access to urban land for the purpose of social reproduction

through agricultural initiatives means asking municipal governments to cede some control of one of the few domains from which they haven't willingly rolled back in the last 50 years: land-use governance. In this way, it is similar to other prominent citizen efforts today like the growing calls for community policing. Efforts to legitimize community gardens as a long-term land use are also indicative of wider struggles to redefine the value and place of nature in schema that determine collective decision-making. By examining the ways in which urban agriculture organizations navigate an environment with limited resources, public skepticism, often underprivileged and politically inexperienced members, and powerful countervailing political interests, we can better understand the dynamics required to accomplish meaningful structural change in modern cities.

Chapter 2: Legitimizing Organizations and Urban Agricultural Space

Organizational scholars have long investigated how an organization's features, including its goals, structure, and relationships with other organizations, influence its lifespan and the outcomes it achieves. This chapter will build upon existing research about third-sector organizations (Staggenborg 1988, Cress and Snow 1996, Haug 2013, Marwell 2007, Andrews et al. 2010), which has shown how decisions made in the context of these features matter for the success of civil society organizations. Day-to-day decisions about the actions an organization will take—strategies to pursue resources, the narrative communicated to target audiences, the nature of events and services, and the people they will be targeted to—are central to how the organization navigates its environment and what it accomplishes. In all three cities, such decisions made within urban agriculture organizations served to legitimize the organizations themselves; moreover, as organizational actors worked to demonstrate that their spaces could achieve outcomes desired for the organization's own legitimacy, they prioritized some of urban agriculture's potential benefits over others. In so doing, these organizations ultimately shaped the local narratives about what urban agriculture could offer each city.

This chapter contributes new perspective on the ways that an organization's strategic pursuit of legitimacy not only works to institutionalize the organization itself, but may also work to institutionalize ideas and social forms in the physical as well as the organizational environment. I argue that organizational sociology can further extend the concept of institutionalization by drawing on urban political ecology's insights regarding the interplay of discursive and biophysical processes in reshaping urban space and, by extension, reshaping

public understandings of socio-environmental space and the organizations that manage it. The three cases demonstrate different ways that the value of urban growing spaces can be socially constructed through organizational activities and discourse. Garden organizations legitimize urban agriculture to legitimize themselves, and their strategic decisions to attract the resources they need for survival have a broader impact on the path along which urban agriculture develops—both spatially and socially—in the city.

The current chapter will trace the different ways in which gardening organizations in Milwaukee, Philadelphia, and Seattle have established and maintained legitimacy for themselves and for the unconventional land use of urban agriculture, both building appreciation for community gardens and sustaining the requisite labor to maintain these spaces for long periods of time. For one thing, sustaining labor requires systematizing the operation of urban gardens and farms, many of which are started ad-hoc by small groups of residents whose efforts may be episodic. Building legitimacy for urban growing spaces rests in part upon presenting consistently well-maintained sites, so that non-gardening residents are more likely to see the sites as a benefit than they are to resent them as a nuisance. The potential for growing spaces to be seen as legitimate only if their appearance conforms to prevailing ideas of appropriate urban nature reflects a wider dynamic that urban political ecologists have noted, wherein the same physical elements can be seen as either assets or liabilities depending on their arrangement, location, and cultural context (Heynen, Perkins and Roy 2006). Beyond the aesthetics, urban gardens and farms are more likely to be seen as legitimate land uses if claims about their benefits are supported with evidence. In all of the case-cities discussed here,

garden organizations systematically gathered evidence over time that showed urban agriculture sites providing certain benefits for nearby residents and the city at-large.

The major community gardening organizations in Seattle, Philadelphia, and Milwaukee have developed systematic processes to manage labor and to maintain a narrative about the value of their organizations' work. In each city, organization leaders framed the value of urban agriculture around particular benefits and then supported this narrative through organizational decisions and data collection. In Milwaukee, urban agriculture's employment potential was foregrounded, while in Philadelphia the role of greening in neighborhood development was emphasized, and in Seattle garden advocates built a narrative around the food production and community-building benefits of urban agriculture. Importantly, given that urban agriculture cannot provide all of its potential benefits simultaneously, the choices made by organizational leaders in pursuit of some benefits meant less emphasis was placed on others. Over time, as these organizations amplified the narratives that maximized their own resource acquisition and legitimacy, local perceptions of urban agriculture and its physical manifestation across the city were increasingly shaped by the organizations' touted benefits. With these benefits reinforced in the minds of political leaders and the general public, and less attention given to other potential benefits, in every case urban agriculture has institutionalized discursively and materially toward certain benefits over others.

In all three of these cases, the legitimacy of urban agriculture was bolstered by some degree of support from officials in the local government; however, city officials are also broadly committed to the logic of urban growth and increasing exchange value, especially those who have power over land use decisions. At junctures when development pressure threatens the

use of urban land for agriculture, a narrative legitimizing gardens around particular benefits is rarely enough to solidify their value as the highest and best use of developable land. In the face of such challenges, social movement mobilization becomes essential. Social movement activity requires significant time and resources, and the main garden organizations in Milwaukee, Philadelphia, and Seattle have not sustained social movement activities for the long-term to the same extent that they have invested in the systematic processes that legitimize their organizational activities. Nevertheless, at critical junctures when gardens have been threatened, each of these organizations has confronted the need for movement-building, or movement-like activities, in order to secure threatened land. In these instances, an organization's existing commitments, its legitimacy, and the particular narrative used to legitimize urban agriculture often constrain organizational options in pushing for preservation.

As this chapter will demonstrate, decisions made by the leaders of large garden organizations have an outsized influence on the public narrative legitimizing urban agriculture in their city. Critically, if organizational leadership is not developed from within the communities most in need (and often most engaged in the day-to-day work of cultivation from the outset), then the local urban agriculture system is unlikely to be tailored to their interests, because the needs of the urban growth machine—which are at odds with the needs of the poor—will impose themselves without fail on any question of urban land use. Existing research shows that local food initiatives and other interventions to make cities more "sustainable" are still likely to manifest as uneven development that further privileges some neighborhoods and groups over others (Gooding, Green and McClintock 2015, Anguelovski 2016). While many of the potential benefits of urban agriculture are promising vehicles to alleviate symptoms of

inequality, such an outcome is not automatic; instead, benefits sometimes accrue to more privileged groups while further disadvantaging those at the margins (Horst, McClintock and Hoey 2017). Furthermore, organizational leaders may be more focused on treating the symptoms of injustice, rather than changing the underlying structural causes, if they do not have lived experiences of inequality and marginalization (Guthman 2008, Reynolds 2014). Even if movements and organizations do pursue structural policy change, they may still reproduce unequal power dynamics in day-to-day practices and interactions (Garzo Montalvo 2015, Bradley and Herrera 2016). Thus, the extent to which organizational leadership comes from poor urban residents, people of color, immigrants, and other marginalized groups will impact the organization's outcomes through both the movement strategies pursued and the organization's everyday activities.

The following sections will show how organizational decisions have been key to the successful legitimation of urban agriculture in Milwaukee, Philadelphia, and Seattle, while noting that the issue of developing leadership from within marginalized communities is still being worked out within urban agriculture organizations, just as within the broader alternative food and environmental movements. The chapter will highlight how organizational goals and decision-making affect the local narrative constructed regarding the benefits of urban agriculture and, ultimately, its role in the urban milieu. In so doing, this chapter strengthens the connections between urban political ecology and sociological theories regarding legitimacy, institutionalization, and social movements, by analyzing how community-based organizations' pursuit of legitimacy over time reflects their relationships with the organizational environment

and extends narratives of legitimacy into that environment, as well as the physical environment, which then shape possibilities for social movement framing and mobilization.

Milwaukee's Diverse Forms and Celebrated Farms

As in many other US cities, interest in urban agriculture and growing food increased in Milwaukee amidst the economic downturn of the 1970s. Residents cultivated vacant land in Milwaukee through the Shoots n Roots program, established by the city in the early 1970s and taken over by the Milwaukee County University Extension from 1978 onward, as well as through more loosely organized activities on lots across the city. When a community garden in the rapidly appreciating Riverwest neighborhood was lost to development in the late 1990s, the displaced gardeners decided to form an organization to protect other sites like theirs. This is how Milwaukee Urban Gardens (MUG) originated.

MUG first formed as a land trust to purchase and preserve community gardens. In its early years, the organization was largely funded by a local benefactor who made a substantial anonymous donation that covered office expenses and one staff person's salary for about 5 years. During this time, the organization's goal was to build a name for itself, draw attention to the need to preserve local urban gardens from development threats, secure funding from additional sources, and purchase land for gardens—in other words, to gain legitimacy and attract the resources to sustain itself. However, without a robust donor base or relationships with large grantmaking foundations, the organization struggled to raise the additional money needed for land purchases. Operating on such a small budget, MUG was only able to preserve land opportunistically rather than based on the biggest threats facing existing gardens. Of the 5

sites that MUG eventually came to own, 3 of them were donated and only 2 were existing gardens. MUG worked to find interested residents and build new community gardens on the donated sites, but these gardens tended not to last.

In 2010 MUG convened a land use policy taskforce in partnership with the Milwaukee Food Council. MUG's director at the time, Bruce Wiggins, was a retired urban planner with experience in Philadelphia and Kansas City who prioritized addressing the city's policies towards urban agriculture as a way to improve prospects for garden preservation. While Milwaukee had never made urban agriculture illegal, as many other cities had, gardening activities were still technically constrained in the industrially zoned areas with most of the large vacant lots, so the land use policy task force worked to get the zoning laws changed. Under Wiggins' leadership, MUG was also able to negotiate longer leases for many of the gardens in its network located on city-owned lots. Longer leases didn't mean preservation, but for gardeners, having assured access to a site for three years rather than one season at a time increased motivation to invest time and labor into the space and its soil.

In its early years, MUG struggled to gain legitimacy as a land trust, but in the process of networking with other organizations and engaging with the public, the organization gradually shifted its goals and eventually gained legitimacy by meeting needs more salient to the community. While MUG was trying to gain legitimacy as a land trust, building its local brand through media coverage, events and advertisements, the organization began to receive requests for different kinds of garden support. Gardeners at existing sites wanted help with maintenance, and some people sought MUG's help finding or starting a garden near them. As raising large enough sums to purchase land was proving difficult, the organization reoriented its

activities toward providing technical support and education about gardening to bolster the function of a growing network of self-organized gardens, influencing land-use policy and planning, and eventually managing leases with the city for gardens on city-owned parcels.

In 2013, MUG's shift from garden preservation to garden support was solidified by their merger with Groundwork Milwaukee, an organization centered on environmental programming activities and job training for at-risk youth. The two organizations had been sharing office space with other nonprofit groups at the Milwaukee Environmental Consortium, and they collaborated on projects such as installing a cistern and solar pump for sustainable water access at a MUG-owned garden in 2011. Seeing how much their activities were aligned, the organizations' leaders decided to join MUG with Groundwork Milwaukee in order to save money on overhead. As MUG's 2012 annual report explained, "The BIG NEWS for the upcoming year is an agency merger with our sister organization, Groundwork Milwaukee. The anticipated merger will allow MUG to be MORE EFFECTIVE and produce efficiencies that will grow more and better gardens throughout Milwaukee's neighborhoods" (Milwaukee Urban Gardens 2012).

When the two organizations merged in 2013, and MUG became a program of Groundwork Milwaukee, Antoine Carter had been working as the Membership and Outreach Manager for Groundwork Milwaukee. Since 2011, Carter had coordinated youth activities such as running a young farmers' CSA and building infrastructure for local community gardens. When Carter became the Program Manager for MUG shortly after the merger, he brought with him the experiences of garden-based youth development and community engagement, plus the perspective of someone who had grown up in the disadvantaged Near North Side of Milwaukee—a first for the organization's leadership. In 2014, at a University of Wisconsin -

Milwaukee (UWM) panel discussion on “Home and Garden: Can Urban Agriculture Save our Neighborhoods?” Carter introduced MUG as “Milwaukee’s best kept secret” and detailed examples of the gardens that Groundwork Milwaukee was helping to install, explaining how these various sites were transforming their neighborhoods—bringing different groups together in one space, healing community trauma, and inspiring young men like him (University of Wisconsin – Milwaukee 2014). Under Carter’s leadership, MUG continued to coordinate garden leases and help residents start new gardens, while placing a greater emphasis on community engagement and programming—especially activities and job training opportunities for Groundwork Milwaukee’s “Green Team” of paid youth work crews.

While MUG had struggled to gain legitimacy as a land trust, the organization found a meaningful role providing garden support and event programming; in the effort to maintain this legitimacy over time, MUG amplified a particular narrative around the benefits of urban agriculture in Milwaukee. Once MUG merged with Groundwork Milwaukee, leveraging public funding and grant sources to employ youth in garden maintenance and service-learning activities became a core function of the program. In its grant applications, media statements and newsletters, the program highlighted the benefits of urban agriculture as a tool for youth development and economic opportunity. MUG was also involved in community building activities, but it did not emphasize these in public communications as much as the youth and employment aspects. Ultimately, while community building remained core to MUG’s work, the framing focused on youth and jobs aligned well with that of other prominent nonprofit organizations in the city that engaged in urban growing, which will be discussed more below.

Milwaukee Urban Gardens began by emphasizing its role in defending local gardens from the threat of development and thereby improving quality of life for Milwaukee residents, but this narrative never gained traction (or gained the organization enough legitimacy and material support), so MUG's focus shifted over time toward community programming, youth education, and employment as the program gained legitimacy for these activities and systematized its operations in order to maintain that legitimacy. MUG's mission continued to be about improving quality of life for Milwaukee residents, but the understanding of how to fulfill that mission evolved from securing permanent gardens to enriching the social life of garden spaces.

Having been unable to successfully gain legitimacy for the work of preserving gardens, MUG was concomitantly unable to legitimize urban agriculture as a permanent land use, and today, most of Milwaukee's community gardens are still vulnerable to development. MUG's efforts have contributed to longer leases for many of the city-owned garden sites, and increased tenure promotes increased time investment by gardeners who maintain the sites. MUG has undoubtedly helped legitimize urban agriculture in Milwaukee by building a narrative around their value for youth and employment training and by providing the administrative infrastructure that affords gardeners and garden sites more continuity, but this legitimacy does not invoke permanence. Furthermore, some of the lots that MUG purchased opportunistically in its early years are not active as gardens anymore, and they actually pose a slight burden to the organization in terms of property taxes and upkeep. Paradoxically, these empty sites may serve as symbols of urban agriculture's temporary nature despite being acquired with the goal of permanence.

Today, Groundwork Milwaukee engages with city officials regularly in managing leases and water permits for various gardens, but the organization does not appear to be actively pushing for longer land tenure for the sites in its network or mobilizing gardeners to achieve more favorable urban agriculture policy. Two factors that help explain why Groundwork Milwaukee doesn't emphasize gardener organizing are the local civic conventions, which will be discussed more in chapter 3, and the wider organizational context of urban agriculture in Milwaukee. As noted above, MUG was not the first organization to oversee community gardens in Milwaukee; it was also not the most prominent in legitimizing and advocating for urban agriculture in the city. That distinction goes to Growing Power, a nonprofit urban farm with national renown. Growing Power's founder, Will Allen, along with the leaders of other nonprofits such as Walnut Way, has played a large role in shaping the city's relationship with urban agriculture.

Allen started Growing Power in 1993, and as the organization grew it increasingly focused on addressing problems in its near north-side neighborhood by engaging at-risk youth and offering jobs to hard-to-employ people such as those with a criminal record, all in order to sell fresh produce affordably. Along with his innovative aquaponic growing techniques, this model earned Allen significant awards, including a Ford Leadership for a Changing World award in 2005 and a MacArthur Genius Grant in 2008. One longtime garden advocate explained how these awards conferred legitimacy on urban agriculture in Milwaukee:

> Will got a Ford Leadership [for a Changing World] award, and that set the stage for his becoming legitimated in the eyes of people, and governments and universities and spiritual communities, who prior to that Ford Foundation award looked upon urban agriculture as some kind of a hippie weirdo thing, you know? (Interview M05)

As he earned prestigious awards from large foundations, and especially following the MacArthur Genius Grant, Allen brought national attention to Milwaukee as a thriving center of the burgeoning urban agriculture movement. Allen came to have a relationship with the Obama White House, and he also had personal relationships with Milwaukee city leaders such as Mayor Tom Barrett and Department of Community Development executive Rocky Marcoux.

With the closeness of Allen to city officials, outsider social movement mobilization wasn't ultimately necessary to convince the city to adopt favorable policies toward urban agriculture. As one city official explained:

> Quite frankly, the mayor played a very strong role in this…. So the reality that we had Will Allen, that we had Sharon Adams, that we had all these leaders, okay?… They were challenging us to do this [embrace urban agriculture as a land use]. (Interview M15)

The local civic conventions related to political representation and social movement organizing will be discussed more in chapter 3, demonstrating how the political environment in Milwaukee was conducive to an insider strategy that was made effective in part through the direct line that Will Allen and a few other prominent community members had to city officials.

As much attention as Growing Power brought to urban agriculture, and as much as the organization engaged local youth and activated Milwaukeeans' interest in growing food, Growing Power did not focus on fostering local civic participation. Allen was himself involved in forming a national network of food policy advocates, but this advocacy work did not involve most of Growing Power's employees, volunteers, and program participants. Over its 25-year history, Growing Power trained a significant share of the city's (and in fact the nation's) urban agriculture leaders in how to grow food successfully on urban land. The training that people got

at Growing Power was reported to be inspiring and high quality; it was just technical rather than political.

As noted above, in addition to Growing Power and MUG, other local organizations have contributed to the legitimacy of and appreciation for urban agriculture as a land use in Milwaukee. The Walnut Way Conservation Corporation, a community development corporation focused on revitalizing the Lindsay Heights neighborhood on Milwaukee's Near North Side, has also elevated the status of urban agriculture locally. Beginning in the 1990s, founders Sharon and Larry Adams organized the installation of community gardens and orchards at the request of neighborhood residents, who wanted to grow peaches and do something positive with vacant lots. From this network of agricultural spaces, Walnut Way now sells produce, canned goods, and value-added products to Milwaukee residents and restaurants. They employ youth and formerly incarcerated people in landscaping as well as agriculture and food production, providing job training and economic development while transforming the physical appearance of the neighborhood. As with MUG and Growing Power, Walnut Way has maintained legitimacy in part by its emphasis on job training, which has further solidified the local understanding of urban agriculture as beneficial for its workforce development potential.

Another organization often mentioned as a source of legitimacy for urban agriculture in Milwaukee is Victory Gardens Initiative (VGI). Since 2009, VGI has organized an annual "garden blitz" during which hundreds of volunteers install up to 500 gardens in backyards across Milwaukee and some of its suburbs. They also manage a 1.5-acre urban farm in the Harambee neighborhood on Milwaukee's Near North Side. After VGI had leased their farm space for four years through the MUG program, they were able to purchase the parcel from the city—one of

only a handful of such cases in which the city sold land for permanent nonprofit-run urban agriculture. In 2013, during the public hearing for the proposed land sale, Alderman Milele Coggs, whose district includes the land in question, called VGI's farm "great work that's been done that's helped the neighborhood and that is a shining example of what can be done with green space in urban areas" (City of Milwaukee 2013). The farm includes an orchard and scale production beds for sale to restaurants and for free distribution to the local community. There is also a community gathering space on the site, along with individual garden plots available for interested community members. VGI uses the site to grow and distribute a significant amount of organic produce, but according to an employee interviewed, their primary mission (and a source of much of their grant funding) is actually related to education: they teach neighborhood children, youth in service-learning programs, and other volunteers about organic food production. Yet again, a primary strategy that this organization has used to attract resources and sustain itself over time has to do with youth development, further legitimizing urban agriculture as a vehicle for job training.

Walnut Way and VGI are organizations that operate well-known community gardens as a vehicle to fulfill their larger missions, and these organizations have garnered a great deal of media coverage and local recognition for urban agriculture even though it is only one component of their work. The UW Milwaukee County Extension has also operated a network of community gardens since 1978, as noted above; this program, too, has received a lot of positive press coverage, especially in its early years. Over time, the program has tended to operate more on county land outside the city limits, but as a partner to other organizations in the city it has still formed an important part of the local urban agriculture milieu.

Organizations with a lower public profile have also helped draw together various people and groups in the city who are interested in urban agriculture for various reasons. The Milwaukee Food Council has long involved leaders from the urban agriculture community and considered urban agriculture as a focus for its policy committee. At multiple points in the last two decades, garden community leaders have also organized groups such as the Milwaukee Urban Agriculture Network (MUAN) to coordinate messaging and bring positive attention to the city's gardens. One organizer of the MUAN collaboration in 2007 explained:

> We would meet at different locations and talk about what we can do… one thing that was super important, was 'how do we get the attention of the city of Milwaukee so they will take seriously that urban agriculture is a strategy, not just for food production, but for community development?' For beautification, for youth engagement. For neighbors getting to know each other. For safety, for you know, eliminating blight, for repurposing all this land, oh my gosh. Cause we could all see there were vacant lots everywhere. (Interview M03)

Members of the network organized an urban agriculture conference in early 2008 that ultimately attracted people from across the country, which did effectively bring attention to some of the benefits that urban agriculture was offering Milwaukee and other cities. It was after this conference that city officials announced their support for urban agriculture as a land use.

Through MUAN, the Milwaukee Food Council, and similar efforts, the leaders of local garden organizations and other advocates for urban agriculture have gotten to know one another and maintain social ties. Three interviewees who had participated in these networks described ongoing friendships that had initially formed through urban agriculture networking forums with people they would not have otherwise known. The Milwaukee Food Council

continues to meet regularly, and it could potentially serve as a hub for social movement mobilization to protect a threatened garden or push for more widespread preservation.

Even though the Milwaukee Food Council is an independent entity, unlike food policy councils in some cities that are administered by the municipal government, the Milwaukee Food Council and other organized advocacy efforts have never taken an oppositional stance toward the city or the logic governing land use decisions. These efforts have been largely led by educated, mostly white academics and professionals; even as they have made a conscious effort to represent the racial diversity of the city and its gardeners, they have struggled to recruit lower income participants or those from the most blighted neighborhoods where urban agriculture's benefits are seen as having the greatest potential. One garden program leader describing a university-led networking effort described the dynamic this way:

> What we learned really quickly was that there was very little trust among community members with the university. And this, you know, this goes back generations, but especially currently, when people get these grants, they go into the community, they, you know, they give a couple years, then they leave. And the community's like 'okay now what? what's my job now? Anything going to pay me now?' (Interview M18)

While organizations like MUG and Victory Gardens Initiative do include community representatives on their boards of directors, one Black program leader interviewed suggested that these representatives were more "token" positions rather than truly being leadership positions. In Milwaukee, the organizational infrastructure best positioned to mobilize social movement activity in defense of urban gardens seems highly unlikely to take an outsider approach that challenges city elites. Furthermore, while the policy-oriented garden advocacy organizations do not appear to have legitimacy with gardeners and neighborhood residents,

which would impede any efforts to mobilize and show enough popular support to apply political pressure to the city's elites.

The orientation of Milwaukee Food Council and similar networking organizations, along with MUG's and Growing Power's focus on youth employment and economic development as strategies for maintaining organizational legitimacy, are evident in the policy victories that the city's urban agriculture organizations have achieved. Compared to policies passed in Philadelphia and Seattle, the policies secured in Milwaukee were enacted with relative ease. However, in a reflection of the primary benefits for which urban agriculture has been legitimized in Milwaukee, the city's policies are largely geared toward employment opportunities: *urban farms* versus *community gardens*.

As mentioned above, in 2010 the city updated its zoning code to allow urban agriculture across more areas of the city, particularly industrial zones that were seen as the most viable places for commercial urban agriculture. Ordinances passed for backyard hens and beekeeping were seen as ways to offset food costs for low-income residents and also to provide opportunities for cottage industry. With urban agriculture's legitimacy built upon its potential as an employment and youth development tool, Tom Barrett's mayoral administration initiated a program called HOME GR/OWN in 2013 that works to green vacant lots and support local food businesses, including by providing city-owned lots to growers at low cost.

Urban agriculture is seen as a legitimate and beneficial part of the urban fabric in Milwaukee, and a handful of gardens are secured through land ownership. In this sense, the approach to urban agriculture advocacy and policy in the city can be seen as successful, but it has its drawbacks. For one thing, the HOME GR/OWN program is not codified and could

disappear at the whim of the next mayor. Furthermore, framing the value of urban agriculture in commercial terms has an inherently limited scope. One city official, who is generally supportive of urban agriculture, noted that it really doesn't produce as many jobs as some advocates have claimed:

> On the other side of the coin, the advocates in some cases were [pause] overselling. And many were saying 'well this is a big jobs program.' Well it's not. How many farmers does it take to work 30 acres of land?.... I mean, and granted, there's more intense work because you can't just put out tractors and do commercial farming of this stuff. But I didn't want people saying that we're doing this because it's a jobs program. Yes, it would employ a small number of people. But farming doesn't bring a lot of jobs. (Interview M15)

When urban agriculture initiatives don't deliver on the benefits most highlighted by advocates, public enthusiasm is more likely to wane. Moreover, if enthusiasm is built up around commercial potential specifically, this support may not extend to non-commercial forms of urban agriculture (such as community gardens) despite the many other benefits such initiatives offer. As it stands in 2021, most of Milwaukee's community gardeners are working on land that could be taken away from them in a matter of months or years if city officials found a higher-priority use for their parcels. While some of the city's gardeners do own their spaces, most do not, and they do not have ready means of protecting their sites from any development threats that might emerge.

From Horticulture to Community Control in Philadelphia

The situation in Philadelphia is different, in part due to differences in the history of how community gardens have been supported. While gaining legitimacy was a major challenge for Milwaukee Urban Gardens, the same was not true for Philadelphia's main garden organization.

The Pennsylvania Horticultural Society (PHS) had nearly 150 years of history and a well-developed reputation by the time it established the Philadelphia Green program in 1973. The organization's leader at the time, Ernesta Ballard, is described by many as a visionary; she certainly helped the organization maintain its relevance in changing times when she pushed for the creation of Philadelphia Green. Long known for producing the Philadelphia Flower Show and providing a venue for suburban socialites to show off their horticultural panache, PHS ventured in a different direction with Philadelphia Green by helping urban residents build gardens on vacant lots. In 1978, explaining why PHS was spending $100,000 from its operating budget on the Philadelphia Green program, Ballard explained, "Our people love the program because it gets rid of their guilt about the inner city… It allows them to help people" (quoted in Dubin 1978). This statement reveals a foundational truth about the Philadelphia Green program: the critical audience from which organization leaders sought legitimacy was the PHS donor base rather than the urban gardeners. Philadelphia Green was developed as a strategy to help the larger organization of PHS maintain its legitimacy as times were changing, interest in horticulture as a status-signal was on the decline, and urban problems were making their way into the consciousness of Philadelphia's elite.

Initiated in this context, the Philadelphia Green program increased PHS's activity within its home city, opened up new funding opportunities, and made a significant impact on the urban landscape. When it was first founded, Philadelphia Green faced no difficulty in gaining legitimacy because of its affiliation with PHS, but as with PHS overall, maintaining Philadelphia Green's legitimacy over time required adaptation to a changing organizational environment. Philadelphia Green was originally conceived as a strategy to benefit urban residents by getting

them interested in horticulture, yet as with many nonprofit urban agriculture programs, PHS discovered that more grant funding was available to start gardens than to maintain existing ones. To meet the shifting landscape of available funding opportunities, the program evolved into a greening tool for combatting blight and spurring neighborhood redevelopment.

For its first ten years, Philadelphia Green mostly offered materials and technical support for urban residents interested in starting gardens. Then the early 1980s, the program's longtime director J. Blaine Bonham proposed a project for the city's bicentennial celebration, which he dubbed the Greene Country Townes. Invoking William Penn's original vision for the city (as the idea was being pitched to the William Penn Foundation), this project targeted a series of neighborhoods for concentrated greening interventions that engaged neighbors on adjacent blocks in various transformations, such as adding window boxes, planting street trees, and installing community gardens and pocket parks on vacant lots. The Greene Country Townes were billed as demonstrations of how much potential greening had to bring beauty and revitalization to urban neighborhoods.

Seeing the impact that intensive greening had on the selected Greene Country Townes neighborhoods, the leader of the city's Department of Licenses and Inspections reached out to partner with PHS on using federal Community Development Block Grant funds to green vacant lots across the city. In Philadelphia Green's "clean-and-green" treatment, lots would be cleared of trash, covered with fresh sod, and then adorned with a small wooden fence to prevent vehicles from driving onto the lot and dumping more trash. As the clean-and-green operation continued throughout the 1990s and early 2000s, PHS worked with researchers at local universities to measure and document its effects. This rationalization furnished convincing

evidence that greening vacant lots can improve property values (Wachter 2004, Wachter and Gillen 2006, Heckert and Mennis 2012), reduce crime (Wolfe and Mennis 2012), and even lower rates of depression among local residents (South, Hohl and Kondo 2018). These frequently cited studies have legitimized investments in community gardens and green spaces in Philadelphia and beyond. However, the studies are based primarily on the clean-and-green treatment rather than the program's gardens, and they appeal to growth coalition interests as much as (if not more than) the needs of marginalized residents. As one development professional explained, the clean-and-green treatment makes neighborhoods "more investment ready" (Interview P10). Well-maintained lots free of trash offer many benefits, not the least of which is their impact on neighborhood attractiveness; however, a lawn-like vacant lot does not offer the same social or nutritional benefits as a community garden.

Philadelphia Green continued to support the creation of community gardens across the city, though this work became harder to fund through grants when the region's large foundations shifted focus. While creating gardens and other neighborhood greening projects was the primary focus of Philadelphia Green's early annual reports, the changing way these documents began to describe greening efforts reflects a conscious shift toward an economic and neighborhood development emphasis. Blaine Bonham later recounted the shift in is thinking, precipitated by a conversation with the head of The Reinvestment Fund:

> As John Ball once asked Blaine Bonham, the key question is: 'What does this do for my pocketbook?' According to Bonham, that comment was a transforming moment in his career. What at first seemed an offensive question turned out to be the source of one of the most important lessons he has learned about his industry: that there is nothing wrong with emphasizing the economic incentive for the business community to invest in green projects. 'The motivation becomes almost incidental,' says Bonham. 'While the value of our work stands on its own, the future would indeed be bleak if all the

> businesses went away. We can't afford to ignore that, and there is no reason that we should. This is a win-win for everyone. (Soroko 2008)

Over time, an increasing share of the Philadelphia Green annual report was dedicated to large-scale landscaping work such as the clean-and-green project, horticultural improvements in highly visible public spaces, and parks revitalization. Garden support continued, but it came to be described more in terms of educational classes offered and trainings to help neighborhoods self-organize to start gardens. Eventually, the Philadelphia Green program ended as its functions were divided into new, more focused programs including Garden Tenders (providing classes for aspiring gardeners), City Harvest (promoting food bank donations from gardens), Public Landscapes (maintaining parks), and Philadelphia LandCare (maintaining vacant lots).

Comparative analysis of documents and interviews provides evidence for how Philadelphia Green's transformation into an urban development program affected the narrative for urban agriculture's value in the city. The codes for *investment*, *city beautification*, *city reputation*, *revitalization*, *cleanup*, and *neighborhood reputation* were all more frequent in Philadelphia documents and interviews than in Milwaukee or Seattle. While narratives were present in all three cities describing urban agriculture as a way to beautify neighborhoods and thereby improve the city's reputation, this beautification was most closely connected to economic impacts in Philadelphia. In this model, if gardens on vacant lots were replaced with housing or commercial development, the end goal of economic improvement would be achieved and the removal of the garden not as much of a loss. In PHS documents and in interviews with current and former PHS staff, the code for *organizing and mobilization* was present mainly in reference to the way that Philadelphia Green trained urban residents to organize their neighbors around identified needs, particularly greening projects that PHS could

support with materials and technical knowledge. The organization did not focus on organizing gardeners to preserve their spaces or engage in much mobilization to increase security for garden sites (activities which will be discussed more in chapters 3 and 4). Over time, many of the gardens that PHS helped to build disappeared; some ceased to be tended as gardens, but many were lost to development as the city ramped up its efforts to sell off vacant lots (Vitiello and Nairn 2009). In the Greene Country Townes and other neighborhoods that had benefitted from Philadelphia Green's concentrated revitalization efforts, property values did increase, but most gardens were lost along the way.

Philadelphia Green was founded as a garden support program rather than a land trust, as Milwaukee Urban Gardens (MUG) had been. The problem of garden loss did become evident to Philadelphia Green's leadership, however, as did the problem of garden attrition which, in the case of MUG, has saddled the organization with some unused properties. In the case of Philadelphia Green, responding to the threats of garden loss and garden attrition took on two forms that have ultimately come to structure the broader efforts to preserve urban agricultural land in the city today.

In response to garden loss, PHS never took on ownership of sites; their board of directors had long been averse to owning property. Instead, in the 1980s when the threat of garden loss became apparent, Philadelphia Green director Blaine Bonham worked with a network of urban planners, garden advocates and others to start a new organization, the Neighborhood Gardens Association, which was founded as a land trust in order to purchase and preserve threatened community gardens. Now called the Neighborhood Gardens Trust (NGT), this organization has remained close to PHS—and since a PHS-led board shakeup around 2010,

NGT has essentially operated as a subsidiary of PHS. As of 2021, NGT has preserved over 40 community gardens in Philadelphia. Most of the organization's early acquisitions were large, well-established gardens in which PHS had invested significant resources over time. In recent years, NGT has taken a new approach by prioritizing sites for preservation that are in gentrifying neighborhoods, even if they aren't among the most well established. As will be discussed more in chapter 4, NGT and similar professionalized nonprofits are able to navigate the city's complex land disposition process relatively effectively because of their expertise and good relationships with city officials. However, NGT's professionalism, association with PHS, and collegial relationships with city officials also work to repel some gardeners seeking help with preservation. As noted at the start of this section, PHS sought legitimacy primarily from its donors and funders, rather than from the gardeners; skepticism of the organization among some Black Philadelphia gardeners endures to this day. One garden advocate explained why some gardeners were hesitant to seek preservation through NGT, "I do have a lot of people because especially in Black communities, in Black and Brown communities as well… there's a lack of trust in regards to other organizations holding title to the land" (Interview P08). Despite not being seen by some Black and Brown gardeners as a legitimate solution for garden preservation, NGT undoubtedly serves as an important part of efforts to secure agricultural land in Philadelphia, and the organization would not exist if it weren't for leadership at PHS in the 1980s and 1990s who saw the need and helped get the land trust started.

While playing a large role in garden preservation efforts, NGT is decidedly not a social movement organization. They meet individually with city councilmembers when seeking to preserve sites in their districts rather than organizing public political pressure in an outsider

strategy. The same approach characterizes PHS overall, although in a roundabout way the Philadelphia Green program has helped spur social movement activity for pro-garden policy change in Philadelphia. Philadelphia Green was founded as a garden support program, not as a land trust like MUG, so systematizing its operations in response to garden attrition (a problem both organizations faced) took on a different form in Philadelphia Green than it did in MUG. While MUG had to overhaul its goals and activities to avoid investing in gardens that might dissolve due to lack of leadership, Philadelphia Green's managers simply had to fine-tune their garden support activities to ensure they were building leadership that would endure at the gardens they invested in. To this end, they established clear criteria for sites to qualify for their garden support services, and they developed programs to cultivate the management and organizing skills that aspiring community gardeners would need in order to lead their sites effectively. Media accounts and two interviewees affiliated with the Philadelphia Green program noted that the leadership development work of their garden support classes has activated civic participation in other neighborhood concerns, such as crime reduction. And while PHS and NGT tend to engage mostly in insider political advocacy, another coalition has emerged, from efforts that PHS was originally involved with, that is dedicated to organizing Philadelphia's growers for outsider strategies that pressure the city to overhaul its land disposition process and policymaking. This organization's radical perspective and outsider tactics constitute the strongest and most effective sustained social movement activity in any of the three case-cities.

Beginning around 2012, an urban agriculture movement in Philadelphia began to get politically organized, and these efforts have evolved and been sustained over the last decade.

Amy Laura Cahn, a lawyer with the Public Interest Law Center of Philadelphia, established a program called the Garden Justice Legal Initiative (GJLI) to help gardeners gain ownership of land they had been cultivating for years. Through her advocacy, she learned that city officials did not view urban growers as a "constituency" and therefore did not consider their needs in policymaking (Cahn and Segal 2016). She hired a community organizer to begin outreach and mobilization, with a goal of mapping the city's gardens and convincing the city to stop selling them (considering the city's inventory included thousands of non-gardened lots that could be sold instead). When revisions to the city's zoning code were proposed that would have banned urban agriculture in certain areas, the GJLI was able to quickly demonstrate that the changes threatened roughly 20% of the city's community gardens (Cahn and Segal 2016). They were also able to mobilize gardeners to show up to hearings opposing the zoning change, in partnership with representatives from other organizations in a coalition that the GJLI initiated called the Campaign for Healthier Foods and Greener Spaces.

PHS participated in the Campaign, and many of the gardeners that GJLI sought to organize had previously received some form of support through Philadelphia Green. It's possible that PHS trainings had imparted skills in neighborhood organizing that proved valuable as the growers got mobilized, but it was GJLI that organized a citywide network of gardeners and staked out a political agenda. As noted earlier, PHS had always erred on the side of insider advocacy and had never cultivated political participation among gardeners. After the zoning proposal was successfully defeated, Kirtrina Baxter, the organizer of the Campaign for Healthier Foods and Greener Spaces, took the coalition in a new direction that did not include PHS. The

group evolved into Soil Generation, a movement organization explicitly led by the city's Black and Brown growers. One community organizer described the transition this way:

> I think obviously it was problematic that it was primarily white folks in the room in a majority Black city, talking about policy that impacts a constituency that's primarily people of color, mostly Black. So I think that was the main issue, is that it was hard to shift… But [Kirtrina] came in and was just 'here's how we're going to do it.' That was my experience. She was like, 'that person makes me uncomfortable; that person makes other people uncomfortable.' So, some people just got booted. (Interview P06)

As is common in alternative food movements, the organizational culture of PHS and some of the other original coalition members reflected professionalized white upper-class perspectives and ways of engaging that alienated many of the city's growers, who are far more likely to be lower income, people of color, and/or immigrants. Despite PHS's long history of working with and providing support for gardeners of color throughout Philadelphia, the organization did not prioritize gaining legitimacy from these gardeners, and its more elite-facing orientation likely prevented the organization from being seen as a legitimate representative of or advocate for gardeners' interests. Soil Generation was formed in conscious opposition to the PHS *modus operandi* that had long been the public face of urban agricultural activities in Philadelphia. Seeking its legitimacy from Black and Brown growers and community members, Soil Generation has worked to put forth a narrative that gives more voice to growers of color, who have long made up the majority of the city's community gardeners and urban farmers. They have also taken a more critical approach to the city's land use policy, working to reframe political struggles around urban agriculture in terms of equity and community control (a framing process that will be discussed more in Chapter 3) rather than economic development and revitalization.

In Philadelphia, more than in Milwaukee or Seattle, stark contrasts are evident in the way urban agriculture is framed by different organizations (namely PHS and Soil Generation),

which points to Soil Generation's efforts to re-legitimize urban agriculture in a way that proves more resilient in the face of development pressure. Codes for *social cohesion* and *fairness, justice, equity* were not applied at all to PHS documents; they were only applied in the Philadelphia case when brought up by gardeners testifying at public hearings or by Soil Generation as they advocated for policies such as the Land Bank (to be discussed in Chapter 4). PHS did sometimes emphasize social benefits that community gardens offered; however, these social benefits tended more toward characteristics that city officials and elite philanthropic funders would appreciate, such as skill acquisition (and therefore employability), self-reliance (and therefore reduced reliance on social services), and a sense of pride in one's neighborhood (and therefore a greater willingness to manage the neighborhood's needs). While these social benefits are undoubtedly important, they are less reflective of what gardeners themselves have found valuable about the city's community gardens.

In Philadelphia's urban agriculture movement today, PHS looms large because of its long history, its citywide reach, and its well-funded public relations; nevertheless, the organization is seen as problematic by a portion of the city's gardeners because it is more representative of white, professionalized, and upper-class conceptions of urban agriculture than those of the majority of Philadelphia's urban growers. As PHS adapted its Philadelphia Green program over time in pursuit of available funding, the organization increasingly legitimized urban agriculture for its blight-removal and neighborhood revitalization potential, a framing which has resonated well with city officials and the wider public and which (as Chapter 4 will explain) has shaped the big policy victories that urban agriculture advocates have achieved. PHS's emphasis on greening as a tool for neighborhood redevelopment has also brought the negative effects of

gentrification to the forefront of the public conversation around urban agriculture. PHS is not leading the charge to preserve gardens or counteract the negative effects of gentrification, but their activities have indirectly influenced organizing and mobilization in the city (sometimes as a counterpoint). Of all the organizations in the three case-cities, Soil Generation is arguably doing the most to challenge the logic of the growth machine and assert the interests of marginalized residents in its efforts to mobilize a social movement and secure permanent gardens.

Growing Food and Community in Seattle

In Seattle, community gardens have gained a notable degree of site security because of social movement activities in the 1990s; while the garden advocates achieved virtual permanence for many of the city's gardens, they did so in part by appealing to growth machine logic in framing the value of gardens (Glennie 2020c). The case of Seattle's P-Patch Program, and the volunteer-led nonprofit advocacy organization that arose alongside it, demonstrates the clearest example of how an organization was able to pivot from community-based service provision to movement organizing (and back), while largely maintaining its own legitimacy *and* augmenting the legitimacy of urban agriculture with a more compelling narrative about its potential benefits.

The Seattle P-Patch Program was founded in 1973, when the City of Seattle stepped in to pay the property taxes of Rainie Picardo (for whom the program is named), who had been allowing neighborhood residents to garden individual plots on his former truck farm. The $950 expense from the city's general fund was legally justified as support for residents' recreation, and Councilmembers advocating for the move also argued that it was a unique opportunity to

help needy families feed themselves during an economic downturn. In 1974, due to the program's huge success, the Picardo Patch was joined by ten additional community garden sites in different neighborhoods; since then, the P-Patch Program has continued its expansion to now include nearly 90 gardens citywide. At first, the program was administered by the Department of Human Resources (later renamed the Department of Health and Human Services) because of its goal of feeding people. In 1997, the program was moved to the Department of Neighborhoods with the recognition that one of its primary effects was to build community among residents who wouldn't otherwise know each other.

In the Department of Neighborhoods, the P-Patch Program thrived under the leadership of department director Jim Diers. With a background in Alinsky-style organizing, Diers took to heart the department's mission to act on residents' ideas rather than imposing initiatives from the top down. With Diers leading the Department of Neighborhoods, new gardens were added in many neighborhoods where residents wanted them, and existing gardens made improvements that increased their appeal for the non-gardening public. Diers provided steady leadership that saw the program grow and become more popular, but the framing to legitimize urban agriculture in Seattle had been established in earlier decades through the organizing efforts of volunteers leading the P-Patch nonprofit.

Only a few years after the city government established the P-Patch Program, gardeners organized a nonprofit that has continued to operate alongside the program and fulfills functions that the public entity cannot (or will not) take on. Originally named the P-Patch Advisory Council and now called GROW Northwest, the P-Patch nonprofit (as it will be referred to throughout this dissertation) has had a different structure and has undertaken different

initiatives over the years. Some of its primary, long-running activities have been advocating for favorable municipal policy, fundraising, paying plot rental fees for low-income gardeners, purchasing and holding title to gardens that were formerly privately owned, purchasing liability insurance for the gardens, serving as the fiscal sponsor for individual garden fundraisers, and facilitating communication among gardeners (including by publishing the P-Patch Post newsletter). The P-Patch nonprofit has effectively coordinated gardener activities and talking points, helping to streamline the program's operations, maximize its impact, and legitimize P-Patches in the eyes of the wider public.

Evidence from interviews and issues of the P-Patch Post newsletter makes clear that over the program's history, gardeners consciously organized their efforts and built the legitimacy for urban agriculture around the food production and community building aspects of the P-Patches. In the late 1980s, dedicated P-Patch volunteer Wendy McClure started an initiative called Lettuce Link that systematized food bank donations by coordinating a schedule of drivers from different gardens and providing information about the closest food banks for different sites. Over time, Lettuce Link installed storage bins, scales, and tracking lists at many of the gardens in order to facilitate measurement and annual reporting of the program's donations to food banks. Gardeners I interviewed in 2016 would readily emphasize that the program had donated over 40,000 pounds of fresh, organic produce to local food banks the previous year. These interviewees understood that reporting a specific (and impressive) amount of food donated helps to make the gardens' public benefit clear for city officials and any potential skeptics.

As a result of Lettuce Link and the gardeners' efforts to demonstrate the extent of their food bank donations, P-Patches were incorporated into the city's strategic planning for food security, first undertaken in the mid-2000s. The P-Patch Program director was included on the Interdepartmental Team developing the city's Food Action Plan, a group which also included at least one P-Patch gardener among the city employees involved. In order to increase food security and local food production, the Seattle Food Action Plan makes recommendations under Strategy 1, "Prioritize food production as a use of land," and Strategy 2, "Develop and support programs to produce food on City-owned land," that specifically advise implementing policies to support and expand the P-Patch program (City of Seattle 2012). The process of gardeners systematizing their activities, and then gaining additional recognition and legitimacy through the city's actions, is characteristic of the interplay between city staff and the P-Patch nonprofit over the history of the P-Patch Program. The case of Seattle suggests that an organizational structure of a city gardening agency supported by a gardener-led nonprofit is a stable and effective model for developing, maintaining, and defending urban agriculture.

Through a similar process, P-Patch participants gradually amplified the community-building benefits of community gardens. In all three cities, the benefit of increased social cohesion among diverse people is widely understood by gardeners and urban agriculture advocates (Glennie 2020a). However, in Seattle this social benefit was more clearly documented, and mobilized more in framing the legitimacy of urban agriculture as a land use, than it was in either Milwaukee or Philadelphia. As will be described more in Chapter 3, the process for documenting community-building in Seattle's gardens was first evident in the P-Patch Post, which ran a series of statements called "I Love My P-Patch Because…" from 1989-

1993. These gardener testimonials offered many reasons to value the P-Patches that span almost the full "panacea narrative" attesting to urban agriculture's wide range of potential benefits, but among these testimonials the community-building power of P-Patches is the most commonly noted benefit, with comments such as "I like my neighbors too: There's always someone nice to talk to when I go to the garden" (P-Patch Post Fall 1993 pg 15). In 1995-1997, when P-Patch advocates were pressuring the city to preserve a threatened P-Patch, and then appealing to the public to pass an initiative preventing the city from repurposing its garden sites, they emphasized how the gardens brought different kinds of people together and contributed to the neighborhood character of Seattle (Glennie 2020b). In a 1998 edition of the P-Patch Post, the president of the P-Patch nonprofit explained the feedback advocates had received about how much the community-building potential of gardens mattered to decision-makers and the public. Analysis of P-Patch documents shows that from the late 1990s onward, codes for *diversity* and *design for community* were much more frequent than they had been in the 1970s and 1980s. The latter code reflects interplay with city program staff who began to discourage fencing in the gardens, and the wider Department of Neighborhoods staff, who approved numerous grant applications from individual gardens seeking to add publicly accessible community-building features, such as picnic tables and benches, in garden improvement projects.

Over time, the work of both the P-Patch Program and the P-Patch nonprofit have contributed to the longevity, popularity and security of community gardens in Seattle. Through the early 1980s when the city faced budget cuts, funding for the P-Patch Program shrank dramatically, and higher plot fees combined with reduced services caused foreboding rates of

attrition (Seattle Times 1983). During these lean years, the program survived with two part-time staff, Barbara Donnette and Barbara Heitsch, who according to interviewees familiar with the program's early history and the P-Patch Post from that time, worked well beyond the hours they were being paid for. Moreover, the P-Patch nonprofit has relied solely on volunteer labor for its entire history. Almost every P-Patch Post newsletter contains a long list of acknowledgements for donations, tasks completed, and group initiatives fulfilled; indeed, the production of the P-Patch Post itself has been accomplished almost entirely through volunteer labor (with some content written by city staff). The P-Patch nonprofit has been led by a series of extremely dedicated volunteer presidents, board and committee members, and the P-Patch Post attests to the organization's ceaseless effort to recruit and train new leadership from among the program's gardeners. Reviewing the program's history through its newsletters reveals a remarkable level of dedication on the part of many gardeners, and even some non-gardeners, whose combined efforts have built, maintained, enhanced, and defended Seattle's P-Patch community gardens for almost 50 years.

The contributions of these volunteers should not go underappreciated, for the program would never have achieved such reach and longevity without them; however, making such a prodigious time commitment is not possible for everyone. Relying on volunteers and people who can accept low salaries to run an organization means that its leaders are likely to be relatively privileged. Indeed, for much of the P-Patch Program's history, the leadership demographics have been far whiter than that of program participants overall (and likely with higher incomes and education, as well, though data are not available to confirm this). The P-Patch Program has counted significant numbers of Southeast Asian refugee families among its

gardeners since the mid-1980s, and surveys in the 1990s showed that the program's demographics were more racially diverse than the city overall. However, program staff and nonprofit leadership alike were virtually all-white until the mid-2000s. This is not to say that active racial bias was applied in hiring and appointing leaders, rather that low or no pay likely served as a barrier for gardeners of color in light of persistent racial wealth gaps (Meenar and Hoover 2012, Hamilton and Darity Jr. 2017, Aliprantis and Carroll 2019).

The demographics of P-Patch leadership are likely to have impacted the perspective from which both organizations operated, especially the framing of the benefits of community gardens. P-Patch volunteers assiduously grew and measured their food bank donations, which have no doubt been helpful for food insecure Seattleites; however, produce distributed through food banks treats the symptom of hunger, rather than its root cause of economic inequality (Pudup 2008, Holt-Giménez and Altieri 2012, Weissman 2015). Likewise, community-building is an important and hard to measure process for maintaining healthy social dynamics in cities (Glennie 2020a). However, when community-building is framed as a relief-valve for the pressures of increasing urbanization, as was often the case in the P-Patch's framing, it reflects an ideological orientation that seeks to accommodate rather than challenge ideas of inexorable urban growth. Moreover, as Chapter 4 will explain, the sense of community engendered in the P-Patches is part of what has made Seattle such an attractive city for the "creative class" (Florida 2002) whose purchasing power and population growth have contributed to gentrification in most Seattle neighborhoods.

Among the three case-cities, Seattle's urban agriculture movement, in particular the organized efforts to preserve P-Patches in the 1990s, has been the most effective so far at

accomplishing policy change that secures community gardens as a permanent land use. The organizational structure, pairing a city-run garden program with a nonprofit fundraising and advocacy organization, appears to have worked very well to develop and manage gardens in a stable way while facilitating gardener mobilization when needed and encouraging leadership from gardeners themselves. However, gardeners from more marginalized communities have almost never taken on these leadership roles, and the mobilization to protect gardens has not addressed the question of securing low-income gardeners themselves in the neighborhoods they have helped to shape.

Conclusion

Urban agriculture has gained legitimacy as a land use in each of the three case-cities, and the benefits with which it is most associated reflect the strategies that the main gardening organizations in each city have pursued to gain and maintain their own legitimacy. In Milwaukee, MUG attempted to gain legitimacy as a land trust, but when they were unsuccessful in convincing a sufficient donor audience that garden preservation was a meaningful cause, MUG ultimately joined Growing Power, Walnut Way and the Victory Gardens Initiative in focusing on youth engagement and employment. Together, these organizations built legitimacy for urban agriculture as a tool for job training and economic development.

Philadelphia Green gained legitimacy as a program of the well-established Pennsylvania Horticultural Society, and in working to maintain its legitimacy for the organization's donor base, program leaders demonstrated how greening can work as a tool for blight removal and neighborhood revitalization. However, PHS and Philadelphia Green did not invest as much

effort in building the program's legitimacy with urban gardeners themselves, and another group has claimed that role. When community organizers were mobilizing to change city policy and defend threatened gardens, they ultimately removed PHS from their coalition and formed Soil Generation, an organization staking its legitimacy on its representation of Black and Brown growers in the city. Rejecting the notion that urban agriculture is a legitimate land use mainly for its revitalization potential, Soil Generation is framing the need for preservation as an issue of community control over land use decisions.

The City of Seattle's original funding for the P-Patch Program was legitimized as support for recreation, but the program and its advocates have maintained legitimacy over time by documenting and emphasizing other benefits more in keeping with the departments in which the program has been housed—that is, providing food for people in need (Human Services) and a network of community-building spaces that bring diverse people together (Neighborhoods).

While urban agriculture has been legitimized as a land use in all three case-cities, the different framings do not all translate equally well into making claims about the need to preserve community gardens in the face of more profitable potential land uses. For example, the economic development potential of urban agriculture confers legitimacy on such spaces, but does not preclude replacement with another form of development that would likely yield more jobs. Legitimacy is built up over time; once urban agriculture has come to be associated with particular benefits in a given locale, shifting the narrative proves more difficult.

Furthermore, shifting an organization's emphasis becomes more difficult once that organization has gained legitimacy and built up ties and commitments with other organizations in its environment. The challenge of gaining legitimacy to begin with was more difficult for

MUG than for Philadelphia Green or the P-Patch program and its supporting nonprofit, because MUG lacked any affiliation with an existing, already-legitimized organization. When seeking policy change to increase land tenure for gardens, MUG, Philadelphia Green and the P-Patch Program all erred on the side of insider advocacy, having built close relationships with city agencies (or, in the case of the P-Patch Program, being part of a city agency). When insider strategies were not enough, the P-Patch nonprofit had relatively more flexibility than these groups to parlay its organizational legitimacy into social movement organizing. Since the P-Patch nonprofit had gained legitimacy as a forum for supporting gardeners, rather than as a garden site administrator, its primary legitimizing audience was the gardeners themselves, and the organization depended relatively less on approval from city officials. Framing appeals for collective action as looking out for the interests of its primary, already-engaged audience, the P-Patch nonprofit was able to take up the function of a social movement organization with relative ease (an effort which will be discussed more in Chapter 3).

Finally, let us consider how the various organizations' efforts to legitimize their operations have impacted the physical institutionalization of urban agriculture within each city's landscape. For example, most Milwaukee residents and visitors are just as likely to encounter young people selling cottage goods made from produce they grew as they would be to encounter the space in which the products were grown. Given the relative scope of Philadelphia Green's different projects, residents and visitors in Philadelphia are far more likely to see lots with the "clean-and-green" treatment than they are to see community gardens. Meanwhile in Seattle, the P-Patch gardens have been gradually developed into public gathering spaces rather than just growing spaces, and residents and visitors are increasingly likely to

encounter them as inviting, park-like places. Thus, the organizations have legitimized urban agriculture around some benefits rather than others, not only discursively through media coverage, publicity, and political engagement, but also materially through the manifestations of their work that reinforce particular ideas about urban nature.

Chapter 3: Tilling Fertile Soil: How Civic Conventions Influence Framing and Political Strategy

Organizational sociologists and social movement scholars have long emphasized the influence of external factors on organizational practices and outcomes (Meyer and Scott 1983, DiMaggio and Powell 1983, McAdam 1988, Meyer 2004). Yet an aspect of the organizational environment that has not received much attention in the literature is the locality's civic conventions (Beamish 2015). *Civic conventions* are shared beliefs about expected and acceptable forms of interaction between the government and the polity, an institutionalized understanding of "how we do things around here" (Beamish 2015, Glennie 2020b). This chapter will demonstrate how civic conventions are especially influential for hybrid organizations as they attempt to expand into a new organizational function which positions them differently with respect to civic action.

Deploying the concept of civic conventions, I contribute to the literature on hybrid organizational forms by exploring the dynamics at work when service providers take on social movement work, rather than the reverse scenario described by Minkoff (2002). Unlike hybrid organizations that begin as movement organizations and later take up service provision as a form of civic action, urban agriculture groups initially work to organize communities in the civic action of transforming land and must then take up social movement work later, when the transformed land becomes threatened. In doing so, garden organizations must navigate idiosyncratic local expectations regarding civic and political engagement. Organizations that build their legitimacy around social movement activities may be able to push the boundaries of

local civic conventions, but organizations that are legitimized for community service provision face an extra challenge in gaining legitimacy for new activities, and thus pressure to conform to extant civic conventions is stronger. Building connections between organizational theory and the literature on social movements, I argue that the local civic conventions can be understood as a combination of political and discursive opportunity structures, working together to shape the terrain on which hybrid organizations cultivate civic participation of various forms among some or all of their members.

When they first form, urban garden organizations must work to establish legitimacy for themselves as community-based service providers. In order for a garden organization to be viewed as legitimate, the gardeners must be seen as contributing to the public good rather than as benefitting unfairly from public resources such as land and water. Even when urban garden organizations become familiar and widely accepted in a city, the use of urban land for agriculture is almost always viewed as a temporary practice (Lawson 2005). Once gardens are established, they often become quite meaningful to the gardeners and those living nearby; this emotional connection makes the loss or removal of the garden a difficult prospect. Facing an impending removal or changing economic conditions that increase gardens' vulnerability to development, garden organizations must work to build a new kind of legitimacy for urban agriculture as a permanent fixture of the urban landscape. This effort requires new framing processes and political strategies, often including social movement mobilization. The strategies that can be pursued at this point will depend somewhat on the local civic conventions, as well as the existing frames that have been used to legitimize garden organizations.

In this chapter, I highlight the role of civic conventions throughout the life of urban garden organizations and the movements they spur to preserve urban agriculture as a land use. When urban garden programs are building their initial legitimacy, when gardens are about to be replaced with a different land use, or when garden advocates propose a change in local policy that would increase the long-term security of growing spaces, they can build strategies that draw on local civic conventions to amass broader support from the general public (Glennie 2020b). I discuss two main ways that civic conventions can promote garden legitimation at these different points in time.

First, civic conventions conducive to bottom-up governance can help build the legitimacy of urban agriculture as garden organizations are getting started and seeking out basic resources and support—in other words, as the garden programs are seeking to gain legitimacy as community-based organizations. Like other resident activities and use-value rich land uses, urban agriculture tends to have its strongest base of support at the grassroots level. If the municipal government is generally receptive to resident preferences and interests, this convention creates a relatively easy way for resident demands for urban agriculture to be incorporated rationally into local policy. In Seattle and, to a lesser extent, in Milwaukee, civic conventions which held that city officials should be receptive to bottom-up governance created many opportunities for residents to express their desire to use vacant land for growing food directly to key decision-makers, and the cities' main garden organizations and policies gained legitimacy through this process.

Conversely, in the case of Philadelphia, civic conventions carry far less expectation for bottom-up governance. In this city, cynicism about government runs high in part because of a

complex, opaque bureaucracy that seems to discourage formal resident input. In this case, when cultivated lots were being sold without gardeners' prior knowledge or input, lack of access to decision-making and perceived injustice became rallying cries for broader mobilization around community control of land and urban planning.

Comparing the social movement dynamics in Milwaukee, Philadelphia, and Seattle, in this chapter I show how civic conventions present a landscape of discursive and political opportunity structures that hinder or make possible certain strategies for achieving an organization's desired policy outcomes. Civic conventions that exist as widely shared *ideas* about what is unacceptable for, expected in, or salient to the local policymaking process can be considered an aspect of the local discursive opportunity structure. That is, these conventions are cultural understandings of what is reasonable and legitimate in the context of local policymaking (Koopmans and Statham 1999, McCammon 2013). When civic conventions are built into the local governance *infrastructure*, such as the mandates of various agencies or the procedures for urban planning, these formalized conventions are an aspect of the local political opportunity structure. That is, civic conventions involve legal and institutional arrangements that can present openings for social movements to pursue particular policies or decisions (McAdam 1988, Meyer 2004). Civic conventions in the form of policy infrastructure create important leverage points for organizations to apply political pressure, while conventions in the form of ideas are important to movement formation and mobilization.

Civic conventions are not uniform across the three cities I investigated, yet as this chapter will demonstrate, these features of the local context have played a role in shaping the nature of mobilization to support urban agriculture in all three cases. The political opportunity

structure in Milwaukee supported efforts to legitimate gardens through insider strategies to craft and enact supportive policy, while the discursive opportunity structure seemed to suggest less need or opening for widespread mobilization. Philadelphia's civic conventions created essentially the opposite opportunity structure, in which advocates have successfully organized to build pressure from the outside with narratives about the injustice and inefficiency of the city's existing policies. In Seattle, both the discursive and political opportunity structures supported the gardeners' efforts to preserve their sites; periods of both insider and outsider strategies have contributed to the robust, secure, and thoroughly institutionalized network of gardens Seattle has today.

Opportunities for Insider Strategy in Milwaukee

The civic conventions in Milwaukee include a tradition of bottom-up governance that has translated from ideas to infrastructure over time. As a result, urban agriculture organizations have enjoyed a political opportunity structure favorable to voicing their interests directly to city officials, securing policy improvements and some public resources for their projects, without having to depart from their legitimized role as community benefit organizations. However, as Chapter 4 will explain, public resources in Milwaukee are severely constrained, meaning the city government has ultimately been unable to invest much in garden development or preservation, no matter how legitimate they consider urban agriculture to be. Additionally, the local civic conventions foster an expectation of bottom-up engagement while assuming good governance overall; these civic conventions do not broadly extend to an expectation that citizens should engage in ongoing activism and social movement activities to

pressure their government for accountability. In other words, the discursive opportunity structure is less favorable to mobilization in defense of threatened gardens. Overall, Milwaukee's civic conventions have created opportunities for community-based organizations to use insider advocacy strategies through the existing infrastructure for bottom-up governance, without presenting as much opportunity for organizations to organize a robust social movement to pressure city officials for longer-term garden tenure or greater community control over land use.

Historically, Milwaukee was the center of "sewer socialism," a political movement organized around public investments in physical infrastructure. Between 1910 and 1960, the Socialist Party was highly successful in Milwaukee politics, winning public support in large part because of honest-government platforms and improvements that Socialist officials achieved in sanitation, water and energy systems, and community parks—including the preservation of the Milwaukee lakefront for perpetual public access (Wisconsin Historical Society 2021). Unlike Socialist Party politics elsewhere, Milwaukee's Socialist movement was less ideological and more pragmatic. The civic conventions that developed in Milwaukee as a legacy of this era include ideas about good governance, but not as much identification with confrontational "us-vs.-them" politics as may be expected for a city with a strong Socialist history. Nevertheless, an ethic of straightforward and transparent policymaking in the interest of the general public has endured from the days of sewer socialism, contributing to the development of some bottom-up governance infrastructure.

One notable element of the city's governance infrastructure that serves to actualize resident ideas is the Community Improvement Projects (CIP) program administered by the

Neighborhood Improvement Development Corporation. Through this program, the city provides matching grants of up to $4,000 for resident-proposed projects that "stimulate resident engagement and support sustainable projects within a small geographic area" (City of Milwaukee 2022). Community gardens across the city have won these grants to support garden improvements, increasing the legitimacy of these sites because of the city's endorsement and financial backing as represented by the CIP award.

In recent years, particularly through its Department of Community Development, the City of Milwaukee has paid attention to residents' ideas and priorities and has brought them into consideration in their urban planning. In 2012 and 2013, the Barrett administration conducted a survey and outreach meetings with residents to develop a sustainability plan for the city. One interviewee stressed that the prevalence of food in public opinion was unexpected: "when surveys have been taken over the years around Milwaukee, and there are issues around sustainability, I think the City people were shocked how much food came up" (Interview M03). The ReFresh MKE Plan produced in 2013 showed that residents identified "empty lots and abandoned buildings" and "access to healthy food" as two of the city's greatest sustainability challenges (City of Milwaukee 2013). Furthermore, "Fresh local food" was the single most common response given for "ideas that you think Milwaukee should focus on in its Sustainability Plan." At the same time as ReFresh MKE was being drafted, the Department of Community Development was compiling a Vacant Lot Handbook with ideas for how residents could work with the city to repurpose unused land, based on examples of existing neighborhood projects that residents had initiated—including community gardens. As they developed these plans with attention to resident activities and priorities, city officials gained

appreciation for the potential for urban agriculture to address important public needs. Thus, urban agriculture increased its legitimacy in the eyes of city officials as a tool to address public priorities developed from the bottom up.

Adhering to civic conventions supporting governance in the public interest, Milwaukee city officials have been receptive to many proposals related to urban agriculture. The Common Council has approved land transfers to some formally organized community gardens located on unbuildable lots or in the city's most economically depressed neighborhoods. When Will Allen, a local celebrity and nationally renowned director of Growing Power, sought to build a 5-story vertical farm and urban agriculture center, the city's planners and Common Council worked with him to make necessary changes to the zoning code. The Common Council also approved a $250,000 forgivable loan for the expansion of Sweet Water Organics, an aquaponics business that hoped to scale up its operations and create more urban agriculture jobs. In 2012, in pursuit of a $5 million award in the Bloomberg Mayors Challenge, a competition to support innovative ideas for city improvement, the Barrett administration sketched out a proposal around addressing foreclosed properties while growing the local food system. When they made it to the semi-final round of the challenge, the administration set up a website to receive project ideas from Milwaukee residents, and then held a public forum to hear presentations for the top ten ideas. In all of these situations, the city showed its interest in urban agriculture and openness to advocates' proposals for new initiatives.

Demonstrating the favorable political opportunity structure for garden advocates in Milwaukee, the city government has also been amenable to broader policy changes that facilitate urban agriculture. In 2010 the Common Council and city planners collaborated with

the Milwaukee Food Council to revise the city's zoning policy in a way that would permit urban agriculture in almost all parts of the city. In 2010 the city's planners and Common Council worked with the Milwaukee Food Council to revise the city's zoning policy in a way that would permit urban agriculture in almost all parts of the city. As one advocate involved in the effort explained:

> We developed some proposals, and [our contact from the mayor's office] took it to DCD [the Department of Community Development]…. They developed their proposal and got it introduced to the Common Council and ran it through our task force and all that… they basically told us, "This is the way we're gonna do it" and as long as we were convinced that it met our objectives, we went along with it. (Interview M04)

Following the zoning update, Common Council also passed ordinances permitting residents to keep bees and chickens in the city. The policies were not highly controversial; while a few residents were vehemently opposed to the chicken ordinance in particular, the Council incorporated realistic concerns into the final rules and proceeded without much resistance.

With government officials so receptive to advocates' input, the leaders of urban agriculture organizations my not have felt it necessary to mobilize the public around preserving community gardens, as doing so would potentially step outside the city's civic conventions. While ideas about good governance are widely shared, they largely assume that the city officials will act in the public interest without needing constant vigilance and the pressure from grassroots mobilization and protest. Ideas about the value and need for active civic participation are not as widespread in Milwaukee as, for example, I found them to be in my investigation of Seattle.

The difference in civic conventions is evident in interviews and documents from the three cities' garden programs. Over the history of the Milwaukee Urban Gardens / MKE Grows

program, gardeners have been asked at a few moments to call or write to their Aldermen or to attend a particular public hearing. However, at no point did the program or other advocates in the city appear to sustain any outsider political strategies, as has occurred in both Seattle and Philadelphia. Out of the three cities, Milwaukee interviews and archival materials demonstrated the least engagement with neighborhood associations or citizen advisory committees. In my qualitative analysis of in-depth interviews and community documents, codes for *civic participation*, *citizen voice*, *organizing and mobilization*, and *political pressure or influence* were also the least frequent in Milwaukee documents and interviews, while the code for *assumed city support* had its highest frequency in Milwaukee.

As mentioned above, the city sold some land in its inventory to community gardening groups; this happened between 2013 and 2017, with very little public engagement. In the six Common Council meetings where these land sales were approved, the only people who showed up to speak were the purchasers themselves and Yves LaPierre, an official from the Department of Community Development's real estate division who manages the city's garden leases. Apparently, LaPierre's presence alongside the purchasers served to confer adequate legitimacy on the transaction for it to win council approval. Additional supporters of the purchasing organization, community gardeners or other urban agriculture advocates did not participate in any of the hearings. Their absence aligns with the city's civic conventions that suggest grassroots political pressure is not a normative aspect of the local public's civic expectations or repertoire.

Indeed, the city has acted favorably toward urban agriculture without much public pressure. With Will Allen forming personal relationships with Mayor Barrett and other city

officials and bringing a national spotlight to Milwaukee as a place using urban agriculture to improve people's lives, government support for urban agriculture appears to have been greater than for other types of resident-driven activity. The city's multimillion-dollar HOME GR/OWN program demonstrates a belief in the potential of urban agriculture as a community investment. This "catalytic project," designed to meet goals in the ReFresh MKE sustainability plan, leverages public funds, land and staffing along with private investments and philanthropic support specifically to repurpose vacant lots and help people grow food. In Milwaukee, the prestigious national awards that Will Allen has won for his innovations in urban agriculture have helped to bring urban agriculture additional legitimacy along with that accrued due to the city's baseline receptivity to resident interests. City officials have come to appreciate how urban agriculture could be used to define the city, attract outside funding, and build the local economy.

However, this appreciation has its limits. As Chapter 4 will illustrate, city officials are loath to remove potentially developable properties from the tax rolls by transferring ownership to a tax-exempt organization. Eight out of my 18 interviewees, both garden advocates and city officials, stated this as if it were a matter of fact. One garden program leader, recounting a time when they were previously told to move their garden from a city-owned lot, explained that the city was prioritizing a potential development over the garden "because the city of course is looking at their tax base. And being a nonprofit, whether we purchase the land or whether we're leasing the land, the city's not making any money that way" (Interview M02). Like other interviewees from Milwaukee, this program leader took for granted that the city's primary interest in land use decisions is tax revenue. Widely recognizing the limits to the city's

appreciation for urban agriculture, garden advocates in Milwaukee have rarely mobilized to resist garden removal. Both before and after MUG was established, when particular gardens have faced development threats, the more common reaction has been a sense of inevitability.

Thus, while government support for urban agriculture is often assumed in Milwaukee, the people involved in urban agriculture projects understand that support only extends so far. In line with the city's civic conventions, advocates have used the political opportunity structures available to them, such as Community Improvement Projects funding and the Barrett administration's receptivity to citizens' ideas about urban agriculture, to advance pragmatic policies to improve residents' lives through urban agriculture. However, Milwaukee's discursive opportunity structure does not support more confrontational strategies or radical, redistributive demands.

Mobilizing Against Cynicism in Philadelphia

The civic conventions in Philadelphia present a different context for legitimizing urban agriculture projects and mobilizing to protect threatened gardens. In Philadelphia, as evidenced by prior work and my interviews, cynicism about the local government runs high. There are fewer opportunities to seek public resources for resident-driven projects, and land is controlled by a complex web of bureaucracy that seems to require professional skills (or a powerful friend) to navigate successfully. Philadelphia's civic conventions have not produced a political opportunity structure as conducive to bottom-up governance. However, the widespread cynicism about government, especially among Black residents who make up the majority of the

city's population, has created a discursive opportunity structure more receptive to social movement mobilization and demands for far-reaching policy changes.

Ideas about good government and resident input have translated into infrastructure for bottom-up governance in Milwaukee and also, as the next section will illustrate, in Seattle; however, Philadelphia's civic conventions are different. The city does not have a matching grant program to support neighborhood improvement initiatives, a tool which has proven valuable for developing and legitimizing community gardens in Milwaukee and Seattle. Like other cities in the US, Philadelphia receives Community Development Block Grants (CDBGs) from the federal government, and over time some of these funds have been used for greening vacant lots. This investment, however, was directed by the city in collaboration with the Pennsylvania Horticultural Society (PHS) rather than being driven by residents. Most of the CDBG-funded greening has involved removing trash, laying down fresh sod, and putting up a small wooden fence to deter future dumping—the "clean-and-green" treatment—whereas resident-driven projects on vacant lots tend to establish community gathering spaces such as gardens, playgrounds or pocket parks. Residents have built hundreds of gardens across Philadelphia with assistance from PHS, the County Extension office, and other entities; however, the funding for these projects has come mostly from private foundations and fundraising efforts rather than from the city. While PHS has established its legitimacy as a provider of greening services (as described in chapter 2), until recently most individual gardens were not viewed as legitimate even if PHS was involved in their development. The majority of the city's gardens have operated without formal permission; the city's revocable garden licenses were hard to obtain and their revocability did not engender much trust in their value (Cahn and Segal 2016). Even for gardens

that secured a revocable license (or the more recently offered leases), the city did not keep a record of which lots contained gardens and long categorized all of the city's agricultural spaces as "vacant" (Cahn and Segal 2016). Without the bottom-up governance infrastructure that Milwaukee and Seattle have for facilitating neighborhood initiatives, gardens in Philadelphia have not been able to gain much legitimacy by seeking support from the city government.

Differences in civic infrastructure between these cities mirror differences in ideas about governance. As others have stated, the citizens of Philadelphia have notably little faith that their government is going to support resident ideas that serve the public interest. Philadelphia politics have long been dominated by the Democratic Party, which uses a ward system to organize voters and control which candidates get the party's endorsement; this dynamic seems to have contributed to civic conventions in which corruption is commonplace. In 1903, Lincoln Steffens detailed the corruption of machine politics in US cities, describing Philadelphia as "the most corrupt and the most contented" [quoted in Fiorillo 2021]. Political corruption has not abated in the century since, with an ongoing parade of congressional representatives, state senators, and members of the Philadelphia City Council being convicted of fraud, bribery, conspiracy, and other corruption charges (Fiorillo 2021). Just in 2020, City Councilmember Kenyatta Johnson and his wife were indicted for corruption related to a land deal in his councilmanic district (Blumgart 2020). In Philadelphia's civic conventions, honest governance is not to be expected, and the public is widely cynical about the local government's ability to function fairly or efficiently.

Cynicism runs especially deep for many of the city's Black residents. Alongside the history of corrupt and inefficient governance runs a history of dispossession, violence and

abandonment with clear racial patterns. Black Philadelphians are well aware of this history, which fosters an additional layer of cynicism that Brownlow (2006) calls "the collective resentment over the politics and geographies of race-based neglect" (pg. 219). As noted in chapter 1, racial inequality in public resources, capital investment, and urban environments is not unique to Philadelphia, nor is the extra skepticism in the Black community's civic conventions engendered by their understanding of institutional racism. For example, Beamish (2015) found that civic discourse in response to plans for a biodefense research facility in Roxbury, Massachusetts built on widely understood narratives about social injustice in the racialized distribution of environmental hazards and a history of "institutional recreancy." In Philadelphia, the Black community's historically rooted mistrust in city institutions has impacted the shape and direction of social movement activities to secure urban land for community gardens. As mentioned in chapter 2, PHS prioritized gaining legitimacy for its Philadelphia Green program in the eyes of its white elite donor base and has cultivated close ties with city officials who sign large contracts for the program's greening work. Maintaining legitimacy with these audiences helped keep the program financially viable, but institutionalization with city elites also works to undermine the organization's legitimacy with those skeptical of the prevailing order (Suchman 1995). In Philadelphia, the dynamics of cynical civic conventions and the legitimation strategy of the city's main gardening organization have informed a split in organizational trajectories—one that provides a nominally "community-based" service (PHS), and one that is explicitly oriented to social movement work (Soil Generation)—rather than a hybridization from CBO to SMO within one entity.

Evidence from interviews and historical documents shows that urban agriculture advocates involved in land preservation efforts understand the widely-shared ideas regarding cynicism and mistrust of the government. The code for *appearance of impropriety* was more common in Philadelphia materials than in those from Milwaukee or Seattle. *Cynicism about government* was expressed in Philadelphia twice as frequently as in Milwaukee and three times as often as in Seattle. One community organizer opined regarding the city's land disposition process, "their institutional structure, and the way that power flows, is not meant to be understood. That's the way it is" (Interview P15). Such sentiments were especially common among advocates affiliated with Soil Generation, but even interviewees affiliated with more "insider" nonprofits like PHS expressed some degree of exasperation with the city's land use governance. Especially given the high number of cultivated parcels the city has put up for auction without notice, urban agriculture advocates in Philadelphia have little faith that the local government will look out for their interests by default.

One specific element of Philadelphia's civic conventions stands out for its impact on land disposition, a political idea known as "councilmanic prerogative" that has become infrastructure over time. Closely related to Kenyatta Johnson's corruption indictment and the cynicism that many urban agriculture advocates expressed in interviews, this convention gives district councilmembers an especially firm grip over land deals. City Council must pass an ordinance to approve any land dispensation, and all of the other councilmembers (both districted and at-large) almost invariably vote the same way as the councilmember whose district contains the parcel in question. Using councilmanic prerogative, councilmembers supportive of urban agriculture can help expedite sale of publicly owned garden lots that have

the resources and wherewithal to access the councilmember and navigate the rest of the bureaucratic process for a land transfer (which will be discussed more in Chapter 4). However, unsupportive councilmembers can singlehandedly block a sale in their district—no matter what resources or legitimacy a garden group may bring. Virtually everyone I interviewed who works to secure land for urban agriculture in Philadelphia identified councilmanic prerogative as a barrier to preservation, but they see little chance of changing it because the councilmembers themselves would need to vote for a policy change, and they have no incentive to reduce their own power. One community organizer described councilmanic prerogative this way:

> Council people really enjoy having power over deciding who gets access to publicly owned property. And which pieces of public, which pieces of property the city acquires. That gives them an enormous amount of power over their districts, that can be used for good sometimes, and can be used for sketchy purposes sometimes… just to state the obvious, I think that people seek to influence the process because they want to get a piece of land. If you have money and can make campaign contributions, you have an easier shot at getting what you need. (Interview P16)

Again, civic conventions in Philadelphia err on the side of cynicism, and even the recent revelations regarding Kenyatta Johnson's abuse of councilmanic prerogative do not appear to have opened a discursive opportunity for mobilizing against this specific convention.

As development pressure has increased, with insider strategies out of reach for most of the city's gardeners, urban agriculture advocates affiliated with Soil Generation have responded with sustained social movement mobilization to increase the legitimacy and tenure of the city's community gardens. In short, local cynicism regarding governance has opened a discursive opportunity structure for promoting collective action and securing other forms of policy change. As described in chapter 2, Philadelphia's urban agriculture movement started to get organized in 2012 and 2013 around changes to the city's zoning code. After hearing directly

from city officials that they did not consider urban agriculture to be a constituency, advocate Amy Laura Cahn set out to make this constituency more vocal and visible by funding a community organizing effort through the Public Interest Law Center of Philadelphia (Cahn and Segal 2016). Her group initiated the Campaign for Healthier Foods and Greener Spaces to oppose a proposed zoning amendment that would have restricted garden activities. As the campaign launched, Cahn was quoted in PlanPhilly arguing against the proposed amendment by saying, "Creating this level of bureaucracy and legislating community participation is just a barrier. It's not adding value" (quoted in Brand 2013). This framing of the proposal appealed to the negative views of government that created a discursive opportunity structure within the local civic conventions—that is, high levels of bureaucracy creating barriers to community participation.

The coalition that Amy Laura Cahn helped to build, Healthy Foods Green Spaces, brought together many organizations from across the city, including PHS and the Neighborhood Gardens Association, to advocate for maintaining community gardens as a land use in Philadelphia. While PHS and the Neighborhood Gardens Association (later renamed the Neighborhood Gardens Trust, or NGT) had been able to preserve a handful of community gardens over the years, they recognized that the lengthy, costly, parcel-by-parcel strategy they had relied upon until then was not enough to meet the citywide need. For one thing, the professional skills and working relationships with city officials that made the organizations' efforts successful could not be scaled up easily. For another, their efforts could succeed only for gardens that the city was willing to preserve; in other situations, the councilmember whose district contained a garden might have other plans for the land, and because of councilmanic

prerogative, preservation without their assent would be impossible. While gardeners or other urban agriculture organizations might take on a strategy of public pressure to overcome councilmember obstinance, PHS was unwilling to risk its close relationships with city officials—and the large maintenance contracts they approve—in order to preserve an individual garden. Nevertheless, recognizing the growing threat to garden tenure, they joined with other organizations in Healthy Foods, Green Spaces to advocate for a more streamlined land disposition process. As this coalition organized numerous constituencies and mounted a high-visibility campaign to establish the Philadelphia Land Bank, PHS participated mostly in the background, donating professional skills such as graphic design to the coalition—but not mobilizing their gardeners to get involved in the civic process. This choice of actions makes sense given PHS's organizational commitments and the legitimacy it had cultivated. With a long history in the city and roots in its elite social circles, PHS would be more likely to take for granted the city's existing way of operating than to question or publicly challenge this system; moreover, outsider social movement tactics and vocal political organizing might threaten PHS's legitimacy with city agencies and with its elite donor base.

Yet, as noted above, civic conventions among everyday residents of Philadelphia—especially the city's nonwhite majority—differ from the perspectives held by the social elite, and cynicism about government is high. Organizations and activists with less history of collaboration with city agencies and an outsider's perspective on how the city functions have taken a more explicitly critical stance than PHS regarding the city's governance. In the realm of urban agriculture advocacy, Soil Generation embodies this stance. As described in chapter 2, leaders of the Healthy Foods Green Spaces coalition evolved it into Soil Generation, which is "a

Black and Brown led coalition of gardeners, farmers, individuals, and community-based organizations working to ensure people of color regain community control of land and food, to secure access to the resources necessary to determine how land is used, address community health concerns, grow food and improve the environment" (Soil Generation 2021). As this statement makes clear, Soil Generation is focused on changing power relations in Philadelphia so that people of color have a seat at the table in decisions about land use and the local food system. In framing garden loss as a lack of community control, Soil Generation links the struggle to preserve urban agriculture to broader concerns that are reflected in local civic conventions, and also highlights the legacies of colonialism and racism that have displaced and oppressed Black and Brown people, immigrants, and indigenous communities in Philadelphia and beyond going back centuries. With this critical perspective, Soil Generation called for changes in the distribution of power—not only changes in the city's land use policy, but also in the relationships that cohered among local community groups and large nonprofit organizations.

As of 2021, this effort is ongoing. Soil Generation has been integral in bringing the voices of urban growers directly to public officials, remaining active in advocating for more garden preservation in the Land Bank's biennial strategic plans and organizing a public hearing with City Council dedicated to urban agriculture in 2016. At that hearing, impressed with the diversity of testimonials—both the demographics of the speakers and the reasons they expressed for valuing urban agriculture—councilmembers committed to pay more attention to the issue. The current process underway to formalize urban agriculture planning in the city is the product of Soil Generation's efforts to re-legitimize urban agriculture through a rights- and justice-based framing, and the dynamics of this process are illustrative of how Soil Generation's

outsider status and social movement strategies have pushed the city to go further in revising land use policy than city officials would have through insider advocacy efforts alone.

In 2019, the city hired Ash Richards, a city planner with strong ties to Soil Generation, for the new position of Director of Urban Agriculture in the Parks and Recreation Department. Later that year, the city began a notably bottom-up process to develop an urban agriculture plan. Soil Generation, along with design firm Interface Studio LLC, won a competitive Request for Proposal process to aid in the public meetings and plan development (City of Philadelphia 2019a). The first public meeting was held in December 2019, and the next was held up by the onset of the pandemic. The second, virtual public meeting began in February 2021, delayed in part because of time taken to bring Soil Generation and Interface Studios together for "facilitation, education and healing" (Richards, quoted in Jaramillo 2021). Kirtrina Baxter, organizer for Soil Generation, explained the need for the facilitation process this way:

> There were some control issues and power dynamics that are common between people of color and white folks. People are unwilling to have conversations about power in ways that are beneficial for people of color, and on the project, as the community experts, we were raising concerns that just weren't being valued. (Baxter, quoted in Jaramillo 2021)

Here, Soil Generation's leader seeks to emphasize the organization's legitimacy as "the community experts" with genuine relationships and knowledge of the needs of urban growers and people of color (as opposed to Interface Studios, PHS, or any other white-led entity in the city). Soil Generation's framing around racial power dynamics speaks to the historically rooted resentment building in the civic conventions of residents of color in the city, and this framing is helping to mobilize a broader shift in the culture of decision-making across the city. According to my interviewees, Soil Generation and its allies have initiative similar conversations in groups

such as the Philadelphia Food Policy Advisory Council and the Philadelphia Area Cooperative Alliance. Regarding the Food Policy Advisory Council [FPAC], one participant explained:

> [FPAC has] an Equity Working Group that's been meeting over the last three months [summer 2018] or a little bit more than that. That [group] came out of conversations that we had—at our general meeting in April [2018], we always present our annual membership survey, which identifies who we are demographically and in expertise, to help us figure out what the gaps are so we can fill those gaps through recruitment. And based off of that conversation in April, a few of our members came to us and were like, 'I think we need to have this conversation about how our group is achieving its values in equity, diversity and inclusion.' So we had a few meetings about that, and then we decided to convene an Equity Working Group, and that's made out of leaders in FPAC who are all people of color, who are guiding that conversation of what can we do differently at FPAC to meet those values. (Interview P12)

Conversations about racial equity in organizational practice started well before the nationwide attention to systemic racism increased in 2020, reflecting a discursive opportunity structure that exists within Philadelphia's civic conventions because of the long history of racial inequality and the general inaccessibility of government to less privileged residents.

In comparison to Milwaukee and Seattle, Philadelphia's civic conventions have included more cynicism about government and less expectation that city officials will be responsive to the desires of ordinary citizens. While these civic conventions have limited the opportunities for gardeners across the city to gain public resources or legitimacy for their sites, they have also created an opening for social movement mobilization to challenge a dynamic that has left much of the public dissatisfied. Soil Generation has sought (and gained) organizational legitimacy as a representative of community interests—not as a service provider, but as an organizer of the social movement seeking policy and cultural change on behalf of the city's Black and Brown growers. The urban agriculture movement that Soil Generation is leading in Philadelphia is framing the problem of garden loss in terms of structural inequalities and unexamined cultures

of control that have done more than just displace gardens. Their efforts are thus an important and energized node within a broader movement to evolve the city's politics, policies, and culture to become more equitable and responsive to the needs of poor residents and people of color. Soil Generation's framing around equity and community control of land use represents a potentially powerful augmentation in the legitimacy of urban agriculture from the narrative that PHS developed regarding urban agriculture's potential role in neighborhood economic development, providing a stronger rationale for the long-term preservation of community gardens threatened by changing economic conditions. Overall, relative to the efforts at garden preservation in Milwaukee and Seattle, the social movement Soil Generation has built likely holds the greatest potential for achieving structural change beyond garden preservation.

Participatory Culture Pays Off in Seattle

Compared to Milwaukee and Philadelphia, Seattle's civic conventions hold the highest expectation of citizens' participation in the political process. Long-held values for bottom-up rather than top-down governance have supported the establishment of a dense infrastructure for civic participation. Yet even with all of the participatory infrastructure they have achieved, Seattle residents remain distrustful of elites, and ideas about the need for active political engagement are still widely shared. The city's political opportunity structure has offered numerous opportunities for residents to assert their interest in community gardens and to draw public resources for administration, site improvements, and even land acquisition; at the same time, the city's discursive opportunity structure has enabled social movement mobilization through a framing of the need to safeguard public interests from potential government abuse.

Seattle's civic conventions around challenging elite control through political engagement have deep roots in the city's history (Glennie 2020b). The Seattle General Strike of 1919 was one of the most successful union actions of its time. More recently, the 1999 Battle in Seattle—mass protests against the meeting of the World Trade Organization that brought together labor unions, environmentalists, and other civil society groups—made international news and soured the public on the mayor at the time due to his heavy-handed response. Seattle residents have organized resistance to more local political concerns in the 1960s and again in the 1980s, with campaigns to change the municipal government's direction and increase its accountability. The officials elected under these campaigns were integral in creating and supporting the P-Patch Program, providing public funding and land for an activity that residents wanted to enjoy.

Civic conventions in Seattle include ideas about organizing to challenge elites in order to assert resident interests, and also about neighborhood-level governance. The public is used to local initiatives and expects that residents in a particular neighborhood will be able to participate in decisions about their community (Hou, Johnson, and Lawson 2009). These conventions have formalized into civic infrastructure such as a large, active network of neighborhood associations; district councils that represent hyper-local interests in conversation with the city; and a Department of Neighborhoods that is tasked specifically with responding to resident interests. As described on its website, the Department of Neighborhoods exists to "provide resources and opportunities for community members to build strong communities and improve their quality of life. Through our programs and services, we meet people where they are and help neighbors develop a stronger sense of place, build closer ties, and engage with

their community and city government" (City of Seattle 2022). The City of Seattle Department of Neighborhoods oversees a Neighborhood Matching Fund, similar to Milwaukee's CIP grants, that awards public resources to proposals that engage the community in making improvements that residents desire. Civic conventions in Seattle dictating an active, ongoing role for the public to participate in governance have contributed to the creation of robust infrastructure for asserting and actualizing resident interests.

Both the ideas and infrastructure in Seattle's civic conventions have benefitted the P-Patch community gardens and advocates' efforts to preserve them. With a multimillion-dollar annual budget, the Neighborhood Matching Fund has proven invaluable for building, improving, and legitimizing the city's community gardens (Glennie 2020b). The infrastructure of neighborhood associations and district councils was tapped in the 1990s both to legitimize residents' desire to save a threatened garden and to mobilize the public around Initiative 42, a policy that effectively makes permanent all of the gardens on public land (Glennie 2020b). Ideas about challenging elite control and respecting neighborhoods no doubt helped galvanize the public to support Initiative 42, which garnered almost 24,000 signatures in a matter of months. The flow of resident input in governance through structured channels, such as from neighborhood associations to district councils to the Department of Neighborhoods or from residents participating in the formalized neighborhood planning process of the 1990s, has made clear the widespread appreciation for P-Patch community gardens and legitimized their continued presence. Overall, Seattle has very strong civic conventions supporting citizens' role in governance, creating numerous opportunities for garden advocates to both provide input directly to city officials and mobilize the public when more pressure was needed.

Comparing against Milwaukee and Philadelphia, data from interviews and documents demonstrate the prominence of participatory civic conventions in Seattle. Codes for *neighborhood association*, *citizen advisory committee*, *bottom-up governance*, *citizen voice*, *elected official accountability*, *neighborhood planning*, and *public hearing* were all the most frequent in Seattle documents and interviews out of the three cities I investigated. Civic ideas and infrastructure have supported public engagement in governance decisions related to P-Patches and also the assertion of how much use-value residents get from the gardens.

Furthermore, as the P-Patch Program expanded over time, encompassing more land and requiring more public resources for administration, the infrastructure created by Seattle's civic conventions facilitated feedback that helped program leaders and garden advocates adjust their operations in accordance with the wider public interest and thereby insulate the program from any challenges to its legitimacy. Aligning gardening sites, activities, and communication with widespread values and concerns ensured that the P-Patch program remained popular and continued to receive public resources over time.

Since the program's inception, P-Patch leaders had invited city officials to "harvest banquets" and other opportunities for positive press. In the 1990s, leaders of the nonprofit supporting the P-Patches encouraged gardeners to significantly increase their contact with the city's elected officials beyond the annual meeting. They did so in order to defend the program's budget from cutbacks in 1991, secure a resolution expressing support for P-Patches as a land use in 1992, resist the removal of two threatened gardens in 1995 and 1996, and achieve the passage of Initiative 42 as an ordinance in 1997 (allowing City Councilmembers to demonstrate they were on the same side of the issue as the public). Following all of these engagements, in

the Winter 1998 P-Patch Post newsletter, Friends of P-Patch President Frank Kirk explained how those advocating for the gardens had learned about their wider reputation in the city:

> We have learned that there is a great reservoir of goodwill toward the P-Patches. Our contributions to the food banks, the Cultivating Communities project with the Seattle Housing Authority [which built gardens with low-income housing residents and enabled them to earn money through a community supported agriculture (CSA) program] and the cultural/ethnic diversity of some of the gardens are especially appreciated. There is also persistent skepticism and unease about the use of public land to benefit a 'few' gardeners… it is clear that we have a major challenge to communicate the public benefits of community gardens…. our challenge for the next several years is to learn how to become full partners with the communities in which the gardens are located and to be stewards of the land in ways which also bring benefits to residents who are not P-Patch gardeners (Kirk 1998).

Over the course of the 1990s, as their interactions with elected officials made clear what aspects of the program were most valued by the broader public, P-Patch advocates worked to demonstrate the contributions that the community gardens made to widely shared civic priorities such as serving low-income communities, fostering multiculturalism, and cultivating a community atmosphere in Seattle's neighborhoods.

As the P-Patch program grew and increasingly formalized its operations, P-Patchers articulated the benefits of their program in terms of broadly shared values, taking advantage of another discursive opportunity structure that Seattle's culture presented. Many gardeners made donations to food banks, and in the 1980s the program administrators began tracking contributions. When one of the program's most active volunteers Wendy McClure organized a produce collection and delivery system called Lettuce Link, the reported food bank donations gradually increased. In editions of the P-Patch Post newsletter from the 1990s, gardeners were asked to measure and report the total pounds of produce they donated if they weren't giving through Lettuce Link. The regular column for requesting help and equipment also noted the

need for produce scales to ensure that donations could be weighed and tracked. In these ways the gardeners' food donation activities were rationalized over time, and along with publicized events like the Day of Giving that began in 1994, the quantified donations helped build legitimacy for the P-Patch program as one channeling civic action to help low-income people.

In addition to their food bank donations, P-Patch administrators and volunteers demonstrated their program's commitment to low-income Seattleites by tracking how many low-income participants the program had, and by working with residents of the city's public housing to build gardens specifically for them. Especially once the program hit political turbulence in the mid-1990s, when gardeners mobilized the public in a somewhat confrontational strategy to preserve threatened gardens, city officials scrutinized the extent to which the P-Patch Program was serving a truly public purpose. The program's leadership and its most vocal advocates were homogenously white and middle- or upper-middle class, so opponents of the program may have wished to paint it as a giveaway to already-privileged people. However, surveys of the gardeners in the mid-1990s showed a diverse constituency, with higher percentages of renters, low- and moderate-income people, and people of color than the city's overall demographics. The program's demonstrated diversity, and the addition of an initiative specifically benefitting immigrant gardeners in public housing, served to align the program with the value of multiculturalism important to many Seattle voters at the time.

In order to ensure that the gardens continued to serve the public equally, officials in the Department of Neighborhoods worked with the program's advocates to prioritize building new gardens in underserved areas of the city (Hagey, Rice and Flournoy 2012). Over time, this has meant that the distribution of P-Patches across the city is genuinely more equitable in terms of

access for low-income residents. As chapter 5 will detail, longitudinal spatial analysis demonstrates that between 1980 and 2019, P-Patch gardens have become more accessible overall; moreover high-poverty neighborhoods in Seattle were originally further from the P-Patch gardens than their lower-poverty counterparts, but that relationship has flipped over time such that proximity is greater for low-income communities today.

Finally, in response to the "persistent skepticism" about gardens as a private use of public land, as Frank Kirk's quote above describes, the P-Patch program leaders systematically incorporated public spaces into design and redesign plans for the gardens. In my analysis of P-Patch Post newsletters, the code *design for community* was only applied twice for issues in the 1980s, but this code came up more and more often in the 1990s and especially from 1998 onward. New gardens were built with public features like benches or picnic tables, and such elements were added to the older gardens as they were renovated—especially when those gardens won Neighborhood Matching Funds to improve their spaces. Because of the civic infrastructure in Seattle, including numerous channels of communication between garden advocates, city officials, and other residents as well as the availability of public resources for garden development, P-Patch gardeners were able to maintain legitimacy for their organization and for the use of public land for urban agriculture by aligning their activities with widely shared values and public priorities.

The priorities of city officials and P-Patch gardeners were not always perfectly aligned, however. As mentioned earlier, two P-Patches on public land were threatened by development in the mid-1990s. Gardeners first pressed their interests through the city's bottom-up governance infrastructure, but it soon became clear they would not prevail through insider

strategies (Glennie 2020c). While Seattle's political opportunity structure is usually amenable to resident interests, competing resident demands—and the growth machine's drive for increasing exchange value—exerted strong countervailing influence in these cases. When insider strategies proved futile, the garden advocates pursued outsider strategies to organize public opposition to the development plans. In this period of mobilization, Seattle's civic conventions promoting distrust of elite control and expecting neighborhood involvement in decision-making helped form a discursive opportunity structure for framing the threat of garden loss in a way that would resonate well beyond the gardens.

When the gardeners at the Mount Baker P-Patch learned that their city-owned lot was slated to be auctioned off for housing development, they joined with the local neighborhood association to come up with an alternative plan. With a grant from the Neighborhood Matching Fund, they conducted design charettes with P-Patchers, representatives of greening organizations, and other residents. The final product, a plan for Bradner Gardens Park, interwove P-Patches with numerous other uses such as a basketball court, family picnic area, public art, and native planting demonstration gardens. Advocates for Bradner Gardens Park presented the plan to city officials, and also visited the meetings of neighborhood associations from across the city to gain their endorsements. They built up legitimacy for the Park proposal through the civic infrastructure of Neighborhood Matching Funds and neighborhood association endorsements, and they framed their proposal as the epitome of neighborhood planning, civic participation and collaboration among diverse groups in a community.

City leaders remained steadfast in their desire to see housing on the site, however, so the garden advocates devised an initiative to prevent the auction. With the help of a former

lawyer for the Parks Department, whom they had met at one of the neighborhood association meetings, park proponents drafted the Protect Our Parks Initiative, or Initiative 42. The initiative would prevent the city from repurposing any land *used for parks purposes* (whether owned by the Parks Department or not) without immediately supplying a space of equal size and quality for the same purpose, in the same neighborhood. As they circulated the initiative to collect the necessary signatures, the group added an extra layer to their framing by highlighting how the Bradner Gardens Park site had been purchased with funds allocated specifically for park development, arguing that under the mayor's logic for selling it, no parks in the city were safe from development. Longstanding civic conventions opposed to political elites making backroom deals and instead promoting neighborhood-level planning meant that this argument resonated widely.

Advocates for the Interbay P-Patch similarly framed their development threat as a betrayal by the city. Interbay P-Patch had been built in 1974 on land intended for a golf course. The garden was relocated in 1992 to make room for the long-planned course, and gardeners were told this new location would be permanent. The mayor even buried a time capsule at Interbay commemorating the 20th anniversary of the P-Patch program, to be unearthed on the 40th anniversary in 2013. In the golf course design Request for Proposals, the Parks Department stipulated that the P-Patch had to stay in its current location. However, the winning bidder followed up by saying that a north-facing driving range could increase revenue, a change to the design which would require moving the P-Patch again. Public hearings for the plan saw strong citizen input on both sides of the issue, and it was well covered in the local newspapers. In their letters to the editor and public comments, the gardeners invoked the idea that elected officials

were reneging on their previous deal. In the Queen Anne News letters-to-the-editor section, Interbay gardener Ray Schutte laid out the P-Patchers' case, including an invocation of the civic conventions around government accountability:

> Facts about the proposed Golf Complex: The request for proposals specified the "Interbay Golf Center *must allow for the continued operation of the P-Patch in its current location.*" Not may or should, but *must*. Does the earlier writer want the city to go back on its word and fall into the pattern of broken promises described by Chief Seattle? (Schutte 1996)

The argument that the city could not be trusted helped to whip up opposition to the proposed move, and it also resonated with one councilmember who reportedly didn't care about P-Patches but was moved by the argument about fairness. Ultimately, Councilmembers did approve a plan to move the garden, but only on the condition that gardeners were given a better replacement site and logistical and material support for the move. These concessions made a big difference for the future direction of the Interbay P-Patch, which is a thriving community garden and destination for neighborhood residents today.

In both of these cases, Seattle's garden advocates were able to strike a nerve for the general public by framing the city's plans as a betrayal of the self-government expectations they held, and by arguing that these moves needed to be resisted in order to hold the government accountable to its citizens. Ultimately, in both cases, councilmembers originally opposed to the gardeners' requests ended up voting in their favor. The garden advocates' leveraging of Seattle's civic conventions is evident in analysis of documents and interviews from the three cities, which shows that the code for *fairness or justice* was more than twice as common in Seattle as in Philadelphia and more than three times as common as in Milwaukee. The bulk of these codes applied to documents in the period of October 1995 to September 1996, when the

Bradner and Interbay resistance efforts were broadening from insider strategies into outsider strategies involving criticism of the city and mobilization of both gardeners and the public.

These examples demonstrate how social movement mobilization was effective in Seattle and accomplished long-term preservation for many of the city's gardens. However, the movement mobilized in the mid-1990s was framed around a symptom—development threats to specific gardens—and not around the underlying economic dynamics driving garden displacement. While all of the gardens on public land are effectively permanent thanks to movement organizers' victory in passing Initiative 42, gentrification has continued apace in Seattle; among the many low-income residents who have been displaced due to rising housing costs are gardeners who can no longer afford to live near the sites they helped to build, including Bradner Gardens Park. In this way, the local garden preservation movement in Seattle draws a clear contrast with that in Philadelphia, where garden loss is framed in connection to the broader context of structural racism, neighborhood disinvestment, and growth machine logic that threatens vulnerable people as well as vulnerable spaces.

Conclusion

This chapter has demonstrated multiple ways that civic conventions structure opportunities for garden organizations to legitimize their activities and to build broader support for urban agriculture as a land use. Civic institutions that support public input into policymaking have served as political opportunity structures to legitimize urban agriculture as a land use desired by residents. Civic ideas can serve as a discursive opportunity structure that garden advocates can leverage to frame the need for social movement mobilization in support of

threatened gardens, whether or not these spaces have gained legitimacy through formal policy channels.

When a city's civic conventions include infrastructure for bottom-up governance, this infrastructure provides a political opportunity structure for supporting resident demands such as space for community gardens and urban agriculture. A participatory governing process can rationalize garden development in accordance with broader public interests and concerns while building legitimacy for community gardens as a land use. Garden organizations in Seattle and Milwaukee have bolstered the legitimacy of their gardens by taking advantage of civic conventions conducive to bottom-up governance, including the civic infrastructure of grant programs for resident-initiated projects and accepted channels for communicating resident desires. In these cities, conventions for bottom-up governance provided a political opportunity structure to legitimate urban agriculture as an activity in line with broader public priorities.

The same political opportunity structure did not exist in Philadelphia, where PHS established legitimacy for its Philadelphia Green program as a provider of city beautification services and a catalyst for neighborhood reinvestment, with less emphasis on the importance of fulfilling resident desires for growing space. Instead, gardens in Philadelphia struggled to gain legitimacy in the eyes of city officials even as many such spaces were used and valued by neighborhood residents. The city's redevelopment efforts led to the loss of numerous gardens in the early 2000s, when city officials treated these spaces as "vacant" rather than land already under legitimate use. With PHS having legitimized its garden support activities as temporary measures to promote redevelopment, the organization was not positioned to challenge the loss of gardens through that very redevelopment. Indeed, due to PHS's dependence on city

contracts for greening services and its association with the city's social elite, the organization stood to lose legitimacy in any open confrontation with public officials.

When PHS did not mobilize its gardeners to challenge the city's land use policies, another organization did. Situating the pattern of garden removal in the historical context of dispossession and racial injustice, Soil Generation has mobilized the city's growers to push for greater community control over land use decisions. Their framing legitimizes urban agriculture as stewardship of land long abandoned by property owners and the city, while delegitimizing the city's development plans by drawing on widely shared cynicism about the government's effectiveness and trustworthiness. This cynicism has provided a discursive opportunity structure in which calls for ongoing mobilization to ensure government accountability have resonated widely. In coalition with other groups organizing for economic and racial justice, Soil Generation has gained legitimacy as a genuine representative of the interests of gardeners and communities of color in the city, and the organization has sustained outsider strategies to pressure the city government to transfer land ownership to community gardeners.

Discursive opportunity structures in Seattle have similarly supported social movement mobilization when gardeners sought to preserve gardens and public officials resisted. Widely shared ideas about the value of civic participation underlay the development of the P-Patch nonprofit, its successful cultivation of volunteer labor over decades, and its mobilization to stave off garden loss and achieve permanence for the P-Patches. As in Philadelphia, civic ideas about distrust of elites contributed powerfully to the local discursive opportunity structure; by framing Initiative 42 as a necessary bulwark against city officials selling off parks, P-Patch

advocates won broad public support for their proposal and secured stronger protections for the city's gardens than public officials were initially wiling to enact.

In contrast, Milwaukee's civic conventions hold more of an assumption of good governance on the part of city officials, and the local discursive opportunity structure has been far less favorable to social movement mobilization. Garden advocates have achieved longer term land access and more permissive zoning policy through insider political strategies, but many gardens in Milwaukee remain classified as a temporary use. Without an organized effort to engage gardeners in civic action, and without a widely held belief in the need to mobilize to hold the government accountable, the city's garden advocates seem to lack the tools to pressure city officials into making more gardens permanent.

In terms of urban political economy, insider strategies that frame urban agriculture's value to align with the city government's priorities will likely reflect growth machine logic. Land use policies that elected officials will happily pass, such as small matching grants to support greenspace improvements and ordinances allowing beekeeping, tend to increase use value for residents in ways that do not undermine the potential for increasing exchange value as well. To achieve permanent tenure for community gardens and urban farms means removing the land from the city's development portfolio—something that runs counter to the standard motivations of most city officials. Winning policies that afford stronger protection therefore requires outsider strategies. The cases of Philadelphia and Seattle demonstrate how garden advocacy organizations have mobilized social movement activity by drawing on discursive opportunity structures to successfully frame the need for garden permanence as part of a wider struggle to preserve resident interests in the face of potential political corruption. Alongside

these more confrontational efforts, organizations in both Philadelphia and Seattle also used insider strategies for some of their efforts to legitimize gardens. As Chapter 4 will explain, growth machine logic endures as a powerful force in shaping the framing, policy, and practice of urban agriculture in all three cities.

Chapter 4: Lifeline, Liability, Livability: Commodifications of Nature at Different Stages of Urban Growth

A city's civic conventions form an important piece of the organizational environment in which community gardening programs develop and define themselves. Yet what is possible for urban agriculture in any given city is also contingent upon its political-economic context. As urban political ecologists would describe it, ideas about appropriate uses for urban space combine with material flows and conditions, as well as ideas governing the legitimacy of governments themselves, in order to determine the actual production of urban socio-nature (Swyngedouw 1996). In this regard, the distribution and character of urban agriculture in any city is influenced by local economic pressures, the sources and extent of public resources, and political factors at larger scales such as the laws and activities of state and federal governments. These elements of urban political economy can be seen as the municipal government's own organizational environment, which the government and its representatives must attend to in order to maintain their legitimacy, resource flows, and survival. Whether in pursuit of land tenure for community gardens or other public investments in quality of life, residents and community organizations inevitably bump up against large-scale structural constraints—no matter how much access and influence they have with local decision-makers—as they try to change local policy to meet their goals.

A primary set of structural constraints affecting all three cities is their existence in a market economy. In recent decades, American governments at all levels from local to national have been affected by the spread of neoliberal ideology, encouraging a turn toward

privatization and new forms of commodification, reduction in taxes and public services, and government intervention to *support* market processes through deregulation and "entrepreneurial" initiatives (Harvey 1989, Brenner and Theodore 2002, Brownlow 2006). Local governments differ on many fronts, as reflected in the civic conventions they pay homage to, but in the US context they have all been forced into a fiscal squeeze by the reduction of federal funding, and they have confronted this challenge with the shared goal of increasing property values, the local population, and with them the overall prosperity of their local economy (Molotch 1987, Jonas and Wilson 1999). All three case-cities are participants in a globalizing competition to attract capital and "win" at urban growth, and although they vary in their recent histories of "winning" and "losing" the competition for growth, all three cities show how urban growth machine logic and the political-economic pressures on municipalities influence the ways in which urban agriculture has been legitimized as a long-term land use.

One common thread is the commodification of nature that runs concurrently with the commodification of land. In each of the case-cities, urban agriculture advocates have taken a different approach to building an economic argument that bolsters the legitimacy of urban agriculture as a land use. The commonality—bolstering urban agriculture's legitimacy with an economic rationale—reflects how pervasively market logic is applied to land use in American cities, while the differences between the cases demonstrate variations in how land is commodified based on the local growth coalition's status in the competition for capital. By drawing attention to the ways that commodification of nature contributes to the production of uneven urban environments, urban political ecology enhances understanding of growth machine dynamics and their impact on the use value(s) available to residents.

In a similar vein, urban political ecologists employ the metaphor of urban metabolism to show how the constant reconfiguration of socio-natural space opens up opportunities for transforming relations of power. Addressing the tension between earlier Marxist and more recent actor-network theory approaches within the field of urban political ecology, Heynen (2014) highlights the "egalitarian potential that is embedded within a robust conceptualization of urban metabolism" (p. 599). According to political ecologists, the tendency of nature to reproduce itself freely runs counter to the private property foundations of capitalism, and urban agriculture holds radical potential as an opportunity for people to produce and consume outside of the market, nourishing non-capitalist material flows (Classens 2015, McClintock 2014). However, because the land on which urban agriculture occurs is commodified, I argue that this radical potential is limited in important ways. Urban growers and the spaces they cultivate do contribute to the creative dynamism of socio-natural circulation: they work to reshape the ecology of cities, sustain bodies left undernourished by the capitalist food system, and promote a wider reimagining of urban relations; however, these material and discursive metabolic flows are still subject to the gravity of capitalist property relations and the mutually reinforcing interests of urban growth coalition members.

Asserting the ongoing relevance of Marxist readings of urban political ecology, I show in this chapter how urban political economy serves as an inescapable force influencing land use policy and the decision-making of elected officials. As noted above, in all three cities I investigated, community garden organizations ultimately succeeded in legitimizing urban agriculture as a land use by building narratives that emphasize the potential economic benefits of growing food on vacant lots, a commonality which demonstrates just how strong urban

growth and market logics are as governing principles in US cities. Yet there is more to learn from comparing the commodification of nature across the three cases. The economic rationales for urban agriculture developed along distinct trajectories that illustrate how variations in organizational legitimation strategies, local economic conditions, and state-level political contexts combine in the construction of different discursive frames and physical manifestations of urban nature.

Comparatively, the local governments in Milwaukee and Philadelphia have faced more acute financial strain in recent decades than the City of Seattle. Milwaukee and Philadelphia have both struggled in the globalized competition for urban growth, while Seattle has largely succeeded. Compounding the effects of reduced federal funding, capital flight has limited the public resources available for social services and urban agriculture investment in both Milwaukee and Philadelphia. Many of the cascading challenges and social maladies are similar for all cities coping with capital flight, but Milwaukee and Philadelphia have diverged in how they construct the role of land in reversing the city's fortune. In Milwaukee, land is a lifeline that needs to be reserved for potential property tax revenue, while in Philadelphia, land is a liability that has burdened the city budget and deterred development. In Seattle, where the local growth coalition has been winning in the competition to attract capital and the creative class, land has served as a selling point for the city's livability. The City of Seattle currently has the most public resources available to invest in its community gardens—but upon close inspection, the benefits still accrue unevenly.

Land as a Lifeline in Milwaukee

In Milwaukee, civic conventions that support bottom-up governance facilitated the communication of resident desires regarding urban agriculture, including access to vacant lots and public resources to improve existing projects. As much as city officials are receptive to resident desires and cognizant of the multiple potential ways that urban agriculture works to meet these desires, the scale of poverty in Milwaukee—and legal limitations imposed by state laws—make it difficult for the municipal government to provide consistent financial support for community gardens and similar resident-led initiatives. Facing a severely constrained budget and compounding social problems caused by capital flight and economic decline, the City of Milwaukee is essentially caught doing triage as it attempts to address pressing social problems and attract new investment to regrow its tax base and the economy.

Like many cities in the Midwest, Milwaukee has struggled to maintain its economic base with the decline of American manufacturing. In every decade since 1960, the city's population has decreased, with the most precipitous contraction between 1970 and 1980 when the city lost 11% of its residents. It was during this time that in Milwaukee, as in many other American cities, community gardening received a surge of attention as a strategy to help residents feed themselves amid rising unemployment and higher food costs. Unemployment and poverty persist as major problems in Milwaukee today; the poverty rate is over 25%, and while the unemployment rate has moderately improved to a little under 7% in 2021, the rate for the city's Black population is almost twice as high (World Population Review 2021). With the decline of the manufacturing sector and inadequate access to transportation, many in

Milwaukee—especially on the Near North Side, with the highest concentration of Black residents—cannot commute to what jobs are available (Powell 2019). High unemployment and concentrated poverty have brought on a host of problems including food insecurity, poor health outcomes, crime, and housing instability (Ghose and Pettygrove 2014, Desmond 2016, Loyd and Bonds 2018). These problems, most acute on the Near North Side but present throughout the city, are at the front of the agenda for city decision-makers. As one official explained:

> "The City of Milwaukee is not Pleasantville. The Common Council—you can always argue about priorities, but frankly, we added 5 children under 5 killed in the last month, by gunshot. The Common Council's focus is not on creating new community gardens right now." (Interview M08)

Officials want to satisfy resident demands for food access and quality of life measures, but with their budget so strapped and other pressing concerns such as crime and unemployment, community gardens are just not the highest priority for public funds.

The city's shrinking population and stagnant economy have also put acute strain on the municipal budget, which has relied on various financing strategies to cover necessary expenses. In 2018, the City of Milwaukee had over a billion dollars in outstanding general obligation debt (City of Milwaukee 2019). Due to their high debt load and severely constrained options for revenue-generation, ratings agencies downgraded Milwaukee's credit in 2020 (Shields 2020, Jannene 2020). The city is faced with financial pressures to fund schools, maintain public services, and reduce crime, all while convincing creditors they will be repaid and convincing potential employers to bring their business to Milwaukee.

The City of Milwaukee is limited in the public resources it can devote to urban agriculture not only because of the city's economic conditions, but also because of tax laws

dictated at the state level. Wisconsin initiated a "shared revenue" program in 1972 with the goal of ameliorating property taxes and distributing state income taxes in such a way that communities with similar property tax rates would receive similar per-capita revenue (Griffin, Klippel, Maguire, and Riggs 2006). Under this program, the state prevents cities from levying their own income or sales taxes, while capping the rate at which local property taxes can be increased (Henken, Day, Moeser and Juarez 2017). In keeping with the neoliberal trends of devolved governance and shrinking public revenues, in 1995 Wisconsin removed the redistributive rule for shared revenue and then in 2001 lowered the per-capita payments to municipalities (Griffin et al. 2006). Since these changes, the state's payments to cities have decreased by 47% (Wisconsin Budget Project 2019). Because of the state's tax laws, compared to other US cities Milwaukee is incredibly dependent on property tax revenue to support its budget. According to a report by the Public Policy Forum, property taxes constitute 96% of the local tax revenue in Milwaukee; none of its 38 peer cities in the US reach even 75% reliance on property taxes. As noted earlier, Milwaukee is deeply in debt with its creditworthiness declining. The City has had to scrimp dramatically to stay within its budget; they simply do not have revenue available for much beyond necessities (Dirr 2020). As one city official explained:

> The City of Milwaukee budget is insanely tight… The Common Council gave a quarter million dollars for beautification in the last two years. And some of that's gone to community gardens, some of it's going to just neighborhood beautification. It's all resident-driven… Point being, that quarter million dollars, that's two police officers. That's the way we look at money in this city… If you expand something, that's a job or two. City Hall staff or a firefighter or we're closing a fire station. It's zero-sum. (Interview M08)

In the context of such stringent budget conditions, allocating any money at all to develop community gardens indicates that city officials value the potential benefits they can provide. At

the same time, since property taxes are virtually their only option for increasing badly needed revenue, city officials in Milwaukee are especially averse to giving any properties over to non-revenue-generating uses like community gardens.

With the city confronting social and fiscal crises associated with its "losing" status in the global competition for urban growth, urban agriculture organizations have not devised or pressed for any sweeping policy to make community gardens permanent. Throughout my analysis, Milwaukee interviews and documents did not include any instances of *questioning the value of development* of urban land. City officials, garden program leaders and other urban agriculture advocates have always seemed to be on the same page about the need to put vacant land back into commercial or residential use. In some instances, gardeners and garden advocates have sought to protect a particular garden from being replaced by housing or commercial development, but they have never contested the need for more economic development overall. In fact, in addition to city officials interviewed, one of the pro-garden policy advocates and one of the program managers I interviewed expressed support for gardens remaining a temporary use, if the gardens could be replaced with something that offered more employment and economic potential. As the policy advocate put it, "if someone said 'we're gonna put up decent affordable housing here' or 'we're gonna put in a new local business' I think people would be okay with that… maybe I'm wrong, but the city needs so much" (Interview M07). The need for economic development and employment is so great in Milwaukee that it has structured advocates' arguments for community gardens as well as the public resources the city has invested in urban agriculture.

The prominence of Milwaukee's economic woes shaped the discourse about urban agriculture in another important way as well: Milwaukee's garden advocates emphasized the employment potential of urban agriculture. In my analysis, codes for *employment* and *leadership development* were two of the top 10 touted benefits of urban agriculture in the interviews and documents analyzed from Milwaukee. These codes were not in the top 10 for either Philadelphia or Seattle, and the code for *leadership development* in Milwaukee was often used in the context of youth programming, while only one reference in Seattle and one reference in Philadelphia highlighted the potential for garden programs to cultivate leadership among the city's youth. In contrast, in Philadelphia the code for *leadership development* was commonly used for descriptions of how Philadelphia Green trained residents to organize their neighbors in support of building a community garden, while in Seattle it was most often used in the context of volunteer recruitment to help run the P-Patch nonprofit. Milwaukee documents and interviews clearly placed the strongest emphasis on the job-training potential of community garden programs.

While urban agriculture is not the city's top priority, given other pressing problems and limited public resources, city officials do appreciate the value of community growing space as a way to address resident priorities around vacant lot cleanup and food access, and especially for the job training and employment potential that advocates have long emphasized. A city official described social benefits he saw in one local community garden program:

> "[The garden] gets children, young adults and children as well, there's a local gentleman who's organized that. And he'll pay them a certain amount of money, and they all go out and do a neighborhood cleanup. And he tries to teach life skills at the same time as money management, it's great." (Interview M15)

Despite their general reluctance to allocate land for permanent gardens, city recently did sell vacant lots to this particular program for its community garden and gathering spaces, recognizing the public good that the program is accomplishing in a neighborhood with significant need (and very low development pressure).

Because urban agriculture has been legitimized as a land use and city leaders appreciate potential benefits that the gardens provide, officials have helped gardeners find funding where possible. In addition to the funding from CIP grants described in chapter 3, the Common Council has allocated over $600,000 for beautification and food access initiatives in recent years, some of which has been used to support community gardens. Given the city's dire fiscal situation, such an amount of money that indicates the impact that urban agriculture organizations have made on the city's priorities. Without the resources to provide more from the municipal budget, supportive city officials have partnered with other organizations in the region to leverage additional funding for Milwaukee's community gardens and other greenspaces.

One source of funding is directly tied to the notion of urban agriculture as a source of employment. In partnership with the county's federally funded workforce development office, Employ Milwaukee, the City of Milwaukee runs a summer youth employment program called Earn & Learn. Employ Milwaukee pays the wages for young people ages 14-24 who work for local government, nonprofit, and faith-based organizations and gain marketable skills in the process (Employ Milwaukee 2017). Groundwork Milwaukee and some individual community gardens participate in Earn & Learn, employing youth to maintain gardens and other greenspaces or to prepare and sell food from local urban farms. The organizations could not afford to pay the youth from their own budgets, but they are able to supervise them and

provide job training that is considered a valuable workforce development experience by the county, the federal government, and the corporate and philanthropic donors that support Earn & Learn. As governments have reduced their own budgets and the scope of social service provision, the Earn & Learn program is typical of the kind of public-private partnerships that are expanding as the public sector becomes increasingly reliant on nonprofits to fulfill a public service. Furthermore, the fact that "workforce development" is considered a public service at all (rather than an investment that corporations make directly by training their own employees) demonstrates the restructuring of relationships between the public, private and third sectors that has occurred through the influence of neoliberal ideology. With limited resources for the public services of food provision, urban beautification, and community programming, the City of Milwaukee seems to be doing what it can to support these areas as an ancillary benefit of the Earn & Learn workforce training, which is ultimately funded to benefit the private sector.

The City of Milwaukee has found another financially motivated partner to support community gardens and other open space investments in the Milwaukee Metropolitan Sewer District (MMSD). Like 850 other municipalities in the US, Milwaukee uses a combined sewer system which drains stormwater along with sewage and industrial wastewater, creating the risk for sewer overflows during heavy rainfall that presents a "priority water pollution concern" for the federal government (US EPA 2021). Due to climate change, the Great Lakes region is facing an increased likelihood of heavy rainfall events—and therefore more frequent combined sewer overflows (US EPA 2008). Because of the potential for being fined by the Environmental Protection Agency (EPA) when overflows occur, local water utilities with combined sewer systems, especially those in the Great Lakes region, have a serious financial interest in

increasing their capacity for stormwater management. Working in partnership with the City of Milwaukee, the MMSD and the Fund for Lake Michigan have invested billions of dollars to expand both "grey" and "green" infrastructure for stormwater management—not only increasing the capacity of pipes and underground storage tanks, but also adding trees and bioswales and preserving open spaces so that more rainwater can be absorbed into the ground rather than flowing into the sewer system. In 2019 alone, MMSD spent $5 million from its capital budget on green infrastructure (Alliance for the Great Lakes 2020).

In the last two decades, MMSD has supported garden improvement projects such as the installation of rainwater catchment and cisterns at numerous gardens in the city. In the process of restoring the Kinnickinnic River, MMSD has partnered with the Sixteenth Street Community Health Center to operate community gardens along the greenspace that will become part of the river basin. The City also contracts with Groundwork Milwaukee to maintain green infrastructure as part of its youth employment work, and on the City's "Green Infrastructure" webpage they highlight Groundwork's network of community gardens as a stormwater management asset (City of Milwaukee 2016). Of the many potential benefits that community gardens offer, stormwater management is neither the most celebrated in the media nor the most sought after by gardeners themselves; nevertheless, it has become an important angle for funding community gardens in Milwaukee (and beyond).

The share of resources that urban agriculture attracts for its value as green infrastructure, relative to the resources it receives for its other potential benefits, may seem puzzling given that this is not one of the main benefits for which urban agriculture has gained legitimacy as a land use. Understood through the lens of urban political ecology, the outsized

role of green infrastructure as a funding mechanism for urban agriculture highlights how all social processes exist within a material environmental system, and fundamental ecological limits on this system cannot be ignored. When it rains, the water is going to go somewhere. If an urban environment has too much impervious surface, the rainwater will cause flooding and, in cities with combined sewer systems, overflows of sewage and industrial wastewater. The health and economic consequences of water flows then become too large for social actors to ignore. While it may be tempting to view this dynamic as evidence of nature asserting its dominance over humankind, the social response has been to further commodify nature and attempt to bring ecological processes into line with economic relations (Heynen et al. 2006). The massive fines that the EPA levies for combined sewer overflows demonstrate how political entities are attempting to price in ecosystem services to keep the capitalist economic system functional, in spite of its inherent tendency to deplete and degrade ecosystems (Heynen, Kaika and Swyngedouw 2006:3). For community garden advocates, stormwater mitigation presents a convenient multifunctionality that helps bolster the economic value of urban agriculture, at least in combined sewer overflow cities in the US context. Ultimately, funding community gardens as stormwater mitigation is another example of how urban agricultural spaces are largely surviving through the ongoing commodification of nature and advocates' amplification of arguments that conform with market logic.

In Milwaukee's tight fiscal context, city officials do not play an active role in expanding the city's community garden network. As reflected in the urban agriculture policies that have passed and the way that city officials talk about gardens, they can mainly envision meeting the public demand for more cultivation on vacant lots through *commercial* urban agriculture.

Describing the reasoning used to convince Common Council to approve zoning changes for urban agriculture, one city official explained:

> Well you're looking at the zoning code… where there might be road blocks to people having successful community gardens or if somebody wants to do a commercial farming enterprise in the city, how would they do that, and how can they *not* do that with the zoning code? And you know, 'these are the changes that we need to make that will help people pursue the legitimate enterprise that they want in the city and allow them to you now meet the rules, so let's make the rules accommodate what people want and need to do.' (Interview M16)

City officials value supporting residents in pursuit of their interests, especially when those interests are in commercial enterprises. Chapter 3 discussed the city's general reluctance to sell vacant lots for community gardens, due to their commitment to collecting property tax revenue from the sites sometime in the future. While the city is far more willing to sell vacant land cheaply for commercial urban farming (which remains taxable), they have found their portfolio of parcels is not conducive to commercial-scale urban agriculture. As one city official explained:

> Our vacant lots are 90% disaggregated, so aggregation of space to create a sufficient-size farm has probably been our biggest challenge… Said simply, we don't have 1.5 or 2 acre or 3 acre or 4 acre sites within the city, so a local farmer can grow food inside the city of Milwaukee at scale. I can offer them 15 vacant lots that may be within 2 blocks of each other – that we have. (Interview M08)

Part of the organizational environment in which the City of Milwaukee operates is a legacy of landownership in which public acquisition of distressed properties has occurred as an ad-hoc process over decades of economic decline and disinvestment. Without the resources to purchase and assemble large enough tracts of adjacent lots, the city's vision for economic uplift through commercial urban agriculture—developed in part because of the framing and legitimation strategies pursued by the city's main gardening organizations—is unlikely to be fulfilled. For the City of Milwaukee, its landholdings remain a lifeline for potential future

revenues, but urban agricultural spaces that don't pay taxes won't fill this need, and therefore the city opts to retain ownership of community garden sites in the hope of future development.

Overall, while Milwaukee has civic conventions conducive to resident input and city officials see urban agriculture as a legitimate use of land for several of its benefits, this receptivity and appreciation has not translated into many land sales to gardeners or consistent investment in the city's gardens. Milwaukee has been struggling to reestablish its competitiveness in a globalized competition for urban growth, while being subject to state policies that have severely constrained the city's budget. As a result, the city's economic and budgetary conditions limit the local government's options for investing in urban gardening initiatives. The investments the city has made have largely emphasized commercial urban agriculture and job training rather than the resident self-provision, community-building, and recreational benefits of community gardens (even though city officials understand and appreciate these potential benefits). The roll-back component of urban neoliberalization has manifested in Milwaukee as fewer resources from the state government and fewer options for the city to raise its own revenue. To minimize cuts in municipal services, the city must rely on land-use intensification even more than most other cities do, and therefore it cannot afford to give up potentially developable sites for long-term use as community gardens. Milwaukee's existing community gardens have gained legitimacy in tandem with the elevated profile of urban agriculture in the city, but most of them continue to operate on temporary use permits, which means they could face removal at any time. Thus, while urban agriculture has as much legitimacy as a land use in Milwaukee as it does in Philadelphia and Seattle, the city's community gardens overall remain the most vulnerable.

Land as a Liability in Philadelphia

In Philadelphia, as in Milwaukee, extreme poverty and an eroding tax base are critical concerns within the local political economy that constrain possibilities for public investment in gardens. Like Milwaukee, Philadelphia has struggled to recover from economic setbacks brought on by capital flight and globalization, but Philadelphia differs in the primary ways that land has figured in its political-economic problems—and the ways that urban agriculture has figured in proposed solutions. As the City of Philadelphia has worked to regrow its economy and resolve strain on the city's budget, land has come to be seen as a liability due to the scale of tax delinquency and the staggering number of vacant parcels that the city has had to deal with. My analysis shows how PHS was instrumental in distilling this land-as-liability narrative and involved in advocating for a land bank to address the issue. Describing the land bank advocacy, resulting policy, and its ultimate impact on gardens, I reveal how Soil Generation's framing for urban agriculture has fundamentally diverged from PHS's and informs robust organizing that maintains pressure on city officials as a counterpoint to the forces of financial constraint and growth interests influencing land bank implementation.

Philadelphia has suffered from the same processes of white flight and deindustrialization that have contributed to budget crises in Milwaukee and many other US cities. As the loss of manufacturing jobs impacted urban centers in the US, Philadelphia's population declined from over 2 million people in 1950 to 1.5 million in 2000. As in Milwaukee, the steepest contraction occurred between 1970 and 1980, the same decade that the city's major community gardening programs were launched. Unlike Milwaukee, however, the city's

population has begun to increase again. After a slight increase from 2000 to 2010, Philadelphia saw 5% population growth between the 2010 and 2020 Censuses. While the population has started to rise—an indication that Philadelphia may be starting to "win" again in attracting the key elements needed for economic growth—Philadelphia is still afflicted by high levels of poverty and unemployment. Nearly a quarter of the city's residents live below the poverty line, and median household income is less than $46,000 a year. The unemployment rate in 2021 was over 9%, with even higher rates for the city's Black population (though the racial disparity is not as extreme as in Milwaukee).

Just as Philadelphia and Milwaukee have similar economic problems, they have both faced budget challenges that threaten essential city services. Philadelphia has a large debt load: in 2018, general obligation bonds totaled $1.6 billion and the city's overall debt through 2047 stood at $5.5 billion (McGoldrick and Vargas 2018). The School District of Philadelphia does not have taxing authority or an elected school board; instead, it seeks funding annually from the city and state, who appoint the five-member School Reform Commission that governs the district. In 2013, just as City Council was considering the Land Bank bill that will be the focus of this section, the school district's financial woes reached a crisis point (Caskey and Kuperberg 2014). Digging $50 million deeper to make up for cuts in state funding and keep their schools staffed, City Council's protectiveness over property tax revenue was heightened at this moment (Caskey and Kuperberg 2014). The school budget crisis played a role in shaping how the Land Bank would ultimately function, and the significant consequences for the city's gardeners will be discussed more below. As in Milwaukee, the budget crunch from an eroding tax base means

that public resources are barely covering essential city services, making investments in urban agriculture less of a priority than they might be if the city's revenue was greater.

In Philadelphia, the city's status as "losing" in the global competition for urban growth became physically evident across the built environment in the form of vacant lots. Due to high levels of tax delinquency and property abandonment, Philadelphia accrued around 40,000 vacant lots, creating pockets of blight that have invited crime and further drained municipal resources. By comparison, Milwaukee has around 3,000 vacant lots; Philadelphia has 1.4 times the land area and 3 times the population of Milwaukee, but 13 times the number of vacant parcels. The problems associated with vacant lots weigh particularly heavily on Philadelphia's political economy, and the issue has had a significant impact on the direction of the city's garden programs and preservation efforts, as will be discussed below.

While the undeveloped and abandoned lots are a visible testament to Philadelphia's economic woes, political dimensions of the vacancy issue are harder to see but equally important to understanding the organizational environment in which city officials and urban agriculture advocates operate. The 40,000 vacant lots in Philadelphia form a complex patchwork of used, unused, city-owned, and privately-owned land. In Milwaukee, tax delinquency is resolved through a process called *in-rem* taking, whereby the City simply gains ownership of the abandoned property. In Philadelphia, however, the city doesn't have authority for *in-rem* taking, so delinquent properties remain in private hands, complicating any redevelopment efforts the city might attempt. For a long time, city officials did not even know which lots were privately owned and which were in the city's inventory (and of those, which city agency owned each one). Untangling questions of ownership and use has in itself required

significant time for city staff and garden advocates. Furthermore, gardens that were made visible through advocates' mapping efforts have still been put up for auction despite their supposed visibility; since this has happened repeatedly, gardeners and organizers in the urban agriculture community have understandably become frustrated and suspicious of the disuse—or misuse—of the information they provided. As one organizer explained:

> We also have issues with Neighborhood Gardens Trust helping to provide information on which of these vacant properties are actually community gardens, so there's a cross reference, and that these gardens aren't being sold. We don't know what they're doing with this information, because it hasn't helped. And people are still losing their gardens, or are finding out through, you know, other channels, that their properties are being put up for sheriff sale. (Interview P15)

The City's poor documentation of landownership and failure to prevent known gardens from being sold off reinforces the local civic convention of cynicism—not only cynicism toward an ineffective government, but also toward the professionalized nonprofits such as the Pennsylvania Horticultural Society and Neighborhood Gardens Trust that some gardeners and organizers associate with a system they see as working against the interests of the poor and residents of color.

The complexity of lot ownership in Philadelphia has hampered advocates' efforts to preserve community gardens in direct ways as well. Moving through the built environment, adjacent vacant lots appear as one. However, as gardeners and their advocates have found out when they attempt to buy the land on which a garden sits, adjacent lots often have different owners. Thus, on top of the financial expense, acquiring land often involves navigating a complex and opaque bureaucratic process that may still only save part (or parts) of a garden. As a professional working at one of the preservation-oriented nonprofits explained:

> I'm a professional, I'm white, I know how to talk to landholding [agencies] – like you could come up with a list of characteristics about me that may give me some advantage or privilege. Like, [speaks slowly] I've been able to figure some of this stuff out, and get them on board, and get everyone kind of moving in the same direction. The problem is that not everyone is in that situation. And the city does not have a transparent, accessible process for people to acquire land or get a lease or legal access. It takes like a super human to figure it out. That includes the gardeners who find their lease up and get their council people to buy in and fundraise, and – it takes years, and it's an up-and-down experience. It seems so easy to give up. Like how many calls can you make to the same city bureaucrat before you get discouraged and throw up your hands? People, it takes a tremendous amount of determination. And savvy, and some good luck, and you know, it's not easy. It's an uphill battle. And I think for lower income communities and communities of color, it's even more of a challenge. (Interview P14)

Because every garden's ownership configuration is unique, preservation efforts are a lot-by-lot struggle requiring separate labor for each garden. The larger the garden, the more complex the land acquisition is likely to be—and this complexity presents additional bureaucratic barriers. In effect, the complexity of vacant lot ownership in Philadelphia compounds racial and class inequalities by advantaging professional land-seekers who have the time, knowledge, social capital, and skill set required to navigate the city's cumbersome bureaucracy.

Preserving gardens that sit on multiple lots is especially difficult if any of the lots have privately held tax liens. In 1997, to raise badly needed funding for the school district, the City bundled tax debt from more than 30,000 parcels and sold it to US Bank. However, when debt collection didn't bring in the expected revenue, investors sued the City for over $40 million that it has not been able to pay (Butkovitz 2013). Properties with US Bank liens have been gradually sold off for development, but close to 3,000 parcels remain in private-lien limbo. As Garden Justice Legal Initiative attorney Ebony Griffin testified to the City Council Housing Committee, around half of the inquiries that her office gets for garden preservation include parcels with a US Bank lien (Griffin 2019). While Griffin has trained an army of lawyers in the city to represent

gardeners pro-bono, law firms won't take the cases with US Bank liens in order to avoid a conflict of interest with the bank. Furthermore, buying a parcel with a private lien costs three or four times as much as the original lien—quite often a sum more than the property itself is worth—due to penalties and interest imposed by the bank (Melamed 2021). Gardeners seeking to purchase these lots are confronted with exorbitant costs and scant assistance, all because of a failed financialization experiment that has ultimately frozen thousands of properties across the city in vacancy and impeded revitalization efforts for entire neighborhoods.

The depth of the vacant lot problem helps explain why the Pennsylvania Horticultural Society (PHS) worked to maintain legitimacy for its Philadelphia Green program as a strategy for addressing urban blight. In analysis of documents and interviews, I applied the code for *vacant lots* to data from Philadelphia twice as often as that from Milwaukee, and more than four times as often as that from Seattle. As explained in chapter 2, orienting Philadelphia Green toward cleaning up vacant lots helped PHS win contracts with the city that provided a stable funding source and a positive narrative to share with their membership. However, for the city's community gardeners, this orientation has imposed limits as much as it has helped to legitimize gardens as a use of vacant lots. Through their association with PHS's "clean-and-green" treatment, the gardens are seen as a temporary strategy to address blight until development comes along. This view ignores the reality that very different people work to maintain the clean-and-green lots—paid landscaping crews—than those who build and maintain community gardens—local residents volunteering their own time to improve their surroundings, increase neighborhood social cohesion, and grow food for themselves and others. When a clean-and-green lot is sold and developed, the landscaping crews likely do not notice; according to a PHS

employee interviewed, the crews are dispatched to roughly 13,000 vacant lots across the city each year. In contrast, when a garden is sold, those who have invested their time and labor into the garden will certainly feel its loss. Framing neighborhood greening as a solution to blight and a strategy for economic development helped PHS garner resources that have contributed to building community gardens across the city, and the organization has helped legitimize urban agriculture by their promotion of Philadelphia Green. However, when the city's problem is framed as one of blighted vacant lots, community gardens can be seen as a temporary fix and will not be automatically prioritized among the range of solutions, despite offering many other benefits that can simultaneously address different dimensions of the city's problems in addition to blight.

Having experienced the city's tangled land ownership, patchy records and hazy bureaucracy in their efforts to preserve threatened gardens, urban agriculture advocates had hoped the creation of a Land Bank would streamline the process in a way that would speed garden preservation in the face of rapid gentrification. Beginning around 2010, housing developers, community groups, urban agriculture advocates and others interested in Philadelphia's land disposition process began organizing to pass a land banking policy. Two coalitions formed: the Land Bank Alliance (LBA), made up of design, construction, community development and realtor industry associations, the environmental advocacy group PennFuture, Regional Housing Legal Services, the Sustainable Business Network, Pennsylvania Horticultural Society, and the Public Interest Law Center of Philadelphia. Another group, the Coalition to Take Back Vacant Land (CTBVL), was led by a North Philadelphia community organization called the Women's Community Revitalization Project and included numerous faith, community

development, social justice, urban agriculture, and labor organizations. While the LBA was constituted of entities more closely associated with the typical centers of power in growth coalitions, the breadth of constituencies sharing a common goal in this effort highlights how widely shared urban growth goals tend to be, despite the uneven share in returns on growth (Logan and Molotch 1987). The LBA and the CTBVL worked toward the same goal of establishing a land bank that would consolidate the city's vacant property holdings and streamline its disposition process. According to development professionals interviewed who were active in each of the groups, the LBA emphasized insider strategies to advocate for the land bank in private meetings with elected officials, while the CTBVL used an outsider strategy by mobilizing large numbers of people to pressure key decision makers—in this case the members of city council who would put forth and vote on the Land Bank bill. Characteristic of their respective organizational orientations, PHS participated in the LBA while Soil Generation participated in the CTBVL. The Public Interest Law Center's Garden Justice Legal Initiative was a member of both coalitions.

While the interests of their member organizations were slightly different, both coalitions framed the need for a land bank in essentially the same way, amplifying a narrative that PHS had been constructing for decades. As PHS contracted to green vacant lots throughout the city in the 1990s, they developed and helped disseminate arguments for the city to invest more in urban greening. They collaborated with local researchers and the Pew Charitable Trusts to produce *Urban Vacant Land: Issues and Recommendations*, a 1995 report that highlighted their successes in greening vacant lots and also stressed the need for city agencies to "simplify and depoliticize the acquisition process by establishing public policy that supports the transfer

of city-owned vacant land into community or private ownership" (Pennsylvania Horticultural Society 1995). Reiterating these findings, PHS's 2000 *Managing Vacant Land* report advocated for the creation of an "Office of Vacant Land Management" within the Redevelopment Authority (Pennsylvania Horticultural Society 2000), and the 2002 *Reclaiming Vacant Lots* report was published as a technical manual for anyone looking to repurpose vacant lots that highlighted the work that PHS had already accomplished in collaboration with community groups across the city (Pennsylvania Horticultural Society 2002). Through these reports and other communications at the time, PHS framed the city's vacant lots as public problems that could become assets if community groups and developers faced fewer barriers to access and ownership. Similarly, in 2010, one of PHS's collaborators in the Land Bank Alliance, the Philadelphia Association of Community Development Corporations, commissioned a report that found the city was spending $20 million a year to maintain vacant lots, while losing $2 million annually in uncollected property taxes as the blighted lots dragged down overall property values by an estimated $3.6 billion. Prominent voices from both the housing and greening constituencies highlighted the same issues, framing vacant lots as an economic drag that could be lifted through government reorganization.

Both of the land bank coalitions argued that with 40,000 vacant lots around the city, some could be preserved as gardens and open spaces while others could be developed into housing at various price points. The abundance of vacant property made possible a shared vision among groups who might otherwise have been competitors, but who instead were all in agreement that the city's process for land disposition was too slow and uncoordinated. The

details of who would acquire what land did not need to be worked out until the Land Bank bill was passed.

With the widely representative coalitions calling for change and a relatively large constituency mobilized, the Land Bank bill made it into the public discourse and onto the legislative agenda. Newspaper coverage was largely supportive, although skeptical of a provision in the bill that would codify the tradition of councilmanic prerogative (that is, explicitly giving district councilmembers the power to assent or object to any proposed sale in their district). Articles and editorials frequently cited the $20 million annual maintenance figure, which worked to underscore the economic inefficiency of letting so much land go unused and the liability this land had become for the city government. In October 2013, when the Land Bank bill got its hearing in the Committee on Public Property and Public Works, attendance overflowed. A reporter covering the event was practically giddy over the unusual show of civic participation, writing:

> That crowd was a beautiful sight - one of the most beautiful things I've seen since moving here and noticing the dreaded Philly Shrug. People just looking on while a cop gets his butt handed to him by a fare-evading mope, that's the Philly Shrug. People watching an obviously incompetent building demolition day after day until it collapses and kills six people. That's the Philly Shrug. On a daily basis, the crime and litter and overall B.S. so many of us get so used to that it doesn't even faze us anymore - that's the Philly Shrug that's ruining the city. Philadelphians shrug off all kinds of things. Corruption, crime, litter. But nothing - nada - says Philly Shrug the way blight does. Because blight begets vandalism and crime and apathy that infests a neighborhood and a city. (Ubinas 2013)

While lamenting the apathy in Philadelphia's cynical civic conventions, this reporter simultaneously echoes the framing of the vacant lot problem that PHS was disseminating for years through its research collaborations: land left unused was a source of crime and depreciation, but this trend could be reversed through better maintenance that would

simultaneously discourage crime, increase property values, and build a sense of community ownership among those in the neighborhood. This vision—the potential for people to see their neighborhoods improve and appreciate while realizing the uses they wanted—is part of what brought so many residents out to the Land Bank bill hearings. But this vision, like the breadth of the coalitions supporting the land bank effort, elided the contradiction in increasing property values and building a sense of ownership for the existing community.

At the end of 2013, Philadelphia City Council passed the Land Bank bill, and Mayor Kenney signed it into law in January 2014. The bill established the Philadelphia Land Bank, which was given the charge of consolidating land held by other city agencies "with due speed and diligence" and making it available to the public "through a unified, predictable, and transparent" disposition process (City of Philadelphia 2013, pg 3 ss 16-703 and ss 16-705 (1)). The Land Bank is explicitly permitted to sell land below market value if the property is to be used for community benefit, defined to include "affordable or mixed-income housing… economic development that creates jobs for community residents; community facilities that provide needed services to residents; side and rear-yards; innovation in design and sustainability; urban agriculture; [and] community open space" (City of Philadelphia 2013, pgs 7-8 ss 16-708 (2)). The bill sets out the structure of the Land Bank Board, and in addition to the charge of land acquisition and disposition, the law requires the agency to 1) maintain and make publicly available a map of all properties available for sale; 2) post notices and take public comments on proposed sales; 3) submit an annual strategic plan with neighborhood-level needs assessments, market analysis, and mapping of vacant lots along with five-year goals for acquisition and disposition; 4) hold a public hearing before adopting its annual strategic plan;

and 5) keep track of whether properties sold below fair-market value are put to the use for which they were sold. In proposing its five-year goals every year, the Land Bank is supposed to align these goals with the city's Comprehensive Plan and also to "encourage equitable redevelopment" by defining targets for the various community benefits—including urban agriculture (City of Philadelphia 2013, pg 9 ss 16-709 (3)(c)). Critically, the bill does not provide dedicated funding for the Land Bank to fulfill these numerous required functions, but it does allow for flexible financing and explicitly states that the agency can use the money from selling properties in order to fund its operations. In the process specified for the Land Bank to sell properties, a resolution by City Council is still required for each transaction.

The passage of the Land Bank bill was celebrated as a victory by Philadelphia's urban agriculture advocates, but they were quickly disillusioned and confronted anew with the strong political-economic headwinds in the city. Given Philadelphia's tight budget, councilmembers did not robustly fund the agency; instead they allocated only $500,000 for the agency's first year (Joseph 2014). Without a budget big enough to provide for its sprawling mandate, the Land Bank was slow to get up and running and even slower to respond to the many Expressions of Interest submitted by community groups seeking to buy land. As a professional working at one of the preservation-oriented nonprofits explained in 2018:

> I think a lot of it is the understaffing, they don't have a lot of people working there. And they have a lot of budgetary constraints. And they just haven't figured out a lot of stuff. Like there's a lot of legal red tape that they have to go through to get stuff transferred…. As of right now, you put in an Expression of Interest on a plot of land, it's just this black hole and you don't know, and you're calling trying to get in touch with people, and people aren't answering the phone. (Interview P08)

Even four years after the Land Bank was established, it had dispensed very little land for community uses. Being so underfunded, in order to cover administrative costs and generate the

revenue to acquire more land, the Land Bank needed to prioritize selling properties at market rate early on—despite its charge to set Strategic Plan goals prioritizing affordable housing and other community benefits. Garden advocate Lauren Troop, whose community finally succeeded in preserving the César Andreu Iglesias Community Garden through the Land Bank in 2021—after fending off a Land Bank-backed plan to develop housing on the site instead—commented after the process:

> Their mission is to get land so it's not all developed at market rate and to use some for community uses. It's like we're in this stage of capitalism where these city government arms have to be privatized and make their own money. It's like you might as well not even have them. (quoted in Briggs 2021)

Gardeners, affordable housing advocates, and other community groups who had fought to establish the Land Bank have been frustrated by the lack of results. As Lauren Troop's comment suggests, the era of neoliberalization manifests in government agencies that operate more like private-sector entities, following a market logic that tilts against the interests of poor residents seeking use value from vacant neighborhood land.

In addition to the Land Bank's underfunding, the city's dire finances reduced the agency's efficacy in another critical way: the Land Bank was not empowered to wipe debt from tax delinquent properties. While publicly owned parcels could be sold for a nominal price to community groups such as gardeners or affordable housing developers, the price of land the city had acquired through tax foreclosure would still include the cost of any liens. As one of the garden preservation professionals explained:

> The challenge that we're running into is that it's expensive, because there's legal fees, but also the city made an agreement with itself [laughs wryly] where there's an MOU between the Land Bank and the Department of Revenue, which says that when the Land Bank acquires a parcel, it will essentially make Revenue whole, for the delinquent taxes. So it's kind of stupid, right? I mean I guess it's a way for the city to clear its tax, you

> know, and make the city look better on paper, like for bond ratings or whatever. But it makes every acquisition more expensive. (Interview P14)

Because the City of Philadelphia is an under-resourced organization operating in a financialized environment, where its fiscal balance sheet has a huge impact on the ability to secure funding that may be needed to keep city services running, the City is unwilling to forgive tax liens in order to make land more accessible to community groups. Thus, residents and nonprofit organizations that would put land to use improving life for low-income people are faced with high cost barriers and intense competition from well-financed developers.

In the political campaign mobilized to create the Philadelphia Land Bank, problem framing placed a strong emphasis on the financial drawbacks of the city's large number of vacant lots, and the resulting Land Bank policy was designed in a way that worked to address the vacant lot problem as framed. Urban agriculture advocates, affordable housing developers, churches and community groups got behind the Land Bank bill because it created a pathway for them to obtain land cheaply for community benefit. However, since the Land Bank needed to generate revenue to fund its own operations and was not empowered to zero out tax debt, the new agency worked to facilitate a great deal more market-rate development and fewer community-controlled land uses than many in the coalition were expecting. On the one hand, hindsight may suggest that the social movement framing around financial efficiency was flawed; on the other hand, this framing was effective because it resonated so well with councilmembers and a public concerned about the city's dire economic condition. The Land Bank bill got passed as written, whereas anything more explicitly prioritizing use-value over than exchange-value would have had less support. In this sense, the political-economic realities in Philadelphia constrained the possibilities for enacting a truly transformative Land Bank bill.

Unsatisfied with the Land Bank's early performance, organizers with Soil Generation have continued to mobilize gardeners and their supporters, pressing for the agency to become more transparent and effective. In listening sessions for the strategic planning process, they expressed frustration at the opacity of the Expression of Interest system and the low amount of land disposition to community groups (with only three parcels transferred for community gardens or open space by the end of 2018, and zero transferred for other community uses). When the Land Bank issued a new draft strategic plan in 2019, they acknowledged the frustration that stakeholders like Soil Generation had voiced:

> The length of time it has taken to operationalize the Land Bank, coupled with the long timelines for each acquisition and disposition transaction, has generated frustration from stakeholders, both within City government and the community at-large, who fought hard for the creation of the Land Bank…. There is general confusion about Land Bank activity and operations – how the process is supposed to work, whether it is working, and if not, why not?.... In the absence of widely-shared success stories, there is a perception of inaccessibility…. There is a sense of urgency to get ahead of neighborhood change…. In places where the market is strong or strengthening, communities often fear that they are racing against market forces and losing ground. (City of Philadelphia 2019b)

The 2019 draft report reflects many of the concerns that interviewees expressed about the Land Bank's efficacy, and it seems to indicate the agency is working to improve its function. Compared to the 2015 and 2017 strategic plans, the 2019 draft plan provides far more precise reporting about the ownership of vacant lots across the city, and unlike the previous plans, the 2019 document reports the actual numbers and types of transactions that the Land Bank has completed. These changes suggest that the agency has begun, albeit slowly, to address key political elements of the vacant lot problem in Philadelphia (that is, incomplete records and opaque bureaucratic processes). The Land Bank also published new policies for its land disposition process in 2020, which help clarify what an Expression of Interest does, how fast the

agency will respond to them, and how different kinds of requests are evaluated. The 2019 draft strategic plan and 2020 disposition policies both demonstrate how the urban agriculture movement continues to influence land use planning in Philadelphia.

Toward the end of 2019, the City made another major change to its land use planning in response to organized political pressure and mounting public scrutiny. For years, a Vacant Property Review Committee (VPRC) that was created (and allegedly controlled) by City Council had exercised an additional layer of control over land sales (Blumgart 2019). In the initial process of deliberating the Land Bank bill, Council President Darrell Clarke insisted that the VPRC—along with City Council—would continue to have a say in each land disposition transaction (Vargas 2013). Then this unelected committee was implicated in Kenyatta Johnson's eyebrow-raising land deals, while simultaneously being targeted as unnecessary by campaigners for the more streamlined Land Bank process. In response to the increased scrutiny of the VPRC and ongoing public pressure for a standardized process, in 2019 City Council passed a bill to eliminate the VPRC and consolidate the Land Bank, the Redevelopment Authority, and the Philadelphia Housing Development Corporation (PHDC) into one entity. Eliminating the VPRC was hailed as a way to reduce corruption and standardize land disposition into the more transparent process that the Land Bank had established (Rothstein 2019). With the Land Bank and the Redevelopment Authority consolidated under PHDC and now answering to one executive, in theory they may coordinate land transactions with less friction. However, the PHDC is a private nonprofit corporation rather than a government agency; this means decisions at the highest level of the consolidated organization are exempt from some public transparency requirements. Normal government operations were disrupted during the pandemic, so it

remains to be seen whether this new organizational structure is more responsive, transparent, and/or effective.

Furthermore, additional changes to the Land Bank may not satisfy critics continuing to call for more disposition to community groups. As part of the 2020 disposition policies, new standards have been set up which allow for a non-competitive bidding process if applicants propose to use parcels for housing development where at least 51% of units will be affordable (Briggs 2021). While Philadelphia definitely needs more affordable housing, the threshold set for "affordable" is 120% of the area median income, or about $73,000 a year. Yet nearly 25% of the city's population lives under the federal poverty line of $12,490 a year (Briggs 2021). No housing under the new policy is guaranteed to be affordable for this quarter of the population, nor for anyone in the bottom half of the income distribution, for that matter. Without guaranteeing that it will go to community uses or housing for those most in need, the Land Bank will likely move property back into use at a much higher rate with the new disposition policy. As their recent documents and public statements make clear, Land Bank officials are attempting to respond to criticism from Soil Generation and other community advocates that the process is too slow. However, they are doing so in a context where few resources are flowing toward community housing and the city's poorest residents, while large amounts of capital are being mobilized for any profitable ventures. Thus, the agency's reforms are limited by economics and market logic that still hold sway over where and at what price it makes sense to develop land.

As it stands in 2021, through the Land Bank and outside of its purview, additional gardens are preserved every year in Philadelphia. These results are achieved through

tremendous effort and expense on the part of gardeners, program leaders, and urban agriculture advocates. However, other gardens continue to be lost under the intense development pressure in gentrifying neighborhoods, and many more gardens still remain vulnerable. Professionalized nonprofits such as PHS and NGT use large donor networks, foundation grants, and insider strategies to nurture political support for urban agriculture and to preserve gardens incrementally. They are no longer active in coalition work to pressure city officials around land use policy change. Soil Generation and the Garden Justice Legal Initiative continue to mobilize and reframe the public conversation around vacant lot disposition, seeking to transform the narrative from one of financial efficiency to one of justice and community control of land. Throughout the implementation of the Land Bank and its biennial strategic planning process, ongoing outsider strategies from these two organizations alongside the Philadelphia Coalition for Affordable Communities (PCAC), a successor coalition of the CTBVL, have accomplished meaningful progress toward more a transparent and community-oriented land disposition process. Political and economic conditions in Philadelphia still present barriers to garden preservation, and well-resourced developers continue to have advantages in securing vacant land, but the organized efforts underway in Philadelphia—especially the work of Soil Generation and PCAC—represent the most radical movement toward structural change in land use policy of any in the three case-cities at this point. If successful, their work will have an impact on the lives of marginalized Philadelphians that goes far beyond the benefits of well-preserved community gardens.

Land for Livability in Seattle

Compared to Milwaukee and Philadelphia, Seattle has had both political and economic conditions more favorable to community garden development and preservation. The economy and the revenue-generating tools available in Seattle created opportunities for the city to fund desired public investments, including gardens. With the city's tech sector thriving, Seattle has been a "winner" in the global competition for urban growth for the last 30 years. In this time, public investments in community gardens, greenspace and other neighborhood amenities have redoubled Seattle's appeal to the "creative class" (Florida 2002). The favorable political economy in recent decades has helped solidify the status of community gardens as a legitimized, permanent feature of the urban landscape. That said, the popularity and security of Seattle's gardens do not ensure that they are providing the potential benefits most needed by the city's marginalized residents.

The strong economy in Seattle has been critical to the expansion of its community gardening program. If the city were facing the kinds of budget crises that Milwaukee and Philadelphia currently confront, open space improvements might not win approval from voters or City Council when tax revenue was direly needed for basic services such as police and schools. Seattle's city budget contracted in 2000 with the bursting of the dot-com bubble, and again in 2008-2010 during the Great Recession. Otherwise, since the early 1990s, the city budget has increased fairly steadily. The growing technology sector has served as a stronger economic base than more traditional industrial manufacturing during this period, in which outsourcing has led to significant economic impacts in cities like Milwaukee and Philadelphia as described above. Seattle faced population loss between 1960 and 1980, including a steep

economic downturn during the "Boeing Bust" when the city's major manufacturer shed thousands of jobs. However, Seattle began to grow again as the information technology sector expanded, with major companies like Microsoft and Amazon headquartered in the area. The city's population grew 4.5% from 1980 to 1990, then 9% from 1990 to 2000 (when P-Patch advocates undertook major efforts to mobilize for the preservation of the city's gardens and parks), 8% from 2000 to 2010, and a whopping 21% between 2010 and 2020. Economic conditions in Seattle differ significantly from the other case-cities: the poverty rate is 11% (compared to 24-25%), and the median household income of $92,263 is greater than that of Milwaukee and Philadelphia combined. A stronger economy and reasonably comfortable city budget have made allocating public resources to community gardens easier in Seattle than in Milwaukee or Philadelphia.

The P-Patch Program is administered by the City, as explained in chapter 2, and public resources have undergirded its entire existence. Seattle has supported gardens as part of its budget since 1973, at first agreeing to pay $950 to cover the property taxes of Rainie Picardo so that his land could continue serving neighbors as a community gardening space. City Council then expanded the program to 10 other sites around the city and took over administration (i.e. collecting applications and rental fees, assigning plots, preparing the sites, ensuring that garden beds were maintained, and handling any disputes or requests from gardeners). For the P-Patch program's first two decades, the city budget allocated roughly $15,000-50,000 to the program for 1-2 staff positions, plowing costs, and money for tools and materials. In 1983—in part due to contracting federal support for local governments that affected all of the cities in this study—a municipal budget crunch forced cuts in the P-Patch program that led to the first

notable site vacancies in the program's ten-year history. With two part-time staff working far more than the hours they were paid for, and significant volunteer contributions to make up the difference, the program survived and continued to add new sites through the late 1980s. When the city was facing budget cutbacks again in 1992, gardeners organized a letter-writing campaign and visited councilmembers to advocate for fully funding the program. Successful in this effort, they received a $50,000 budget *increase* for 1993. For the next 14 years, as Seattle's economy and city budget saw gradual but nearly uninterrupted growth, the P-Patch program garnered increases in staff and funding that enabled them to administer more and more sites. During this period, the program more than doubled in size—from 30 gardens and 2 staff positions in 1993, to almost 70 gardens and 7 staff in 2007. Although the city froze the program staff size during the Great Recession, funding from open space tax levies continued to facilitate expansion in the number of gardens. As of 2021, there are nearly 90 P-Patches reaching across every neighborhood in Seattle. The program is well known and popular, in part because of its expanse and its stable administrative capacity; these features result from the substantial public resources that the City of Seattle has been able to dedicate to the program over the last 40 years.

In addition to the annual budget allocation that supports P-Patch administration, the garden program has been able to expand because of funding from tax levies. Seattle and King County give citizens official decision-making powers in regard to certain tax policies. Washington state allows cities and counties to raise revenue through taxes of different types; many such tax increases require voter approval with turnout requirements and at least 60% support at the ballot. Seattle voters typically see at least one tax levy question on their ballots

every year, either for the City of Seattle or for King County. Not all of these measures receive the necessary 60% support, but since 2000 voters have approved several tax levies related to parks and open space improvements at both the city and county levels. These measures have raised hundreds of millions of dollars for parks and open space, including at least $4 million specifically for the acquisition and improvement of P-Patches. Such an infusion of cash into citywide community gardening efforts has only been possible because a) the P-Patch program is a public entity; b) county and city governments in Washington state have the ability to raise revenue with tax levies; and c) the citizens of Seattle and King County are willing to pay higher taxes in order to improve and secure open spaces. The levy funds have been used for the City to acquire land for P-Patches in high-demand parts of the city (new gardens that are permanently preserved by default because of Initiative 42) and, importantly, levy funds have also been used to enhance existing P-Patches with features such as picnic tables, gazebos, or benches designed to make the sites more inviting for the general public. As discussed in chapter 3, the P-Patch gardeners and program administrators undertook a concerted effort to design community gardens so that they are accessible, usable and therefore valued by the general public. This effort ramped up in 1998, shortly before the first of the munificent open space bonds was approved in 2000, putting P-Patch advocates in a perfect position to apply the flush funding in a way that would yield visible returns for the public at-large. Seeing the benefits of improved P-Patch gardens (as well as other open space enhancements in the area) likely made voters more amenable to approving the next open space tax levy that came before them—a positive feedback loop made possible by the particular political-economic conditions in Seattle.

The City of Seattle was willing to dedicate resources to the P-Patch community gardens in part because of the stable city budget and revenue from tax levies, and in part because of how local garden advocates have framed the value of urban agriculture. In addition to legitimizing urban agriculture as a community-building tool and source of food for those in need, leaders of the P-Patch nonprofit built a narrative around the value of community gardens as an amenity that would keep Seattle neighborhoods green and livable as the city took on more residents. Building off of existing ideas about what made Seattle special, such as its environmental amenities and pleasant neighborhoods, the P-Patch advocates constructed an effective framing for the value of community gardens in contributing to Seattle's place-legacy (Glennie 2020b). As the city grew and neighborhoods densified, community garden advocates argued that the P-Patch program should also grow as a way to maintain residents' quality of life (Glennie 2020c). Essentially, garden advocates used a framing that would appeal to the growth coalition: exchange value could continue to increase along with concession of a relatively small amount of the city's land preserved for use value.

Seattle's garden advocates had constructed this sophisticated narrative by the mid-1990s, and in the early 2000s Richard Florida outlined a theory of "creative cities" that essentially describes the alignment of certain kinds of use value with exchange value. As the US economy is shifting away from manufacturing, Florida argued, continued growth derives from an ascendant group of workers he called the "creative class"—people who work in science, technology, engineering, design, and other knowledge-based sectors (Florida 2002). Because their work is intellectual rather than physical, these individuals are not as tied to particular locations, and they can choose to live in whichever cities they find attractive; in other words,

particular types of use value can serve as a basis for increasing exchange value. The types of use value most important to the creative class include diversity, individual expression, and loose community with many weak social ties (Florida 2003). Indeed, Florida highlighted Seattle as a creative city with all the ingredients to attract the creative class, and the P-Patches are exemplary of the urban character that Seattle was offering: they are filled with art and with all different kinds of people getting to know one another in loose communities (Glennie 2020c). Without having the vocabulary of creative cities, P-Patch advocates in the 1990s framed the value of their gardens for city leaders in terms that align well with attracting the creative class.

While the theory of creative cities appears to offer a resolution to the tension between use and exchange value in urban growth dynamics, in reality the tension is simply displaced. Urban growth entrepreneurs were quick to take up Florida's ideas in their development strategies, and critics were equally quick to decry the downsides (Gibson and Klocker 2004, Peck 2005, Krätke 2011). Florida himself acknowledged that creative cities tend to have higher levels of inequality as the economy is increasingly bifurcated into a creative class and a service class (Florida 2005). People in creative cities who do not belong to the creative class cannot fully enjoy the benefits of its use-value-rich amenities. The increasing exchange value in hip neighborhoods—or, in cities such as Seattle, all neighborhoods—contributes to higher rents and displacement of lower income and marginalized people (Catungal, Leslie and Hii 2009). Furthermore, while creative cities make a show of celebrating racial and ethnic diversity, the reality is often a superficial multiculturalism lacking substantial engagement with institutional racism and the inequalities it produces (Leslie and Catungal 2012). In creative cities, the downsides of increasing exchange value are borne even more heavily by marginalized people.

This diminished use value is just easier for a creative city's more affluent residents to ignore than the traditional downsides of growth such as noise, traffic and air pollution—pervasive downsides that P-Patches help ameliorate for Seattleites.

For the last 30 years, the political economy of Seattle has enabled continued investment that has helped solidify the status of the city's community gardens, but nothing about this political economy ensures that the gardens are providing the potential benefits most needed by the city's marginalized residents—or even that they remain accessible to these communities at all. The city's gardens do produce a lot of food, with some of it directly feeding low-income gardeners in the P-Patch program and other gardens such as the Danny Woo International District Community Garden, which serves primarily Asian-American residents of nearby affordable housing. As described in chapter 3, the City ensured that as its P-Patch program expanded, new gardens accessible to low-income residents were prioritized, and P-Patch gardeners also grow tons of fresh produce for the city's food banks. Food bank donation is a longstanding tradition in the P-Patches, but it is not a requirement for participants and is contingent upon the available time and generosity of current gardeners.

In good years, the total amount of produce donated by P-Patch gardeners exceeds 40,000 pounds; however, as Seattle has become increasingly unaffordable, the number of people relying on food banks has also increased. Even before the pandemic, food banks were distributing more than 22,885,000 pounds of food a year (Bolt et al. 2019). From 2007 to 2011, average monthly visits to food banks in Seattle doubled from 61,401 to 122,197 (Lerman and Haima 2012). The rate of food insecurity in Seattle grew from 7% in 2007 to 13% in 2019 (United Way of King County 2009, Bolt et al. 2019). The fresh, organic produce that flows from

P-Patches to low-income gardeners and other food-insecure Seattleites is not insignificant, but the rate of growth in food bank donations is not keeping up with the rate of growth in rents and attendant growth in food insecurity.

Food provision is one of the key benefits that urban gardens can offer low-income residents, but others matter as well. Low-income neighborhoods tend to suffer from more blight, higher crime rates, and lower neighborhood social cohesion, and gardens have been extolled for their potential to improve low-income neighborhoods along these dimensions. However, if the neighborhoods become unaffordable for low-income people, then those residents have to move, and the neighborhoods' improvements are moot for them. In Seattle, over the last two decades since garden advocates won preservation victories and significant resources to expand the P-Patch program, real estate values have also increased dramatically citywide (Glennie 2020c). Staggering increases in median home values—up 93% from 2012 to 2018—have priced many people out of formerly affordable neighborhoods or out of the city entirely (Reynolds 2018). As one outcome of this extreme housing market, the Laotian gardeners who helped build Bradner Gardens Park in the 1990s can no longer afford to live in the surrounding neighborhood.

Overall, the program has evolved toward benefitting low-income residents (as described in chapter 3) because of its public mission and some of its partnerships, and P-Patch gardeners have long celebrated their racial and ethnic diversity although it does not seem that a lot of effort was put into cultivating leadership from minority communities. The social movement mobilized to prevent program cuts in the early 1990s and preserve threatened P-Patches thereafter was led by gardeners who were active in the P-Patch nonprofit. Unlike the

Pennsylvania Horticultural Society, this organization was seen as a legitimate representative of gardeners' interests, but the movement the organization built was not framed around or led by gardeners of color, immigrants, or low-income people. This movement has been extremely effective at preserving community gardens and ensuring that public resources continue to support these spaces; today, P-Patch advocates quickly organize to protect any sites that become threatened (such as the Ballard P-Patch, which is on land that was privately owned until 2020, or the UpGarden, which had been established as a temporary use on the roof of a public parking structure). The P-Patch nonprofit has many of the features known to contribute to social movement success: skilled and experienced leadership, an engaged constituency, legitimacy in the eyes of decision-makers and the public, and sophisticated framing that resonates with their target audiences. However, this movement has been organized narrowly around preserving the P-Patches—resisting one of the symptoms of unrestrained urban growth, rather than challenging the logic of growth overall or any of its other ill effects. As Seattle real estate values continue to balloon, displacement continues apace, and the framing for preserving P-Patches does not address the detrimental impacts of growth on poor gardeners, residents of color, or others vulnerable to the ongoing displacement.

Conclusion

Evidence from the three case-cities indicates that a local government's ability to support urban agriculture is tied to its economic and fiscal situation. Of course, the status of the locality within the ongoing global competition to attract growth matters for the amount of resources available to invest in urban gardens. Since cities are continuously engaged in this competition,

their status is always subject to change, and potential change in the city's economic fortunes remains a top concern of elected officials and growth elites regardless of the city's current success or failure in attracting urban growth. The history of all three cities shows that framing urban agriculture as a valuable tool to improve or insure a city's economic standing has been an effective strategy for winning favorable policy and public investment.

The appeal to growth interests has taken on different forms in the different economic and political contexts of each city, and in all three cases these economic rationales have consequences for the city's gardens and/or for its marginalized residents. In Seattle, as the city was beginning to experience urban growth due to its strong technology sector, P-Patch advocates refined their efforts to legitimize community gardens by framing them as a neighborhood amenity that ameliorates some ill effects of urban growth, building a case to value gardened land alongside housing and commercial development and furthering the commodification of nature as a selling point for the city's livability. This refined framing presents urban agriculture as a palliative for the alienation from nature and fellow humans that often occurs with urbanization (McClintock 2010). However, it does not address other social impacts of rising property values—particularly the affordability crisis that displaces the city's low-income residents.

In Philadelphia, where economic downturn and disinvestment left 40,000 lots across the city vacant, PHS and other growth coalition members successfully argued that this land was a liability for the city, and that repurposing it for greening (temporarily) would help revitalize blighted neighborhoods and attract new capital investment. They were right; Philadelphia has turned its fortunes around and is now experiencing renewed urban growth, including rapidly

increasing land values and gentrification in some of the city's neighborhoods. With the floodgates opening to capital flows, gardens are getting swept away. Now, Soil Generation and its allies are trying to push back on the commodification of nature as a symbol of investment readiness that can flip vacant land from liability to asset, shifting the focus to the community members who have stewarded these spaces and arguing that they deserve to retain them—an outcome that would necessitate both the gardens and the gardeners being able to stay in place. In order for this to occur, the city's Land Bank must implement its directives in a way that prioritizes community land uses in gentrifying neighborhoods, an uphill battle given the immense amounts of capital held by growth entrepreneurs vying for ownership of these spaces. Soil Generation's ongoing organizing and framing around community control works to put power behind this struggle, and they have accomplished some early victories in framing the Land Bank's mandate and revising the disposition process; however, it remains to be seen what the movement will ultimately achieve in terms of garden preservation and affordable housing.

In Milwaukee, the city is still struggling to win greater capital investment and urban growth, and land is seen as a lifeline for this effort. Urban nature in the form of gardens and farms has been commodified as a tool for training and employing residents, a potential pathway to economic development that can ameliorate some of the worst impacts of capital flight that the city has experienced. Despite its poor fiscal situation, the cash-strapped city government still shows willingness to devote some resources and recruit public and private partners to invest in urban agricultural spaces. However, like PHS's framing in Philadelphia, Milwaukee's commodification of urban nature as training ground and space of economic

production leaves open the ongoing possibility of replacing gardens and farms with any more profitable use that might come along.

Chapter 5: Gardens for All? Assessing Equity in Garden Access

The preceding chapters have revealed how the main community garden programs and proponents in each city highlighted some of urban agriculture's potential benefits over others, influencing the priorities for how community gardens were developed and managed over time. In addition to assessing what benefits community gardens are providing to surrounding neighborhoods, we can better understand their impact on a city by investigating where community gardens are located, and thus to which neighborhoods their benefits are accruing.

As noted throughout this study, many of the benefits for which community gardens are celebrated are particularly important for low-income communities and marginalized racial and ethnic groups. The free or low-cost fresh produce these spaces can yield will matter most for food-insecure households, often associated with high-poverty neighborhoods and those with a higher proportion of Black and/or Latino residents (Meals 2012, Hoover 2017, LeDoux and Conz 2017, White 2017). Urban blight, crime, and inadequate greenspace are also more common in neighborhoods with these characteristics, so the value of community gardens as safe, attractive, and healthy greenspace is also especially salient in such areas (Martinez 2010, White 2011). Community gardens can support important cultural practices as well, since ways of growing food and medicine are meaningful traditions for virtually every culture. In this regard, the ability for immigrants to access community gardens is another key consideration for understanding whether urban agriculture's touted benefits are available to those who need them most.

As with any alternative food initiative, there is no guarantee that the benefits of urban agriculture will accrue to those who are most in need. Assessing the socio-demographic dynamics of urban agriculture development in New York City, Reynolds (2015) notes that while low-income communities, immigrants and people of color often bring significant knowledge, energy and enthusiasm to the development and maintenance of gardens, these groups tend to have less access to the resources, networks and cultural capital required to build and defend community gardens in the urban landscape. As earlier chapters have demonstrated, in order to attract resources and legal status for their gardens, community garden programs must legitimize themselves according to some of urban agriculture's potential benefits at the expense of others. In all three cities, urban agriculture advocates have made claims about the role of gardens in helping people in need, but they have also emphasized arguments about the economic benefits of community gardens. Economic benefits like neighborhood development and elevated property values can be in tension with serving the needs of the marginalized, whose interests are often left behind in the flow of capital through cities (Smith 1996, Wacquant 2008). On the one hand, community gardens may be easier to establish where vacant land is more abundant, that is, in neighborhoods with depressed property values—often those with higher proportions of people in poverty, immigrants, and/or residents of color. On the other hand, marginalized communities may have a harder time marshalling the resources needed to defend community gardens from rising property values and increased neighborhood development, if and when these potential economic benefits of urban agriculture materialize. This tension is ubiquitous in urban agriculture (Schmelzkopf 1995, Martinez 2010, Reynolds 2014, Alkon, Kato and Sbicca 2020). However, researchers have to date paid little attention to

the role that citywide community gardening organizations can play in mitigating neighborhood inequalities by amassing and equitably distributing the resources needed to build, maintain, and defend urban agricultural spaces.

In this chapter, I draw on historical datasets developed from review of organizational documents for each city to conduct a longitudinal spatial analysis of garden accessibility. To fully understand who is benefitting most from community gardens, multiple types of data ought to be considered. Ethnographic research or extensive surveys would be needed to determine who is actually using the gardens within a program, how much nutritional, recreational, social and cultural benefit participants are receiving, and what collective benefits the local community is realizing from the presence of a garden. With the exception of a few documents summarizing survey results from Seattle's P-Patches in the 1990s, my data do not provide this type of detail about usage or measured outcomes. However, extensive review of the historical documents from each program does enable another important approach to understanding equity in garden access: the proximity of gardens to different neighborhoods. Mapping the gardens that each program invested in over time and using spatial analysis to assess the gardens' accessibility to marginalized communities, we can understand the historical trajectory of each program's impact on the urban environment, a perspective that would not be possible with ethnographic or cross-sectional survey methods.

A spatial approach is especially relevant for understanding urban agriculture as a land use as well as a social practice. Urban researchers have used spatial analysis to assess whether community gardens are alleviating food deserts (Wang, Qiu and Swallow 2014) and to identify the neighborhoods in a city which would benefit most from urban agriculture (Parece, Serrano,

and Campbell 2017), but have yet to analyze the extent to which existing community gardens in a city actually serve the neighborhoods with the highest need.

In this chapter, I first summarize the methodology used to map the gardens in each city over time. Then, I describe the results of my spatial analysis in detail, connecting them to key points from the qualitative historical analysis laid out in preceding chapters. I conclude by highlighting the ways that organizational decisions over time are evident in how gardens are and have been distributed across each city.

Methodology

In order to show how the citywide gardening programs in Milwaukee, Philadelphia and Seattle have expanded (and contracted) over time and how accessible their gardens have been to marginalized communities, I built an original historical dataset[2], mapped the gardens that were associated with each program in 1980, 1990, 2000, 2010, and 2019, and conducted a series of spatial analyses on the relationships between garden locations and neighborhood demographic characteristics.

During my review of documents from the main garden programs in each city, I compiled a database with the name, location, and years active for each garden mentioned over the programs' histories. Records such as annual reports and garden maps (for administrative or promotional purposes) tended to provide complete snapshots of the gardens included in a

[2] In this chapter, I focus on the methodology of spatial analysis used to establish patterns in garden distribution. In the appendix, I provide a more complete description of the process through which I built the historical dataset of garden locations in each city.

program at a particular time, while newsletters and newspaper articles offered supplementary information to date the creation or closure of some gardens. Together, the documents available for each city furnished enough information for a detailed, if not perfectly complete, picture of how the programs expanded in urban space as their budgets grew and they were able to develop new gardens—and how and where the programs contracted under the pressure of changing budgetary or real estate market conditions.

Independent and Dependent Variables

In order to understand the relative accessibility of each programs' gardens for marginalized groups, I acquired neighborhood demographic information for each city at the Census tract level. Using Geolytics, I downloaded a dataset with relevant variables for 1980, 1990, 2000, and 2010 fit to the 2010 Census boundaries. Using the software program R, I then downloaded equivalent values from the 2015-2019 American Community Survey (for which 2010 Census tract boundaries were the default). Given the salience of urban agriculture's potential benefits for immigrants, low-income and people of color, I obtained counts and calculated percentages for each tract's poverty rate, percent foreign born, percent non-Hispanic white, percent non-Hispanic Black, percent Hispanic, and percent non-Hispanic Asian or Pacific Islander. Census questions about racial and ethnic categories have changed slightly over the last 50 years, and the groups above were chosen for this study because they can be calculated consistently across the 5 decades of interest while speaking to the patterns of racial inequality and marginalization most commonly observed in US cities. Because the ability to create, maintain and preserve community gardens is influenced by socioeconomic

characteristics such as real estate values and supporters' cultural capital, I also obtained tract-level data on education levels (downloaded as counts and converted into variables showing percent with less than a high school education and percent with a college degree), median household income, and median monthly housing costs.

After compiling a dataset with the independent variables of interest for the 2010 Census tracts across all 5 decades, I calculated measures of garden accessibility for each Census tract in each decade. I used the Google API to geocode the garden addresses into latitude and longitude, and then georeferenced the coordinates to align with the Census tract coordinate reference system. Overlaying the gardens' geographic information onto the 2010 Census tracts, I obtained counts for the number of gardens in each tract in 1980, 1990, 2000, 2010 and 2019. Since most tracts had zero gardens and very few had more than one, this measure had significant skew; I then created a binary variable indicating whether a tract contained at least one garden in a given year. There is a great deal of variation in the size of Census tracts, and the boundaries between tracts do not represent firm restrictions on residents' activities. To address these concerns, I created additional dependent variables based on distance rather than tract boundaries. For each tract and year, I calculated the distance from the tract centroid to the nearest garden, and I created another binary variable indicating whether at least one garden was within a one-mile radius of the tract centroid.

Exploratory Data Analysis

Before mapping and modeling garden accessibility, I conducted exploratory data analysis to refine my variable specification. I ran correlations of all variables and found several

strong correlations that risked weakening the models through multicollinearity. First, the two variables for education (percent with less than high school and percent with a college degree) were strongly negatively correlated. I chose to model percent with a college degree and leave out percent with less than a high school education, given the role of cultural capital in successful creation and preservation of community gardens that earlier studies have identified (Meenar and Hoover 2012, Ghose and Pettygrove 2014, Reynolds 2015). Next, median household income was strongly positively correlated with housing costs and strongly negatively correlated with poverty rates, but the correlation between housing costs and poverty rates tended to be much weaker. I chose to include housing costs and poverty rates in the models while removing household income to reduce multicollinearity. Retaining the poverty and housing variables, both the accessibility of gardens for low-income communities and the threat to gardens from high land values can be represented in the model.

Correlations in variables measuring racial composition also required attention. Due to a consistently strong negative correlation between percent white and percent Black, I chose to remove percent white from the models and retain focus on gardens' proximity to people of color. I also found strong positive correlations between percent foreign born and percent Hispanic in Milwaukee and Philadelphia, and between percent foreign born and percent Asian or Pacific Islander in Seattle. Due to the theoretical importance of understanding garden accessibility both for racial minorities and for immigrants, I chose to retain all three variables in my models and test the outcomes when each of them was removed to see if multicollinearity was impacting the results.

After testing for multicollinearity, I tested for spatial autocorrelation—that is, whether high or low values for any of the variables were clustered in adjacent Census tracts. For each city, I made three matrices defining neighboring tracts: queen contiguity, 2-nearest, and 3-nearest neighbor weights matrices. Then I calculated Moran's I for all variables in each city and year, using each of the three neighbor weights matrices[3]. Regardless of the matrix used, Moran's I values were greater than 0.3 for almost all of the independent variables[4], indicating substantial spatial autocorrelation. In other words, neighborhoods show clustering in characteristics such as poverty rates, racial and ethnic composition, and education levels. This finding is unsurprising, given what we know of neighborhood effects and the legacies of residential racial segregation, yet it is important to note due to its potential impact on any spatial models.

Clustering in measures of garden accessibility was less clear-cut. For all cities, years, and neighbor weights matrices, Moran's I showed significant spatial autocorrelation in the distance-based measures of garden accessibility (that is, distance to the nearest garden and presence or absence of a garden within a 1-mile radius of the tract centroid). However, the tract-boundary measures of garden access (number of gardens in a tract and the binary presence-or-absence variable) had Moran's I values close to 0 in Milwaukee and Seattle for all years, indicating that the gardens themselves are not generally clustered in these cities. Only Philadelphia appeared

[3] In general, I found that the 3-nearest neighbor weights matrix produced fewer results that deviated from the other matrices' results, so I chose to use 3-nearest neighbor weights matrices for subsequent spatial calculations. Overall, results from all three matrices were consistent in showing spatial autocorrelation, or lack thereof, for any variable, city, and year.

[4] The exception is monthly housing costs in Milwaukee and Seattle in 2010, which suggests that patterns in real estate values may have been disrupted by the 2008 recession in these cities.

to have statistically significant clustering in the locations of gardens. Mapping the dependent variables for each city and year showed that much of the clustering in the distance-based measures of garden accessibility was due to a complete lack of gardens in certain areas of the city, where adjacent tracts logged progressively larger distances to the nearest garden. Figure 1 illustrates the typical appearance of this pattern, with the areas of northwest and south Milwaukee and northeast and south Philadelphia hosting zero gardens from their cities' respective garden programs. The clustering of distance-based garden accessibility variables in Seattle is not as visible when mapped, but it nonetheless registered as significant in the Moran's I tests for all neighbor weights matrices and years.

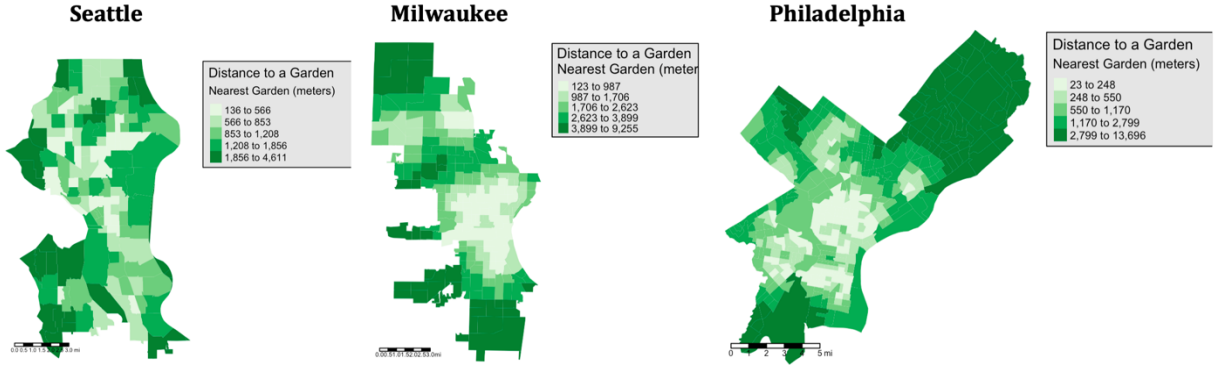

Figure 1: Maps of distance to the nearest garden for each city, showing that high values (i.e. longer distances) are clearly clustered in Milwaukee and Philadelphia because of large swathes of these cities lack any gardens.

Given that garden programs are working to administer multiple sites across a city with limited resources, the lack of gardens in far-flung regions (which would require additional staff time and resources to visit) may be understandable. Still, when large areas of a city remain unserved by a citywide program, the lack of service to these areas is notable. For this reason, I chose not to treat the far-flung tracts as "outliers" and remove them from the models altogether. However, in practical terms, the progressively larger distances to the nearest garden

that result from this pattern can skew the dependent variable in a way that interferes with the overall model fit and accuracy. Therefore, I developed a "corrective" variable giving the distance from each tract centroid to City Hall, a measure approximating the resources required to travel to the tract from garden program offices[5]. I chose to run models with and without distance to downtown in order to assess how well it corrected for skew from the far-flung tract values and whether it impacted results in any other way.

Preliminary Modeling and Diagnostics

Given the potential impact of multicollinearity and spatial autocorrelation on regression modeling, I ran a series of Ordinary Least Squares (OLS) regressions and diagnostics to test the impact of controlling for distance to downtown, to assess the influence of correlations between race and immigration variables, and to determine whether OLS or spatial models would be more accurate.

For the full panel of tracts and years, I ran nested OLS models with the distance to the nearest garden as the dependent variable and independent variables of percent in poverty, median monthly housing costs, percent with a college degree, percent Black, percent Hispanic, percent Asian or Pacific Islander, and percent foreign born. I then added the distance to downtown variable, and finally the variable for year of measurement to assess and control for any change in overall accessibility over time.

[5] The address of City Hall was a more consistent reference point than the garden program offices, which moved around over time but nonetheless remained close to the downtown core of their respective cities.

Quantile-quantile plots show that, as expected, controlling for distance to downtown greatly reduced the right-skew of the residuals resulting from the consistent under-service of far-flung areas. However, due to the clustering of high-poverty neighborhoods relatively close to downtown, controlling for distance to downtown also reversed the coefficients for the effect of percent in poverty. Therefore I chose to continue nesting models with and without distance to downtown in order to gain an accurate picture of garden accessibility for low-income residents. Results showed that adding year to the model generally did not have a strong impact[6], but did yield slight improvements in model fit, so I retained year as an independent variable in subsequent models.

To determine whether correlations between percent foreign born and racial composition would interfere with modeling, I looked at variance inflation factors and tested the impact of removing percent foreign born, percent Hispanic, and percent Asian or Pacific Islander. I ran separate models for each city due to differences in their immigrant composition. In the full model, variance inflation factors were consistently below 10 for all racial groups and percent foreign born, indicating that multicollinearity was likely not a problem. Running the models with each variable removed, I confirmed that one was not masking the effect of another in any of the cities.

Finally, in order to assess whether OLS or spatial models would be more appropriate, I ran Lagrange multiplier tests following Anselin et al. (1996). Lagrange multiplier tests

[6] The one exception was that the effect of median monthly housing costs became insignificant once year was added to the model; this makes sense since housing costs increase with inflation, so ultimately controlling for year works to cancel out the noise of inflation and allow for more accurate assessment of relative differences in real estate value.

consistently indicated that spatial modeling would be more accurate than OLS modeling. When the variable for distance to downtown was included to correct for some of the spatial autocorrelation in the dependent variable, the Lagrange multiplier test results showed more significance for a spatial error model than for a spatial lag model. Spatial lag models measure the spillover effects of dependent variable values from adjacent tracts, while spatial error models treat these effects as random error. In accordance with the Lagrange multiplier results, I chose to run spatial error models and to include distance to downtown. For this study, the relationships of interest are between the independent variables (theoretically relevant neighborhood characteristics) and the dependent variables (neighborhood proximity to gardens), so any spillover effects in garden accessibility between adjacent tracts can reasonably be treated as a nuisance to control for—as with spatial error modeling—rather than being measured and reported as with spatial lag models.

Results

Distance to the Nearest Garden

Overall, spatial error models indicate that the gardens of each program are closer to neighborhoods with higher proportions of Black and Hispanic residents, as shown in Table 1. Models for the three cities are less consistent regarding the accessibility of gardens for Asian and Pacific Islander communities, immigrants, and people in poverty.

In Milwaukee, the spatial error model predicts that with all other factors held constant for a neighborhood, the nearest garden will be about 8 meters closer for every 1% increase in the share of the tract's residents who are Black, 13 meters closer for every 1% increase in the

share who are Hispanic, and 46 meters closer for every 1% increase in the share who are Asian and Pacific Islander.

Spatial Error Regression Results

	Dependent variable:		
	Distance to the nearest garden (m)		
	Milwaukee	Philadelphia	Seattle
percent in poverty	-10.191***	18.069***	-4.022
	(3.901)	(2.727)	(3.706)
housing costs	-0.628*	-0.160	0.750***
	(0.364)	(0.170)	(0.128)
percent college	-1.249	6.360***	-19.045***
	(3.804)	(2.255)	(2.915)
percent Black	-8.338***	-14.376***	-10.711***
	(1.902)	(1.191)	(3.377)
percent Hispanic	-13.398***	-18.619***	-21.771**
	(5.191)	(2.521)	(9.208)
percent API	-46.345***	7.052	-2.114
	(11.100)	(6.276)	(6.626)
percent foreign born	24.062**	4.332	-14.628*
	(10.809)	(5.688)	(8.596)
year	14.355**	-30.979***	-28.642***
	(7.089)	(5.877)	(6.018)
distance to downtown	0.263***	0.533***	0.037***
	(0.013)	(0.008)	(0.011)
Constant	1,048.279***	-1,098.212***	2,439.539***
	(178.472)	(165.903)	(183.239)
Observations	1,138	1,902	700
Log Likelihood	-9,685.875	-16,222.990	-5,669.955
sigma2	1,429,656.000	1,286,247.000	629,548.300
Akaike Inf. Crit.	19,395.750	32,469.990	11,363.910
Wald Test (df = 1)	37.603***	1,955.934***	17.600***
LR Test (df = 1)	33.701***	913.948***	11.925***
Note:		*p<0.1; **p<0.05; ***p<0.01	

Table 1: Spatial error regression results for each city show consistently significant results for garden proximity's association with percent Black and percent Hispanic, while other associations vary across cities

In Milwaukee, regression results also suggest that low-income neighborhoods have been relatively well served by the city's garden programs[7]. The model predicts that the nearest garden will be about 10 meters closer for every 1% increase in a tract's poverty rate, with all other factors held constant. The opposite is true for the city's immigrant population, however; a 1% increase in percent foreign born is associated with an *increase* of about 24 meters to the nearest garden.

Other factors thought to influence the creation and maintenance of gardens—that is, real estate values and levels of cultural capital—do not appear to have a strong effect on garden locations in Milwaukee, as neither is significant at the $p<0.05$ level. The model does indicate that the reach of the city's main garden programs has changed over time: on average, with other factors held constant, every additional year is associated with about 14 meters more distance to the nearest garden. This suggests that Milwaukee's main garden programs have not been able to increase their gardens' proximity to residents over time, and in fact the garden distribution is becoming less accessible overall. Given that the policy victories achieved in Milwaukee have done the least to secure permanent land tenure, this finding makes sense.

In contrast, Philadelphia's garden distribution appears to be more accessible over time, with a decrease of nearly 31 meters to the nearest garden on average for every year, with other factors held constant. Similar to Milwaukee, neighborhoods with more Black and Hispanic residents tend to have closer gardens (about 14 meters closer for every 1% increase in the

[7] Since Milwaukee Urban Gardens was only founded in 2001, I included gardens developed through the city's Shoots n Roots program (which was founded in the early 1970s, around the same time as Philadelphia Green and Seattle's P-Patch Program, enabling better comparison of garden distributions over time across the cases).

share of Black residents, and about 19 meters for every 1% increase in Hispanic residents). The proportion of Asian and Pacific Islander residents and the percent foreign born residents are not significantly associated with garden proximity in the spatial error model for Philadelphia.

While low-income neighborhoods in Milwaukee appear to have gardens closer to them, in Philadelphia higher poverty rates are associated with the nearest garden being further away—about 18 meters further away for every 1% increase in the poverty rate, with all other variables held constant. As noted in the previous section, the association between poverty rates and garden proximity in Philadelphia reverses direction when the model controls for distance to downtown. Many of the city's low-income neighborhoods are relatively close to Center City, which may help explain the reversal; however, the clustering of poverty near downtown does not entirely explain the relationships observed. In Philadelphia, the Pearson correlation between poverty rate and distance to downtown is negative (meaning higher poverty rates do tend to occur closer to Center City), but at -0.013, this correlation is quite weak. Examining maps of poverty rates and garden locations in Philadelphia over time shows that several high-poverty tracts further from Center City have never had gardens nearby, while the gardens near Center City are often just as close to low-poverty tracts as they are to high-poverty ones. In general, the spatial error model suggests that Philadelphia Green's garden development efforts did not maximize the benefits of garden access for low-income communities, and in fact may have better served neighborhoods with lower poverty rates.

In Seattle, poverty rates are not significantly associated with distance to the nearest garden, suggesting that gardens are equally likely to be found in high-income and low-income neighborhoods. As in Milwaukee and Philadelphia, a higher share of Black or Hispanic residents

is associated with closer garden proximity—about 11 meters for every 1% increase in Black residents and 22 meters for every 1% increase in Hispanic residents, with all other factors held constant. Similar to Philadelphia, associations with percent Asian and Pacific Islander and percent foreign born are not significant at the $p<0.05$ level.

Other factors thought to be associated with garden development and maintenance, the neighborhood's real estate values and cultural capital, do appear to be significant in Seattle. Every $1 increase in median monthly housing costs is associated with an increase of 0.75 meters to the nearest garden, meaning that a tract with median rent $100 more than an otherwise identical tract is predicted to be 75 meters further away from the nearest garden. For every 1% increase in the proportion of residents with a college degree, distance to the nearest garden is predicted to decrease by about 19 meters with all other factors held constant. This association suggests that cultural capital has been a factor in the development of P-Patch gardens, which is plausible given that much of the program's expansion has relied upon local residents organizing to demonstrate demand and seek grants to help build new gardens.

Distance to the Nearest Garden: Associations Over Time

To understand the impact of organizational framing and decision-making on the equity in garden distributions, we should consider the possibility that proximity to various communities of interest may have changed over time. Expanding the models with interaction terms for year and the main independent variables (poverty rates, percent foreign born, racial and ethnic composition, education levels, and median housing costs), I assessed ways in which organizational priorities may have impacted garden distributions as they changed over time.

Table 2 shows the results for spatial error regression models including interaction terms for year and the main independent variables. For all three cities, adding in the interaction terms produced better fitting models as shown by their lower Akaike Inference Coefficients. In general, the results are consistent with the original spatial error models, though the interaction terms appear to dilute some relationships while revealing others.

In the case of Milwaukee, none of the interaction coefficients are significant at the $p<0.05$ level. This suggests that the development and preservation of gardens has not followed a clear trajectory in terms of targeting specific communities more deliberately over time. Milwaukee's main gardening programs have highlighted the value of urban agriculture for low-income people, and throughout my interviews advocates referred to the Near North Side, where poverty is highest and where the city's Black residents are concentrated, as the area most "in need" of the benefits that community gardens can bring. On the one hand, a relatively static pattern of garden accessibility in Milwaukee may suggest the city's main programs were succeeding in their goals from the outset. Indeed, maps of Milwaukee's gardens over time show that the Near North Side has consistently hosted a substantial share of the gardens developed by Shoots n Roots from the 1970s to the 1990s and Milwaukee Urban Gardens from 2000 onward. The spatial error model without interaction terms suggests that Black and poor communities have been well served by the program, with significant negative coefficients for both percent in poverty and percent Black, as described above. On the other hand, a lack of significant interaction terms may suggest that program leaders have been unable to undertake a concerted effort at reaching potentially underserved groups, such as immigrants.

Spatial Error Regression with Interaction Terms

	Dependent variable:		
	Distance to the nearest garden (m)		
	Milwaukee	Philadelphia	Seattle
percent in poverty	-7.993	21.997***	15.761**
	(7.412)	(4.874)	(7.161)
housing costs	-0.294	-1.658***	1.791***
	(0.645)	(0.420)	(0.397)
percent college	1.193	-0.496	-20.774***
	(6.737)	(3.630)	(4.460)
percent Black	-4.038	-19.444***	-16.918***
	(3.417)	(1.972)	(4.800)
percent Hispanic	-22.690**	-21.196***	-26.703
	(10.178)	(4.812)	(24.455)
percent API	-77.437**	-1.378	11.059
	(31.263)	(13.733)	(11.961)
percent foreign born	17.570	5.145	-60.393***
	(24.758)	(12.233)	(17.531)
distance to downtown	0.259***	0.535***	0.033***
	(0.013)	(0.008)	(0.011)
year	31.695***	-64.480***	-34.112***
	(10.974)	(10.232)	(11.300)
poverty*year	-0.080	-0.250	-0.705***
	(0.269)	(0.191)	(0.271)
housing costs*year	-0.012	0.042***	-0.025**
	(0.018)	(0.013)	(0.010)
percent college*year	-0.216	0.448***	-0.007
	(0.269)	(0.162)	(0.209)
percent Black*year	-0.281*	0.301***	0.310
	(0.144)	(0.088)	(0.258)
percent Hispanic*year	0.206	0.218	0.219
	(0.360)	(0.186)	(0.808)
percent API*year	1.066	0.412	-0.172
	(1.024)	(0.476)	(0.478)
percent foreign born*year	0.202	-0.087	1.420**
	(0.869)	(0.416)	(0.645)
Constant	898.671***	-343.075	2,390.817***
	(252.943)	(242.825)	(241.537)
Observations	1,138	1,902	700
Log Likelihood	-9,675.525	-16,201.440	-5,657.528
sigma2	1,405,269.000	1,267,924.000	609,582.000
Akaike Inf. Crit.	19,389.050	32,440.880	11,353.060
Wald Test (df = 1)	34.103***	1,774.650***	10.896***
LR Test (df = 1)	29.979***	825.284***	6.995***
Note:		*p<0.1; **p<0.05; ***p<0.01	

Table 2: Spatial error regression results for models including interaction terms indicate that many of the observed associations between neighborhood characteristics and garden proximity were stable over time, but in Philadelphia and Seattle some relationships show statistically significant change over time.

In Philadelphia, program leaders did undertake a concerted effort to bring the benefits of gardens to specific communities: the Greene Country Townes developed in the 1980s and early 1990s. However, as explained in Chapter 2, the Greene Country Townes initiative was as much about demonstrating the potential public benefit of a greening intervention as it was about improving the lives of poor and marginalized people. With interaction terms added to the spatial error model, higher poverty rates are still significantly associated with the Philadelphia Green program's nearest garden being further away. There is not a significant effect of year on the association between poverty rates and garden proximity.

Adding the interaction terms does reveal more about the relationship between garden locations and housing values. This relationship was not significant in the original spatial error model, but it is in the interaction model, which estimates that every $1 increase in housing costs in 1980 was associated with a decrease in 1.658 meters to the nearest garden. In other words, a neighborhood with $100 more in median monthly housing costs would be predicted to have a garden about 166 meters closer than an otherwise identical neighborhood. The interaction term for housing costs is also significant, and it suggests some attenuation of the underlying relationship over time. For every additional year after 1980, the model predicts that every $100 increase in median monthly housing costs would yield an increase of about 4 meters to the nearest garden. Taken together, the significant coefficients for housing cost and housing costs' interaction with year suggest that the association between housing costs and garden proximity has gradually gone away over the last 40 years, to the point where housing costs should have no impact on distance to the nearest garden in 2020. Given that the Pennsylvania Horticultural Society did little to resist garden sales and lot redevelopment as real estate values

rapidly appreciated in some neighborhoods—including former Greene Country Townes—the changing relationship over time makes sense. While gardens were established closer to high-rent neighborhoods, they remained largely vulnerable to the development pressures of a growth machine continuously seeking higher rents and denser land use, and many have been replaced with housing over time.

The model appears to contain more subtle evidence of vulnerability to gentrification as well. The relationships between racial composition and garden proximity remain relatively unchanged with interaction terms added to the Philadelphia model: an increase in the share of Black or Hispanic residents predicts that the nearest garden would be closer, while the share of Asian and Pacific Islander residents is not significantly associated with garden proximity. The interaction between percent Black and year also has a significant and positive coefficient, suggesting that like housing costs, the relationship is gradually disappearing over time. The model estimates that in 1980, a 1% increase in the share of Black residents would be associated with a decrease of about 19 meters to the nearest garden, all other factors being equal. However, every additional year would see the predicted distance to the nearest garden increase by about 0.3 meters for every 1% increase in the share of Black residents. Taken together, these coefficients suggest that the greater proximity of gardens to neighborhoods with more Black residents will disappear after about 65 years, or around 2044. The model cannot determine whether this change in the relationship results from more garden attrition in Black neighborhoods than other neighborhoods, or from the proportion of Black residents decreasing in neighborhoods in which gardens have more durability (such as those preserved through the Neighborhood Gardens Trust), but either scenario seems plausible given the shift in

organizational priorities at the Pennsylvania Horticultural Society. With little grant funding to help maintain existing gardens, many of the projects that were developed through Philadelphia Green did decline over time. At the same time, the Neighborhood Gardens Trust has begun to target its garden preservation efforts at rapidly gentrifying neighborhoods where gardens appear to be the most threatened; however, preserving the gardens does not prevent the demographic change and possible displacement that are associated with gentrification.

Results for Seattle provide a contrasting example of what can happen when garden preservation becomes the rule rather than the exception, and when organizational priorities shift over time toward developing gardens closer to people who ostensibly need them more. As in Philadelphia, with interaction terms added to the Seattle model, a higher poverty rate is associated with the nearest P-Patch being further away (by about 16 meters for every 1% of residents in poverty in 1980). However, unlike Philadelphia, the interaction term is also significant, and it moves in the opposite direction. That is, for every passing year, a 1% increase in the poverty rate is associated with a decrease of about 0.7 meters to the nearest P-Patch, with all other factors being equal. Taken together, these coefficients suggest that Seattle's gardens were originally distributed further away from high-poverty neighborhoods and closer to low-poverty ones, but the relationship reversed after about 22 years, and from 2002 onwards gardens are increasingly likely to be found closer to high-poverty neighborhoods than low-poverty ones. As explained in chapter 3, the leaders of the P-Patch program in the 1990s were responsive to the public concern that the gardens were a private use of public space and to city officials' appreciation for evidence showing how the gardens benefitted low-income and other marginalized residents. The program leaders undertook a concerted effort to expand the

program in neighborhoods with greater socioeconomic need, an effort which gained traction especially after the 2000 Pro-Parks Levy infused the program with $2 million. This effort included working with the Seattle Housing Authority to build gardens in low-income housing developments specifically for use by their residents. The changing organizational priorities in the 1990s and influx of resources in 2000 would logically explain why the interaction model shows gardens' proximity to poor neighborhoods equalizing around 2002 and growing gradually closer since then.

The interaction model's results suggest that P-Patch gardens have become more accessible to poor neighborhoods over time, but also that they have become less accessible to immigrants. Similar to the pattern observed with percent Black residents in Philadelphia, the coefficient for percent foreign born in Seattle is negative and significant while the coefficient for interaction between year and percent foreign born is positive and significant—in fact, it is the largest coefficient of any interaction term across the three models, suggesting a relatively fast pace of change. The model estimates that in 1980, the nearest garden would be about 60 meters closer for every 1% increase in the immigrant population, with all other factors held constant. With every additional year, a 1% increase in the immigrant population relative to otherwise identical tracts would predict 1.4 meters further to the nearest garden, suggesting that after about 42 years the percent foreign born in a tract will have no impact on garden proximity, and ultimately after 2022 gardens will be further away from communities with higher shares of immigrants. As in Philadelphia, the gradual attenuation of garden accessibility for immigrants in Seattle may be linked to gentrification, as higher housing costs push

vulnerable groups further from the more desirable areas, but this explanation cannot be verified from the model alone.

What the model can tell us is the relationship between housing costs and garden locations in Seattle, as well as how this relationship changed over time. The coefficient for housing costs is significant and positive, suggesting that gardens were originally built further from high-demand real estate. With the coefficient for interaction between year and housing costs being negative, this relationship appears to be gradually weakening over time. Chapter 3 describes the widespread garden preservation that P-Patch advocates accomplished with the passage of Initiative 42, which offers a plausible explanation for why this pattern would be seen in Seattle: gardens were initially built where more land was available, and most of them have not been removed as property values in the surrounding neighborhoods have increased.

Conclusion

Spatial analysis indicates that the citywide programs in Milwaukee, Philadelphia, and Seattle have generally developed gardens closer to marginalized communities than to more privileged ones. That said, significant historical trends and a few deviations from the overall pattern are important to note, especially given their apparent relation to organizational decisions and political-economic factors described in previous chapters.

First, while the models suggest that community gardens in all three cities have generally been closer to neighborhoods with more Black and Hispanic residents, their accessibility for Asian and Pacific Islander residents and for immigrants is not as consistent. On the one hand, studies of urban food access indicate that Black and Hispanic communities are the ones most

impacted by lack of healthy, affordable food options (Zenk et al. 2005; Baker, Schootman, Barnidge and Kelly 2006; Meals 2012; Miller, Middendorf and Wood 2015), so if organizations are prioritizing the food-security benefits of urban agriculture, then building access for Black and Hispanic residents more than for Asian and Pacific Islander populations may genuinely reflect understandings of local need and equitable use of the organizations' resources. On the other hand, food insecurity is just as acute in some Asian American and immigrant communities, and there is a chance these communities are being overlooked.

Furthermore, food access isn't the only benefit that community gardens bring; the organizations in this study have also emphasized social, cultural, and economic benefits of urban agriculture. Advocates for Seattle's P-Patch program were the most explicit in touting the ability of gardens to build community among diverse people and to provide cultural continuity for immigrants from agrarian backgrounds. Perhaps because of this recognition, Seattle's gardens have been the most accessible to immigrants according to the spatial error models. However, the P-Patches' proximity to immigrants is eroding over time. In Milwaukee, gardens appear to be further away from communities with higher foreign-born populations, and in Philadelphia the relationship does not register as significant in the spatial error models. According to my interviews and review of organizational documents, in all three cities, immigrants—and in particular Southeast Asian immigrants—have been heavily involved in building gardens and organizing the labor required to keep them going. Yet it appears that immigrant gardeners may have to travel further than others to reach their sites, and they may lose access altogether if they or their garden is displaced when a neighborhood gentrifies. Qualitative researchers have drawn attention to some ways that immigrant gardeners may be

undervalued by urban agriculture organizations and media accounts (Mares and Peña 2010, Tsu 2017). My research suggests that this oversight may influence organizational priorities in development and preservation efforts, extending inequity to the physical siting of gardens.

When community garden organizations do identify the benefits they want their spaces to provide and identify neighborhoods to prioritize in receiving those benefits, they can achieve desired outcomes over time. One example is the expansion of Seattle's P-Patch network through the 1990s and 2000s, which was undertaken with conscious attention to increasing garden access for the city's low-income residents. The spatial error model with interaction terms shows that initially, P-Patches were less accessible for communities with higher poverty rates, but this relationship flipped over time such that communities with higher poverty rates are now likely to be closer to the nearest garden than otherwise similar communities with lower poverty rates.

Philadelphia Green provides another example of how programs can achieve clear outcomes by prioritizing a certain benefit that they want urban agriculture to provide in their city. In this case, the benefit has been economic. As explained in Chapter 2, Pennsylvania Horticultural Society secured grant funding for its Philadelphia Green program to undertake concentrated neighborhood greening initiatives in the 1980s and 1990s; these initiatives included tracking how the greening affected the target neighborhoods, which helped the Society to make a broader case for public investment in their greening services. Scholarship based on the greening initiatives (Wachter 2004, Wachter and Gillen 2006, Heckert and Mennis 2012, Wolfe and Mennis 2012) and organizational publications from the time highlight how the program's community gardens and greening intervention improved neighborhood

attractiveness and increased local property values. One organizational brochure includes a map showing, for different neighborhoods, the percentage of vacant lots involved in the program which had subsequently been sold and developed. Building and preserving greenspace for the benefit of disadvantaged neighborhoods was not the goal, and it has not been the primary outcome.

Compared to Milwaukee and Seattle, Philadelphia has seen the highest rate of garden attrition, so a longitudinal analysis based on the distribution of existing gardens at given points in time misses some of the story. Still, even by examining the spatial error models and maps of garden locations over time, we can see distributional outcomes that are likely related to Philadelphia Green's prioritization of economic benefits and limited efforts toward long-term garden preservation. The program's gardens tended to be developed in neighborhoods with higher housing costs and lower poverty rates, but this relationship with housing costs has gradually diminished over time. Maps of garden locations in successive decades show that gardens have disappeared in neighborhoods where housing costs have increased and poverty rates have decreased. This pattern reflects the program's overall weak commitment to maintaining gardens for the long term, allowing market forces to displace gardens from more desirable areas. Meanwhile, garden proximity to neighborhoods with a higher share of Black residents has decreased over time, which suggests that either gardens are disappearing at higher rates in neighborhoods with more Black residents, or that as neighborhoods themselves are changing through gentrification, those that keep their gardens are nevertheless seeing decreases in the proportion of Black residents.

The pattern of garden distributions over time in Milwaukee demonstrates an outcome likely to result from program management without the resources or a clear strategy to direct garden development toward specific communities. The model with interaction terms did not yield any significant interactions with year, suggesting that garden distributions over time have not moved toward or away from communities with any of the characteristics analyzed (racial and ethnic composition, percent foreign born, poverty rates, housing costs, and education). Instead, the static model shows that the nearest garden is likely to be closer to neighborhoods with higher poverty rates, higher percentages of Black, Hispanic, and/or Asian and Pacific Islander residents, and lower percentages of immigrants. Given what we know about the potential benefits of urban gardens and the communities most in need of those benefits, the distribution of Milwaukee's gardens seems to produce equitable outcomes other than the lower proximity to neighborhoods with more immigrants. However, the historical analysis in preceding chapters demonstrates the ongoing vulnerability of most gardens in Milwaukee to potential removal in the face of development pressure. In other words, the gardens are close to the populations where they are needed because that is where land is available and development pressure is low; the process of displacement and disappointment that unfolded in Philadelphia is likely to be repeated in Milwaukee if and when market conditions change. Underscoring the limits to garden accessibility in Milwaukee, distance to the nearest garden appears to be increasing over time. While gardens appear to be distributed in a way that makes them more accessible for marginalized groups than for more privileged ones, the gardens are becoming less accessible in general.

No strategy is perfect and no citywide gardening organization in this study exhibits an ideal distribution of gardens to target benefits equitably toward those who need them most. However, the spatial analysis also highlights the impact that adequate funding, directed by organizational priorities, can have on the physical landscape and the proximity of gardens to different groups, whether the organization's priorities are working with or against market forces.

Discussion and Conclusion

In Seattle, Philadelphia, and Milwaukee, the primary organizations involved in building, maintaining, and defending the city's gardens worked to gain legitimacy for themselves and, in the process, served to legitimize urban agriculture as a land use—selecting from among its many potential benefits to construct a narrative that served their organizational interests and priorities. The organizations discussed in this dissertation identified different target audiences for their legitimizing efforts, faced different challenges in gaining or maintaining legitimacy, and ultimately advanced the legitimacy of urban agriculture along different lines. As this dissertation demonstrates, variations in how urban agriculture has been legitimized have impacted the socio-natural spaces constructed in each city and the strength of arguments for long-term site preservation in the face of potential redevelopment.

As it worked to gain legitimacy, Milwaukee Urban Gardens found more success as a garden support organization than it did as a land trust; as it has undertaken more programming and site maintenance over the years, Milwaukee Urban Gardens has joined with other organizations in the city to frame urban agriculture as a legitimate land use for its job training, employment and commercial potential. Urban farms are the focal point in Milwaukee, and greening is the focal point in Philadelphia, where the Pennsylvania Horticultural Society gradually evolved its Philadelphia Green program toward blight removal and neighborhood revitalization. In recent years, this framing for the value of urban agriculture has been contested by Soil Generation, a Black- and Brown-led coalition advocating for more permanent gardens, affordable housing, and community control over land use more generally, advancing a new frame that ties urban agriculture's legitimacy to the stewardship of longtime residents and

the unjust history of dispossession they have experienced. In Seattle, the P-Patch program worked to legitimize its activities for the benefits of food production and community-building that community gardens can provide, and advocates with the P-Patch nonprofit refined this narrative over time by articulating how urban agriculture serves as a neighborhood amenity that could ease some of the strain of urban growth while attracting desirable new residents.

In all three cities, economic arguments have been central to strengthening the legitimacy of urban agriculture in the eyes of city officials in order to secure more resources and favorable policy for the gardening organizations and their spaces. However, these economically focused arguments also cohere with processes perpetuating inequality in urban environments. In the case of Milwaukee's employment emphasis and PHS's revitalization framing, economically focused arguments have served to reinforce the conception of urban agriculture as a temporary use of urban space that can and should be replaced with more profitable development whenever the opportunity arises. In Seattle, framing that augments urban agriculture's legitimacy as a source of livability amidst intensifying urban development overlooks the fact that rapidly appreciating neighborhoods become unlivable for residents at the bottom of the income distribution, who end up with greater food insecurity and likelihood of displacement regardless of garden permanence.

Just as the different ways of framing urban agriculture's benefit have been unequally strong as a claim for garden permanence, the different organizational configurations and environments in each city have been unequally conducive to social movement mobilization that could challenge elite interests and push city officials beyond their original willingness for garden preservation. In terms of the organizational environment, evidence from Milwaukee and Seattle

indicates that civic conventions conducive to bottom-up governance work to support the process of legitimizing urban agriculture, but it appears to have been the discursive opportunity structure of mistrusting elites, absent in Milwaukee but present in both Philadelphia and Seattle, that has facilitated mobilization in defense of threatened urban agricultural spaces.

Different organizational configurations across the three case-cities are instructive for understanding the dynamics of organizational hybridization, especially from community-based to social movement activities. Across the three cases, I found only one example of a community-based organization (CBO) effectively taking up the work of a social movement organization (SMO)—the P-Patch nonprofit. Developed as a parallel organization to support the city's P-Patch program by providing a forum for volunteer site leaders to share strategies for garden management, the P-Patch nonprofit gained legitimacy as a representative of gardener interests while maintaining an organizational structure independent from the city program that allowed for outsider social movement mobilization when needed. Both of these features facilitated the P-Patch nonprofit's success in SMO activities, but these activities were organized on a temporary basis, and their framing reflected the relatively privileged perspectives of the nonprofit's volunteer leaders.

In contrast, Soil Generation has arisen in Philadelphia as a counterpoint to PHS, a CBO that did not prioritize gaining legitimacy from gardeners and has been perceived as coopted because of its close relationship with city leaders. Soil Generation has functioned as a SMO since its inception and has kept up its social movement activities for the long term. With leadership explicitly oriented to the needs of poor people of color, Soil Generation is advancing a frame that re-legitimizes urban agriculture as worthy of permanence, while also insisting on

policy that will address the broader needs of the city's low-income gardeners—especially their need for affordable housing. While not generalizable to all organizations in all cities, comparing the example of Soil Generation to the other organizations in this study suggests that organizations formed with a social movement orientation may simply be better positioned to advocate for policies that run counter to elite interests than organizations formed as community-based organizations to provide services.

In Milwaukee, none of the organizations involved in building, maintaining, or advocating for urban gardens can really be considered a social movement organization. The main community-based organization that manages gardens in the city, Milwaukee Urban Gardens and now Groundwork Milwaukee, has occasionally called for gardeners to write letters on behalf of a favorable policy, but the group has never organized to pressure city officials for garden preservation or other policies that go beyond what the city is interested in doing for its own interests. Similar to PHS in Philadelphia, Groundwork Milwaukee now draws a decent share of its funding from greenspace maintenance contracts with the city, establishing organizational commitments that would conflict with outsider strategies for social movement mobilization. Across the three case-cities, evidence suggests that the switch from CBO to SMO is challenging because CBOs often must seek resources and legitimacy from city officials, large funders, and other elites; over time, their work as service providers appears to build up connections and commitments to other organizations that can leave them coopted or less focused on the needs of more marginalized members, clients, and constituencies. Of course, this finding only reflects analysis of a small sample of organizations, and additional research with larger samples would be needed to confirm if this pattern is widespread, but it conforms

with earlier findings about the process of organizational cooptation over time (Selznick 1980 [1949]). While Groundwork Milwaukee provides one example of a CBO unlikely to take up confrontational politics, the Milwaukee Food Council is an organization more like Soil Generation that was formed to advance policy goals, and due to its relative independence from the local government this organization might be better positioned for outsider strategies of social movement mobilization. However, the Milwaukee Food Council mostly counts leaders from other organizations as its members and does not have much of a direct relationship with gardeners or the general public. In other words, unlike Soil Generation, the Milwaukee Food Council has not gained legitimacy as a representative of the city's gardeners and marginalized residents. Even if the Milwaukee Food Council had legitimacy as a representative of gardeners and a large, active base of supporters to mobilize in the push for more permanent urban agricultural spaces, because of the benefits for which urban agriculture has been legitimized in Milwaukee, the city's civic conventions, and the political-economic reality in which currently cultivated lots are seen as a potential development lifeline for reviving the city's economy, this organization would still face a steep challenge in convincing city officials or the general public that permanent gardens are the best policy.

Across all three cities, the legitimation activities of garden organizations and the policies they have achieved to increase longevity for the city's gardens are reflected in the physical manifestations and geographical distribution of gardens. While there are certainly similarities between the community gardens in all three cities, the forms and ideas about urban agriculture that people are likely to encounter as they move through urban space are different.

Among the three cities, the prevalent urban agricultural forms in Milwaukee can be understood as the most impermanent. In Milwaukee, one is more likely to observe large, mowed lots with only a few trees or garden beds that represent the legacy of MUG's early attempts to function as a land trust, which backfired when these sites did not have enough support or interest from nearby residents to be maintained in full form. This particular form is certainly not widespread in Milwaukee, but it is virtually absent in the other case-cities and it serves to reinforce ideas about community gardens as temporary land uses. Another distinct feature of Milwaukee's urban agriculture landscape is the prevalence of youth job training programs and food businesses that package and distribute items grown on urban farms. Someone moving through the city is as likely to encounter a site where young people work together to tend crops as they are to encounter a community garden with individual plots claimed and cared for by different people. Both of these urban agricultural forms can provide important nutritional and social benefits for people in need, but the employment and commerce-oriented nature of Milwaukee's urban agriculture leaves open more possibility for relocating urban agriculture to make way for other kinds of development.

In Philadelphia, there are numerous traditional community gardens—certainly more than in Seattle or Milwaukee—but their presence is dwarfed by the 13,000 vacant lots that are maintained with PHS's signature clean-and-green treatment. As in Milwaukee, this form of urban agriculture signals impermanence, but unlike the spaces tended by Milwaukee's youth these sites are not growing food—only trees and a few ornamental plants that can be easily kept up by the circulating maintenance crews. Someone moving through the city is more likely to encounter a clean-and-green lot than a community garden or farm, but many such spaces do

exist. Some of these spaces announcing themselves with signs, murals, and tributes to groups who have ensured their existence, while others keep a low profile to avoid what gardeners perceive as the likelihood the city will sell the lot if they learn it has a garden. Regardless of their outward appearance, and despite not being the focus of the legitimizing narrative that PHS amplified for many years, hundreds of gardens in Philadelphia have provided food, a sense of community, and other benefits to residents in many neighborhoods.

In Seattle, the most common form of urban agriculture is the P-Patch community garden, most of which have individually tended plots and common areas with space for the public to sit and enjoy urban nature. Someone moving through the city is likely to encounter a P-Patch with signage announcing the program and perhaps an upcoming community event to be held in the space. These elements reflect the strategic efforts that P-Patch advocates have made over the years to bolster the program's legitimacy in the eyes of city officials and the non-gardening public, given that they have secured virtual permanence for the gardens as a land use, but must still work to maintain the spaces' public legitimacy and funding.

As we consider what form of urban agriculture someone might encounter as they move through each city, we should also consider who is likely to be having the encounter in the first place. Over time, as one part of the wider urban processes of economic competition and land use contestation, organization-led efforts to legitimize and secure urban agricultural spaces have not only influenced the form that these spaces take, but also where the gardens have survived and who is most likely to be occupying nearby urban space to begin with.

Milwaukee's urban agriculture organizations have worked to secure longer leases for community gardens, but they have not succeeded in purchasing and preserving many of the

sites, so most of the city's gardens remain vulnerable to development. The gardens that exist today are generally clustered around the Near North Side, where poverty, unemployment, and food insecurity are high and development pressure has remained low. Based on the demographics of the Near North Side, the people most likely encounter the city's gardens are low-income Black residents, however my spatial analysis revealed that gardens associated with citywide programs are also relatively more accessible for neighborhoods with higher rates of Hispanic and Asian/Pacific Islander residents than for neighborhoods that are largely white. These gardens appear to be concentrated where the greatest economic need is, but if development pressure in the disinvested neighborhoods were to increase, the gardens (as well as many residents) will be vulnerable to displacement.

In Philadelphia, development pressure has increased quite dramatically in some neighborhoods, displacing gardens and residents alike. PHS's effort to concentrate greening interventions in specific neighborhoods has proven the revitalization potential of urban agriculture. However, this revitalization focus seems to limit the benefits for the city's poorest residents. Based on my spatial analysis, the program's gardens are likely to be closer to neighborhoods with lower poverty rates and higher housing costs (although the latter association is fading over time, likely due to loss of some gardens in gentrifying areas). Neighborhoods with more Black and Hispanic residents are more likely to have a garden nearby, but the racial composition of many neighborhoods has also been in flux as property values rise, and Black residents appear to be gradually losing access to gardens in this process.

In Seattle, through the concerted effort of P-Patch program and nonprofit leaders seeking to maintain the program's legitimacy, gardens have become more accessible for the

city's low-income communities over time. However, they have also become less accessible for immigrants, reflecting a pattern in all three cities where many foreign born residents seem to lack convenient access to programmatic gardens. Moreover, in Seattle the increasing access for high-poverty neighborhoods belies the fact that many people in poverty have been forced out of the city altogether, as property values have risen precipitously in recent years due to Seattle's status as a world-class creative city—a reputation bolstered by the secure, widespread presence of P-Patch gardens. Thus, someone encountering a garden in Seattle today is more likely to have a high income, and while they might appreciate the social, environmental and aesthetic benefits of the garden before them, there are thousands of other people missing out on that experience because of the city's changing economic condition.

The individuals moving through the socio-environments in these three cities are unlikely to directly see the organizations that have helped to build and protect the city's cultivated spaces, but as this dissertation shows, organizations in all cases have clearly played a role in shaping the flows of materials, ideas and people that converge to make urban agriculture and urban life more broadly.

Appendix: Research Design and Methodology

I designed this research project to address the following questions through a comparative historical approach:

1. How do urban residents win policy changes?
    a. How do urban residents with relatively few resources win policy changes?
2. What strategies do urban agriculture advocates use to resist development pressure and secure long-term access to urban land?
3. How do different strategies of contestation, organizational forms, and local cultures influence urban agriculture program orientations and their outcomes for low-income residents, people of color, immigrants, and other vulnerable populations?

Comparative historical analysis contributes to answering these questions by uncovering the processes at work in different cities and organizational contexts and by illuminating relationships between particular aspects of the strategies pursued, contexts in which they are selected, and outcomes that occur. In order to develop a framework to understand strategies for successful preservation of valued community spaces, I selected three US cities with large, multi-site gardening organizations that have been involved in efforts to preserve land used for community gardens, in which at least two policy victories have been achieved.

Focusing on these cases allows for comparison of the urban political economy, civic conventions, organizational configurations/environments, discourse, strategies, and (social movement?) activities that have supported or constrained the efforts to allocate urban land for community-based agriculture. While garden advocates have achieved policy victories in all

three cities, the pathways pursued vary across the three cases, creating an opportunity for case comparison of how the contexts and pathways pursued influenced the outcomes – in terms of degree of garden security, distribution of gardens across a city, and function of the gardens within the urban milieu (in particular, the extent to which garden programs direct resources toward and empower civic participation from marginalized communities).

Case Selection

In a preliminary investigation of questions 1 and 2 listed above, I conducted an intensive case study about the history of Seattle's P-Patch program. Since the program's garden sites are supported by public funding and sit largely on city-owned land, yet they have continued to thrive and expand even as the city's real estate values have increased precipitously, Seattle's P-Patches appear to defy the general logic of the Urban Growth Machine. Focusing on this case, I sought to build understanding of how residents can work with or against the growth coalition in order to maintain cherished but unprofitable land uses (Glennie 2020a, Glennie 2020b).

This preliminary research showed that the P-Patch program's leaders succeeded in their campaigns to preserve and expand the gardens by leveraging their social capital and appealing to key elements in the city's place-legacy and civic conventions (Glennie 2020a). These factors produced a favorable outcome for the long-term security of P-Patch community gardens, and a mixed outcome for low-income and immigrant gardeners who had worked hard to develop the gardens but faced displacement as real estate values increased around them (Glennie 2020b). With these results, I sought to understand how replicable the strategy would be in other urban

contexts, and to examine whether other strategies or situations had yielded outcomes more beneficial for marginalized gardeners.

Thus, I expanded my research into a comparative study by selecting two other cases with key similarities and differences to the Seattle case. After reading about garden programs in numerous US cities, I chose to investigate the efforts in Milwaukee and Philadelphia because like Seattle, both of these cities have large, well-established multi-site community gardening organizations that have been involved in successful negotiations with the city over land use [see Table 3]. In each of the three cities, garden advocates have won at least two policy victories that increase the legitimacy and security of garden sites (though the details of the policies achieved vary considerably across the three cities). Furthermore, Milwaukee and Philadelphia contrast with the Seattle case in terms of their place-legacies and civic conventions as well as the structure and leadership of their large gardening organizations. These distinctions enable a comparison of the pathways to garden preservation in each context, yielding further insight into questions 1 and 2 above while also taking up questions 1a and 3.

TABLE 3: Summary of Cases

	Milwaukee	**Philadelphia**	**Seattle**
Main Program	Milwaukee Urban Gardens	Philadelphia Green	Seattle P-Patch Program
Program Founder/Date	Local residents 2000	Local non-profit 1974	City government 1973
Organizational structure	Nonprofit program supported by a city agency	Nonprofit program contracted by the city; multi-org land access partnership	City program supported by a nonprofit

Managing Nonprofit	Groundwork Milwaukee	Pennsylvania Horticultural Society; Soil Generation	GROW Northwest
Nonprofit leadership composition	Several people of color in leadership roles (board and staff)	Board almost exclusively white, some minority staff (PHS); Explicitly black- and brown-led coalition (SG)	Board almost exclusively white; all volunteer staff
Urban Planning inclusion	Comprehensive Plan (2010)	Philadelphia Land Bank Bill (2013)	Comprehensive Plan (1994)
Other key policy victory	HOME GR/OWN created – mayor's initiative to promote food production on city land (2013)	Zoning amendment (Bill 120917) halted, removing 20% of the city's gardens from risk of development (2012)	Initiative 42, the Protect Our Parks initiative, passed by city council (1997)
Degree of site permanence in current city policy	Multi-year leases available for gardens on city-owned lots	Gardeners have priority for dispensation of city-owned "vacant" lots	City-owned gardens are effectively permanent
US Region	Midwest	East coast	West coast
Economic conditions	Recovering rustbelt economy	Diversified rustbelt economy	Thriving high-tech economy
Political culture	Somewhat liberal, socialist tradition	Moderately liberal	Extremely liberal, strong labor tradition
Environmental values	Green city	Going green	Ecotopia

First, the garden programs in each city were founded by different actors: Milwaukee Urban Gardens was founded by a group of local residents after they lost an informal community garden to development; Philadelphia Green was founded by the nonprofit Pennsylvania Horticultural Society as an urban greening initiative; and the Seattle P-Patch Program was founded by the City of Seattle in response to citizen requests in an economic downturn. Regardless of their origins, all of the garden programs are now managed through a combination of local government and nonprofit organization(s); however, the programs vary in the roles played by each entity. The nonprofit organizations involved with the programs also vary in scope: Groundwork Milwaukee seeks to improve the local environment through community-based partnerships; the Pennsylvania Horticultural Society promotes horticulture to build attractive and healthy communities; and GROW Northwest not only supports gardens in Seattle but also serves as a regional urban agriculture advocate and educational resource. All of the nonprofits have boards of directors or trustees composed mostly of well-connected professionals, but the boards of the Pennsylvania Horticultural Society and the all-volunteer GROW Northwest are almost exclusively white, while the board of Groundwork Milwaukee is co-chaired by a woman of color, includes several minority members and has designated board positions for community representatives. The network of allied and supporting organizations in the three cities also varies. Most notably, in Philadelphia, the grassroots coalition Soil Generation has taken a lead role in advocating for urban agriculture since the passage of the Land Bank Bill in 2013.

Seattle, Milwaukee and Philadelphia are also politically and economically distinct. Politically, all three cities lean liberal, but Seattle is arguably the most progressive and has a

strong environmentalist political culture dating back to at least the 1970s. Seattle faced severe economic downturns in the 1970s and 1980s when its economy relied disproportionately on one company (Boeing), but is now thriving due to its prominent high-tech sector. In contrast, Milwaukee and Philadelphia are both rustbelt cities suffering from the broad decline of American manufacturing. Perhaps due to its large education and healthcare sectors, Philadelphia's economy now appears to be recovering, boasting faster job growth than even Seattle in 2016 (Cineas 2017). In Milwaukee, manufacturing remains one of the largest sectors of the economy; the manufacturing sector in the city is regrowing, leading to some economic gains, but economically Milwaukee still lags behind the US as a whole. Politically, similar to Seattle's far-left progressivism, Milwaukee's political history involves a socialist tradition (pre-1960); but even the city's socialist politics have been more pragmatic than radical. Philadelphia's political culture leans liberal as well, although it bears no strong history of socialism or "green" politics; the city is characterized by its cultural and sports traditions more than by environmentalism or progressivism. These organizational and contextual contrasts support a comparative historical analysis of the strategies pursued and outcomes achieved in the process of preserving land for urban agriculture.

Data Collection

Media Coverage

For each city, I used online and library newspaper archives to compile a dataset capturing how urban community gardens were discussed in local media going back to the early 1970s (when community gardening efforts began expanding nationwide). Using the NewsBank

America's Newspapers database for the major newspapers in each city, I ran searches for "community garden*" and ["urban agriculture" OR "urban farm"], extracting articles from the search results that described community garden initiatives, new urban garden or farm sites, proposed policies affecting gardens (mostly related to zoning and land disposition), changing economic conditions and their relationship to neighborhood gardens, and controversies around maintaining existing gardens or replacing them with other proposed land uses. I supplemented the NewsBank searches with library and municipal records, as well as with newspaper clippings filed in various organizational archives. The resulting dataset included 274 articles from Milwaukee, 330 articles from Philadelphia, and 299 articles from Seattle.

The NewsBank *America's Newspapers* database contains issues of the Milwaukee Journal Sentinel (and its precursors, the Milwaukee Journal and Milwaukee Sentinel, which merged in 1995) from 1990 to the present. Earlier issues of the Milwaukee Journal and Milwaukee Sentinel were accessed in July 2019 from a computer at the Milwaukee Public Library, whose NewsBank subscription includes coverage of the two newspapers going back to 1980. Even earlier articles were obtained from the Municipal Research Library's microform collection, which contains a dedicated reference set (468M64) for newspaper clippings related to "horticulture" that includes coverage of the City and County's efforts to provide public land for garden plots beginning in 1973.

Along with the dataset of Milwaukee Journal / Sentinel articles from 1973-2019, I collected newspaper clippings from other local and national publications as stored in archival records for Growing Power, Inc., Milwaukee Urban Gardens, and Groundwork Milwaukee (which absorbed the Milwaukee Urban Gardens program in 2013). Like many nonprofit groups,

these organizations documented their own appearances in the press as a resource for funding applications and for internal organizational purposes. From the organizations' archives, I collected articles referencing Milwaukee's major gardening initiatives that appeared in the Associated Press, New York Times, Wall Street Journal, Now Magazine (based in Toronto), Weedpatch Gazette (based in Chicago), Business Times of Milwaukee, Business Journal of Milwaukee, the Milwaukee Courier, Milwaukee Idea, Milwaukee Magazine, Milwaukee Neighborhood News Service, Milwaukee News Buzz, Milwaukee Post, OnMilwaukee, Shepherd Express, and Urban Milwaukee, as well as smaller neighborhood publications including the Bay View Compass, Fond du Lac Reporter, Lake Effect, Outpost Exchange, Riverwest Currents, and Sherman Park News. The coverage in national media demonstrated the general message about Milwaukee's urban agriculture movement that was "getting out" to the rest of the country. Articles in citywide media outlets, including the Milwaukee Journal Sentinel and others, provided similar discursive context as well as details about important events—especially controversies around land and water access—that played out in the public forum. The neighborhood publications tended to present localized, resident-centered opinion about the controversies as well as detailed descriptions of some organization-led events.

Philadelphia's long-running daily newspapers are the Philadelphia Inquirer and Philadelphia Daily News. NewsBank's *America's Newspapers* database includes records of the Philadelphia Daily News going back to 1978, and the Philadelphia Inquirer from 1981 to present. I searched both of these record collections and used Newspapers.com to supplement for the years going back to 1973. Additionally, during preliminary online research, I found that the publication PlanPhilly has engaged in extensive coverage of local land-use policy

deliberations, community gardening events, and grassroots action to protect threatened garden sites since its inception in 2006. PlanPhilly is a publicly funded online news source and is not featured in NewsBank's collections, so instead I used the search feature on the PlanPhilly website to retrieve articles including the phrases "community garden" or "urban agriculture." As with Milwaukee, articles from other Philadelphia publications were collected during archival research, including All Around Philly, City Paper, GeneroCity, Hidden City, Next City, and Philly Voice. The Philadelphia Inquirer and PlanPhilly tended to offer the most detailed coverage of the political process and changing economic conditions in the city, while all of the publications featured coverage of the major policy change – the creation and development of the Philadelphia Land Bank – along with human interest stories profiling various gardens and contributing to the public discourse regarding the role that urban agriculture plays in the city's cultural and socioeconomic milieu.

Seattle's two major daily newspapers are the Seattle Times and the Seattle Post Intelligencer, both of which are featured in the NewsBank *America's Newspapers* database. Seattle Times articles from 1985 to present, and Seattle Post Intelligencer articles from 1986 to present, were obtained using the NewsBank searches described above. For both newspapers, I supplemented the NewsBank search results with records going back to 1973 by visiting the Seattle Public Library, which offers digitized access to the Seattle Times and microform images of the Seattle Post Intelligencer. The microform records did not include a dedicated reference set that would yield relevant results, so I targeted my review of Seattle Post Intelligencer issues from 1973-1986 to the date ranges around key events in the early development of the P-Patch Program, particularly City Council proceedings at which decisions about the program were

made.

As with Milwaukee and Philadelphia, I collected additional articles from other publications as I came across them in municipal and organizational archives. This included articles from the Atlantic Monthly, New York Times, Sunset Magazine, Washington Magazine, the Daily Journal of Commerce, Seattle Met, Seattle Press, Seattle Shopping News, and the Seattle Weekly. Seattle's media landscape includes many neighborhood publications that provided detailed coverage of proposals to remove particular gardens, including reports, opinion pieces, and letters to the editor. Such articles were collected from neighborhood publications including the Mount Baker View, Magnolia News, the North Central Outlook, North Seattle Press, Queen Anne News, Regrade Dispatch, Seattle Downtown News, and the West Seattle Herald. The Seattle Times and Seattle Post Intelligencer records also included some opinion articles and letters to the editor, while providing the bulk of the discursive context and reporting on city proceedings that affected the program and land for gardening writ large.

Archival Records

Media coverage is an important historical record and evidence of public discourse around a particular phenomenon, but it provides only limited insights about the more private deliberative processes that groups are engaged in. For this type of data, I visited the archives of key organizations in each city and collected records of their internal communications, direct communications with the public (i.e. newsletters, annual reports, fliers, and press releases), and communications with decision-makers. These documents provide a window into how the organizations were thinking about the work that they were doing to build, manage and

preserve urban agricultural spaces, as well as the strategies they pursued to justify the use of urban land for gardens when these spaces were threatened. I also visited the public archives in each city to obtain records of the government's own decision-making process regarding land use policy and support for urban agriculture.

In total, I collected documents from ten archival sources: the Milwaukee Municipal Research Library; the Milwaukee Public Library; the Philadelphia City Archives; the Seattle Municipal Archives; the Seattle Public Library; the Golda Meir Library at University of Wisconsin – Milwaukee (which houses the records of Growing Power, Inc.); exhibit materials from the Milwaukee School of Engineering Grohman Museum's "Growing Place: A Visual Study of Urban Farming" (which contained records from the Milwaukee County Extension's urban gardening program); the offices of Groundwork Milwaukee (which houses the records of Milwaukee Urban Gardens); the Pennsylvania Horticultural Society's McLean Library (which contains the records for its Philadelphia Green program); and the Seattle Department of Neighborhoods (which stores records for the city's P-Patch program).

In the larger archives where finding aides were available, I searched for folders that seemed likely to contain materials relevant to the organization's or government's understanding of and decisions around urban agriculture. For example, in the public archives, I searched folders from mayoral records, the files of councilmembers who led land-use and parks committees, and the records of city departments involved in key decisions (typically the Parks Department and any agency involved in real estate or zoning) as well as any folders containing the name of a garden program in the city. The Golda Meir Library and the McLean Library had finding aides for the organizational records of Growing Power, Inc. and the Pennsylvania

Horticultural Society, respectively; I went through these finding aides and examined all folders related to their community gardening programs, correspondence, publicity, reports, grant applications, and internal deliberative documents such as board meeting minutes and strategic plans. In the smaller archives storing materials for Milwaukee County Extension's urban gardening program, Milwaukee Urban Gardens, and the P-Patch Program, I searched systematically through all available file cabinets or boxes in order to find the types of relevant materials described above.

Finally, I retrieved records from organizational and government websites. These materials were typically more contemporary than the archived documents and included reports, newsletters, maps or lists of garden sites, and records of public hearings.

As I found relevant documents, I photographed them (or downloaded them) and stored them on my computer. I organized the archival materials by type and made PDF files for multi-page documents to be used in the analysis. In total, I collected over 20,000 pages of organizational and government records; the more tangential documents, such as organizational budgets and regional land-use plans, were not coded for analysis but simply used as a reference for the historical development and context of urban gardening in each city. The most salient documents, such as newsletters, promotional materials, annual reports, correspondence between organization leaders and city officials, and policy documents, were uploaded to NVivo for coding and analysis.

Interviews

To complement the media and archival data with perspectives of those who were directly involved in critical initiatives and events, I also conducted interviews with key informants in the three case-cities. These 55 interviews constituted a purposive sample of individuals with specific knowledge of the administration of community gardening programs, the local organizing and advocacy for urban agriculture, the process and rationale for related policy decisions, and/or broader development dynamics in each city. My sample included community garden program managers, leaders involved in pro-garden advocacy and community organizing, city officials, and development professionals [see Table 4].

TABLE 4: Interview Sample (with sample and city-subsample relative frequencies)

Trait	*Milwaukee sub-sample*	*Philadelphia sub-sample*	*Seattle sub-sample*	***Total Frequency***
Profession				
Community garden program manager	8 (44%)	6 (30%)	5 (29%)	**19 (35%)**
Pro-garden policy advocate	4 (22%)	6 (30%)	2 (12%)	**12 (22%)**
Pro-garden community organizer	2 (11%)	4 (20%)	1 (6%)	**7 (13%)**
City employee or elected official	3 (17%)	1 (5%)	7 (41%)	**11 (20%)**
Development or planning professional	1 (6%)	3 (15%)	2 (12%)	**6 (11%)**
Gender				
Male	11 (61%)	7 (35%)	8 (47%)	**26 (47%)**
Female	7 (39%)	13 (65%)	9 (53%)	**29 (53%)**

Race/ethnicity				
Black	2 (11%)	3 (15%)	1 (6%)	**6 (11%)**
Asian American	0 (0%)	3 (15%)	2 (12%)	**5 (9%)**
Latinx	1 (6%)	2 (10%)	0 (0%)	**3 (5%)**
White	14 (78%)	11 (55%)	14 (82%)	**38 (69%)**
More than one race	1 (6%)	2 (10%)	0 (0%)	**3 (5%)**

Differences in the distribution of interviewees from various roles within each of the city-subsamples reflect differences in the organizational configuration in each case-city as well as in the responsiveness of types of individuals, particularly present or former elected officials. In Seattle, a higher proportion of interviewees were city employees or elected officials in part because former elected officials there were particularly responsive to interview requests, and also because the city's main garden program is administered by the city. While P-Patch program leaders were categorized as "community garden program manager" for parity with the similar organizational leaders in other cities, officials involved in distributing grants to the gardens, or finding city-owned lots for garden expansion, did not work for the P-Patch program and were therefore categorized as "city employee or elected official." A Milwaukee city employee who fulfilled a similar role was also interviewed, but in Philadelphia such activity rarely occurred through government channels. Instead, nonprofit organizations secured most of the grant funding and helped gardeners negotiate leasing or purchasing garden sites; individuals working at these organizations (if not involved in overseeing gardens directly) were categorized as "pro-garden policy advocates" because they also drew on their experience securing resources and land for gardens to weigh in on related policy deliberations. In Milwaukee, the largest category of interviewees was "community garden program manager" because in this city, and in

Philadelphia to some extent, the overall work of organizing and administering community gardens around the city is less centralized than in Seattle. In all three cities, managers from multiple community gardening programs were interviewed rather than focusing exclusively on the main multi-site gardening organization.

Interviews were semi-structured, using an open-ended interview protocol tailored to the initiatives and events in which each interviewee had participated. Each interview began with opening questions related to the person's background and the general trajectory of their involvement with urban agriculture, then moved into specific questions regarding the key events they participated in, followed by closing questions "zooming out" to reflect on the general role of gardens in their city and what makes the city unique [see Appendix A]. During interviews, I took notes and asked follow-up questions to probe the most salient responses.

Interviews were conducted either in-person at a location of the interviewee's choosing, or over the phone if they could not be arranged during the time in which I was visiting each city. With one exception[8], interviews were recorded and transcribed using ExpressScribe software. Interview transcripts were uploaded to NVivo and coded as part of the qualitative analysis.

[8] Due to user error, one of the phone interviews was not recorded properly. For this interview, I relied on notes taken during the conversation for analysis. Notes included some short, direct quotes that were designated as such during note-taking, and the notes were supplemented for a full interview transcript for the purpose of analysis.

Data Analysis

Qualitative Content Analysis

I wrote memos during and after data collection as themes relevant to my research question began to emerge. Interview transcripts, memos and documents were coded using the qualitative analysis software NVivo, employing a combination of open and focused coding to identify major themes and organize material accordingly. I began the qualitative analysis using a directed approach (Hsieh and Shannon 2005), with a list of codes brainstormed from the literature on urban agriculture, analytic memos written during data collection, and my findings from preliminary research on Seattle's P-Patch program.

As my research progressed, new themes emerged from the data that were relevant to the research questions but not well captured by my initial codes; at this point, I employed the inductive category development typical of conventional content analysis. With focused coding, I revisited the data to ensure that codes were applied evenly whether they had been included in the initial codebook or developed as part of the open coding phase. I continued to write analytic memos throughout the coding process, which together form the basis of my research findings regarding hybrid service and movement organizational forms and the importance of both rationalization and framing processes in their activities.

Spatial Regression

As established by my research questions, one key outcome to consider for multi-site gardening programs is the accessibility of gardens to vulnerable communities. In other words, where are the gardens located in a city; are they concentrated in specific neighborhoods, or

widely distributed? Can people with low incomes, limited mobility, and/or cultural barriers enjoy the benefits of an urban garden in their community? Of course, accessibility is determined not only by location but also by qualitative features of the gardens such as physical layout and patterns of use; nevertheless, if there is no garden located nearby, accessibility is likely to be low regardless of other considerations. Therefore, I conducted longitudinal spatial regressions to compare how the accessibility of garden sites for marginalized communities had changed in each city over time.

Database Construction

Using the historical documents gathered during archival research, I constructed a database of gardens affiliated with the organizations, the garden locations, and their years of activity. In Philadelphia, the sources of garden data were records from the Pennsylvania Horticultural Society, the Neighborhood Gardens Trust website, and newspaper articles including profiles of individual gardens and announcements about available plots in Philadelphia Green gardens. In Seattle, the data sources were records from the P-Patch Program, the P-Patch Post newsletter published by the P-Patch nonprofit, and newspaper articles (mainly announcements in the first decade soliciting applications and listing the program's sites). In Milwaukee, since the main gardening organization that operates today has only existed since 2001, I included gardens from the city's and county's Shoots n Roots program, which had been created around the same time as the Philadelphia Green and P-Patch programs and operated as a citywide program, for comparability across the three cases. Data on garden locations and years of activity were drawn from the Groundwork Milwaukee

website, Milwaukee Urban Gardens archival records, Shoots n Roots documents, and newspaper articles.

As I reviewed archival materials, any time I came across a reference to a specific garden that included a date and/or location, I cross-referenced it against my database. If the garden was already listed in the database, I made sure that the database entry spanned the year(s) for which the document gave evidence of its existence, and I added the document to a "references" section at the end of each row. If there was any conflicting evidence regarding dates of activity—for example, a garden profile that listed one start date, but a reference to the existence of the same garden that predated the start date given in the other document—I gave preference to contemporaneous accounts first and to information from organizations running the gardens over information from secondary sources. I kept track of the existence of conflicting data in the "references" section of the database, so that I could adjudicate discrepancies thoroughly after completing my review of archival materials.

Once I had obtained as much information as I could on garden names, dates, and locations from the all of the documents I had collected, I refined the database and cross-referenced garden locations using Google. I removed any listings for which an approximate address could not be determined. I consolidated entries for gardens that were listed with different addresses that referred to the same location, such as an intersection versus a street address. Since some gardens were listed as spanning multiple addresses, I used the street number nearest to the center of the group of adjacent lots. While checking addresses on Google, I also used the Google Street View function (including historical images going back as far as 2007) to confirm whether gardens still existed on the sites from 2007 onward. If garden

start or end dates could not be verified down to a specific year using archival materials and Google Street View, I used the most conservative estimate for years of activity based on documented references. In some cases, gardens were only listed as active for a single year. The end result of this effort was a database with names, locations, and years started and ended (as well as notes on ownership, affiliations, and a list of reference documents) for 210 gardens in Milwaukee, 669 in Philadelphia, and 100 in Seattle.

Independent and Dependent Variables

In order to understand the relative accessibility of each programs' gardens for marginalized groups, I acquired neighborhood demographic information for each city at the Census tract level. Using Geolytics, I downloaded a dataset with relevant variables for 1980, 1990, 2000, and 2010 fit to the 2010 Census boundaries. Using the software program R, I then downloaded equivalent values from the 2015-2019 American Community Survey (for which 2010 Census tract boundaries were the default). Given the salience of urban agriculture's potential benefits for immigrants, low-income and people of color, I obtained counts and calculated percentages for each tract's poverty rate, percent foreign born, percent non-Hispanic white, percent non-Hispanic Black, percent Hispanic, and percent non-Hispanic Asian or Pacific Islander. Census questions about racial and ethnic categories have changed slightly over the last 50 years, and the groups above were chosen for this study because they can be calculated consistently across the 5 decades of interest while speaking to the patterns of racial inequality and marginalization most commonly observed in US cities. Because the ability to create, maintain and preserve community gardens is influenced by socioeconomic

characteristics such as real estate values and supporters' cultural capital, I also obtained tract-level data on education levels (downloaded as counts and converted into variables showing percent with less than a high school education and percent with a college degree), median household income, and median monthly housing costs.

After compiling a dataset with the independent variables of interest for the 2010 Census tracts across all 5 decades, I calculated measures of garden accessibility for each Census tract in each decade. I used the Google API to geocode the garden addresses into latitude and longitude, and then georeferenced the coordinates to align with the Census tract coordinate reference system. Overlaying the gardens' geographic information onto the 2010 Census tracts, I obtained counts for the number of gardens in each tract in 1980, 1990, 2000, 2010 and 2019. Since most tracts had zero gardens and very few had more than one, this measure had significant skew; I then created a binary variable indicating whether a tract contained at least one garden in a given year. There is a great deal of variation in the size of Census tracts, and the boundaries between tracts do not represent firm restrictions on residents' activities. To address these concerns, I created additional dependent variables based on distance rather than tract boundaries. For each tract and year, I calculated the distance from the tract centroid to the nearest garden, and I created another binary variable indicating whether at least one garden was within a one-mile radius of the tract centroid.

Exploratory Data Analysis

Before mapping and modeling garden accessibility, I conducted exploratory data analysis to refine my variable specification. I ran correlations of all variables and found several

strong correlations that risked weakening the models through multicollinearity. First, the two variables for education (percent with less than high school and percent with a college degree) were strongly negatively correlated. I chose to model percent with a college degree and leave out percent with less than a high school education, given the role of cultural capital in successful creation and preservation of community gardens that earlier studies have identified (Ghose and Pettygrove 2014, Reynolds 2015). Next, median household income was strongly positively correlated with housing costs and strongly negatively correlated with poverty rates, but the correlation between housing costs and poverty rates tended to be much weaker. I chose to include housing costs and poverty rates in the models while removing household income to reduce multicollinearity. Retaining the poverty and housing variables, both the accessibility of gardens for low-income communities and the threat to gardens from high land values can be represented in the model.

Correlations in variables measuring racial composition also required attention. Due to a consistently strong negative correlation between percent white and percent Black, I chose to remove percent white from the models and retain focus on gardens' proximity to people of color. I also found strong positive correlations between percent foreign born and percent Hispanic in Milwaukee and Philadelphia, and between percent foreign born and percent Asian or Pacific Islander in Seattle. Due to the theoretical importance of understanding garden accessibility both for racial minorities and for immigrants, I chose to retain all three variables in my models and test the outcomes when each of them was removed to see if multicollinearity was impacting the results.

After testing for multicollinearity, I tested for spatial autocorrelation—that is, whether high or low values for any of the variables were clustered in adjacent Census tracts. For each city, I made three matrices defining neighboring tracts: queen contiguity, 2-nearest, and 3-nearest neighbor weights matrices. Then I calculated Moran's I for all variables in each city and year, using each of the three neighbor weights matrices[9]. Regardless of the matrix used, Moran's I values were greater than 0.3 for almost all of the independent variables[10], indicating substantial spatial autocorrelation. In other words, neighborhoods show clustering in characteristics such as poverty rates, racial and ethnic composition, and education levels. This finding is unsurprising, given what we know of neighborhood effects and the legacies of residential racial segregation, yet it is important to note due to its potential impact on any spatial models.

Clustering in measures of garden accessibility was less clear-cut. For all cities, years, and neighbor weights matrices, Moran's I showed significant spatial autocorrelation in the distance-based measures of garden accessibility (that is, distance to the nearest garden and presence or absence of a garden within a 1-mile radius of the tract centroid). However, the tract-boundary measures of garden access (number of gardens in a tract and the binary presence-or-absence variable) had Moran's I values close to 0 in Milwaukee and Seattle for all years, indicating that the gardens themselves are not generally clustered in these cities. Only Philadelphia appeared

[9] In general, I found that the 3-nearest neighbor weights matrix produced fewer results that deviated from the other matrices' results, so I chose to use 3-nearest neighbor weights matrices for subsequent spatial calculations. Overall, results from all three matrices were consistent in showing spatial autocorrelation, or lack thereof, for any variable, city, and year.

[10] The exception is monthly housing costs in Milwaukee and Seattle in 2010, which suggests that patterns in real estate values may have been disrupted by the 2008 recession in these cities.

to have statistically significant clustering in the locations of gardens. Mapping the dependent variables for each city and year showed that much of the clustering in the distance-based measures of garden accessibility was due to a complete lack of gardens in certain areas of the city, where adjacent tracts logged progressively larger distances to the nearest garden. The areas of northwest and south Milwaukee and northeast and south Philadelphia hosted no gardens from their cities' respective garden programs. The clustering of distance-based garden accessibility variables in Seattle is not as visible when mapped, but it nonetheless registered as significant in the Moran's I tests for all neighbor weights matrices and years.

Given that garden programs are working to administer multiple sites across a city with limited resources, the lack of gardens in far-flung regions (which would require additional staff time and resources to visit) may be understandable. Still, when large areas of a city remain unserved by a citywide program, the lack of service to these areas is notable. For this reason, I chose not to treat the far-flung tracts as "outliers" and remove them from the models altogether. However, in practical terms, the progressively larger distances to the nearest garden that result from this pattern can skew the dependent variable in a way that interferes with the overall model fit and accuracy. Therefore, I developed a "corrective" variable giving the distance from each tract centroid to City Hall, a measure approximating the resources required to travel to the tract from garden program offices[11]. I chose to run models with and without distance to downtown in order to assess how well it corrected for skew from the far-flung tract values and whether it impacted results in any other way.

[11] The address of City Hall was a more consistent reference point than the garden program offices, which moved around over time but nonetheless remained close to the downtown core of their respective cities.

Model Specification

Given the potential impact of multicollinearity and spatial autocorrelation on regression modeling, I ran a series of Ordinary Least Squares (OLS) regressions and diagnostics to test the impact of controlling for distance to downtown, to assess the influence of correlations between race and immigration variables, and to determine whether OLS or spatial regression models would be more accurate.

For the full panel of tracts and years, I ran nested OLS models with the distance to the nearest garden as the dependent variable and independent variables of percent in poverty, median monthly housing costs, percent with a college degree, percent Black, percent Hispanic, percent Asian or Pacific Islander, and percent foreign born. I then added the distance to downtown variable, and finally the variable for year of measurement to assess and control for any change in overall accessibility over time.

Quantile-quantile plots show that, as expected, controlling for distance to downtown greatly reduced the right-skew of the residuals resulting from the consistent under-service of far-flung areas. However, due to the clustering of high-poverty neighborhoods relatively close to downtown, controlling for distance to downtown also reversed the coefficients for the effect of percent in poverty. Therefore I chose to continue nesting models with and without distance to downtown in order to gain an accurate picture of garden accessibility for low-income residents. Results showed that adding year to the model generally did not have a strong

impact[12], but did yield slight improvements in model fit, so I retained year as an independent variable in subsequent models.

To determine whether correlations between percent foreign born and racial composition would interfere with modeling, I looked at variance inflation factors and tested the impact of removing percent foreign born, percent Hispanic, and percent Asian or Pacific Islander. I ran separate models for each city due to differences in their immigrant composition. In the full model, variance inflation factors were consistently below 10 for all racial groups and percent foreign born, indicating that multicollinearity was likely not a problem. Running the models with each variable removed, I confirmed that one was not masking the effect of another in any of the cities.

Finally, in order to assess whether OLS or spatial models would be more appropriate, I ran Lagrange multiplier tests following Anselin et al. (1996). Lagrange multiplier tests consistently indicated that spatial modeling would be more accurate than OLS modeling. When the variable for distance to downtown was included to correct for some of the spatial autocorrelation in the dependent variable, the Lagrange multiplier test results showed more significance for a spatial error model than for a spatial lag model. Spatial lag models measure the spillover effects of dependent variable values from adjacent tracts, while spatial error models treat these effects as random error. In accordance with the Lagrange multiplier results, I chose to run spatial error models and to include distance to downtown. For this study, the

[12] The one exception was that the effect of median monthly housing costs became insignificant once year was added to the model; this makes sense since housing costs increase with inflation, so ultimately controlling for year works to cancel out the noise of inflation and allow for more accurate assessment of relative differences in real estate value.

relationships of interest are between the independent variables (theoretically relevant neighborhood characteristics) and the dependent variables (neighborhood proximity to gardens), so any spillover effects in garden accessibility between adjacent tracts can reasonably be treated as a nuisance to control for—as with spatial error modeling—rather than being measured and reported as with spatial lag models.

Spatial Regression Analysis

I conducted a series of static and longitudinal spatial regression analyses to assess the relationships between neighborhood characteristics and garden access over time. First, I calculated the static relationships for each city in each year (1980, 1990, 2000, 2010, and 2019) using nested models with the dependent variable of distance to the nearest garden and independent variables of percent in poverty, housing costs, percent with a college degree, percent Black, percent Hispanic, percent Asian or Pacific Islander, and percent foreign born; this base model was nested with additional independent variable for distance to the nearest garden to assess the impact of this spatial corrective on other relationships. Modeling the static relationships within each year showed that, in general, beta coefficients changed over time to become significant or lose their significance, or to increase or decrease, but did not tend to increase and then decrease (or the reverse) which would have suggested the need for quadratic terms in the longitudinal models. These models also affirmed that adding a variable to control for distance to downtown improved the regression fit, especially in Philadelphia and Milwaukee.

Using the full dataset for each city with all years, I ran spatial error regression models with variables for year and distance to downtown. I then ran these models again with interaction terms for the main independent variables (poverty rate, housing costs, college attainment, percent Black, percent Hispanic, percent Asian or Pacific Islander, and percent foreign born). The results of these analyses are described in chapter 5, including tables for the results of the spatial error regression analysis, with and without interaction terms, for each city.

References

Abzug, Rikki, and Joseph Galaskiewicz. 2001. “Nonprofit boards: Crucibles of expertise or symbols of local identities?” *Nonprofit and Voluntary Sector Quarterly*. 30(1): 51-73.

Ackerman, Kubi, Michael Conrad, Patricia Culligan, Richard Plunz, Maria-Paola Sutto, and Leigh Whittinghill. 2014. “Sustainable food systems for future cities: The potential of urban agriculture.” *The Economic and Social Review* 45(2): 189-206.

Alaimo, K., E. Packnett, R. A. Miles, and D. J. Kruger. 2008. “Fruit and Vegetable Intake among Urban Community Gardeners." *Journal of Nutrition Education and Behavior* 40(2): 94-101.

Algert, Susan J., Aditya Agrawal, and Douglas S. Lewis. 2006. “Disparities in access to fresh produce in low-income neighborhoods in Los Angeles.” *American Journal of Preventative Medicine* 30(5): 365-370.

Aliprantis, Dionissi, and Daniel R. Carroll. “What is behind the persistence of the racial wealth gap?” *Federal Reserve Bank of Cleveland Economic Commentary* March 2019.

Alkon, Alison Hope, Daniel Block, Kelly Moore, Catherine Gills, Nicole DeNuccio, and Noel Chavez. 2013. “Foodways of the Urban Poor.” *Geoforum* 48: 126-135.

Alkon, Alison Hope, Yuki Kato, and Josh Sbicca. 2020. *A Recipe for Gentrification: Food, Power, and Resistance in the City.* New York, NY: NYU Press.

Alkon, Alison Hope, and Teresa Mares. 2012. “Food sovereignty in US food movements: radical visions and neoliberal constraints.” *Agriculture and Human Values* 29(3): 347-359.

Allen, P., M. FitzSimmons, M. Goodman and K. Warner. 2003. "Shifting plates in the agrifood landscape: the tectonics of alternative agrifood initiatives in California." *Journal of Rural Studies* 19(1): 61-75.

Alliance for the Great Lakes. 2020. “Case Study: Milwaukee: Green Stormwater Infrastructure in the Right-of-Way.” Alliance for the Great Lakes. https://greatlakes.org/wp-content/uploads/2020/09/AGL_GSI_CaseStudy_Milwaukee_FIN.pdf

Altieri, Miguel A., Nelso Companioni, Kristina Cañizares, Catherine Murphy, Peter Rosset, Martin Bourque, and Clara I. Nicholls. 1999. “The greening of the ‘barrios’: Urban agriculture for food security in Cuba.” *Agriculture and Human Values* 16(2): 131-140.

Anselin, Luc, Anil K. Bera, Raymond Florax, and Mann J. Yoon. 1996. “Simple diagnostic tests for spatial dependence.” *Regional science and urban economics* 26(1): 77-104.

Aptekar, Sophia. 2015. “Visions of Public Space: Reproducing and Resisting Social Hierarchies in a Community Garden.” *Sociological Forum* 30(1): 209-227.

Barraclough, Laura R. 2009. "South Central Farmers and Shadow Hills Homeowners: Land Use Policy and Relational Racialization in Los Angeles." *Professional Geographer* 61(2): 164-186.

Baker, Lauren E. 2004. “Tending cultural landscapes and food citizenship in Toronto’s community gardens.” *Geographical Review* 94(3): 305-325.

Baker, E. A., M. Schootman, E. Barnidge, and C. Kelly. 2006. “The role of race and poverty in access to foods that enable individuals to adhere to dietary guidelines.” *Preventing Chronic Disease* 3(3): A76.

Barker, C., A. Francois, R. Goodman, and E. Hussain. 2012. *Unshared bounty: How structural racism contributes to the creation and persistence of food deserts*. New York Law School.

Beamish, Thomas D. 2015. *Community at Risk: Biodefense and the Collective Search for Security*. Stanford, CA: Stanford University Press.

Been, Vicki. 1993. “Market dynamics and the siting of LULUs: Questions to raise in the classroom about existing research.” *West Virginia Law Review* 1069-1078.

Benford, Robert D., and David A. Snow. 2000. “Framing processes and social movements: An overview and assessment.” *Annual Review of Sociology* 611-639.

Biewener, Carole. 2016. “Paid work, unpaid work, and economic viability in alternative food initiatives: Reflections from three Boston urban agriculture endeavors.” *Journal of Agriculture, Food Systems, and Community Development* 6(2): 35-53.

Block, Daniel, and Joanne Kouba. 2006. “A comparison of the availability and affordability of a market basket in two communities in the Chicago area.” *Public Health Nutrition* 9(7): 837-845.

Blumgart, Jake. 2020. “Why Philly can’t quit the tradition at the center of FBI’s Kenyatta Johnson case.” *PlanPhilly*, 1/30/2020. https://whyy.org/articles/why-philly-council-still-backs-the-tradition-at-the-center-of-kenyatta-johnsons-fbi-case/

Bolin, Bob, Sara Grineski, and Timothy Collins. 2005. “The geography of despair: Environmental racism and the making of South Phoenix, Arizona, USA.” *Human Ecology Review* 156-168.

Brand, Monique. 2013. “Councilman O’Neill’s amendments hit community gardens.” *PlanPhilly*, 1/17/2013.

Brenner, Neil, and Nik Theodore. 2002. "Cities and the Geographies of 'Actually Existing Neoliberalism'." *Antipode* 34(3): 349-379.

Briggs, R. 2021. “Philadelphia Land Bank is finally selling its vacant lots. Now the question is who will benefit.” *WHYY.org* 2/17/2021. https://whyy.org/articles/philadelphia-land-bank-is-finally-selling-its-vacant-lots-now-the-question-is-who-will-benefit/

Brinkley, Catherine, Charlotte Glennie, Benjamin Chrisinger, and Jose Flores. 2019. “’If you build it *with them*, they will come’: What makes a supermarket intervention successful in a food desert?” *Journal of Public Affairs* 19(3): e1863.

Brinkley, Catherine, Subhashni Raj and Megan Horst. 2017. “Culturing food deserts: Recognizing the power of community-based solutions.” *Built Environment* 43(3): 328-342.

Brown, Kate H., and Anne Carter. 2003. “Urban agriculture and community food security in the United States: Farming from the City Center to the urban fringe.” *North American Urban Agriculture Committee, Community Food Security Coalition*. https://policycommons.net/artifacts/2108491/urban-agriculture-and-community-food-security-in-the-united-states/2863789/

Brown, Kate H. and Andrew L. Jameton. 2000. “Public health implications of urban agriculture.” *Journal of Public Health Policy* 21(1): 20-39.

Brownlow, Alec. 2006. “Environmental control in Philadelphia.” Pp. 208-225 in *In the Nature of Cities;* Nik Heynen, Maria Kaika and Erik Swyngedouw, eds. New York, NY: Routledge.

Brulle, Robert J., and David Pellow. 2006. “Environmental justice.” *Annual Review of Public Health* 27: 103-124.

Butkovitz, A. 2013. “Delinquent Real Estate Taxes: Changes Required to Improve Collectability.” City of Philadelphia Department of Revenue, Office of the Controller. November 2013. https://controller.phila.gov/wp-content/uploads/2018/06/DelinquentRealEstateTaxes_November2013.pdf

Cahn, Amy Laura, and Paula Z. Segal. 2016. “You can’t common what you can’t see: Towards a restorative polycentrism in the governance of our cities.” *Fordham Urban Law Journal* 43:195.

Carriere, Michael H., and David Schallio. *The City Creative: The Rise of Urban Placemaking in Contemporary America*. Chicago, IL: University of Chicago Press

Caskey, J. and M. Kuperberg. 2014. “The Philadelphia School District’s ongoing financial crisis: Why the district has a money problem.” *Education Next* 14(4). https://www.educationnext.org/philadelphia-school-districts-ongoing-financial-crisis/

Catungal, John Paul, Deborah Leslie, and Yvonne Hii. 2009. “Geographies of displacement in the creative city: The case of Liberty Village, Toronto.” *Urban Studies* 46(5-6): 1095-1114.

Centeno, M. A. and J.N. Cohen. 2012. “The Arc of Neoliberalism.” *Annual Review of Sociology* 38: 317-40.

Cineas, Fabiola. 2017. “Philadelphia a top 5 big city for most improved economy.” *Philadelphia Magazine,* 8/21/2017. https://www.phillymag.com/business/2017/08/21/philadelphia-improved-economy-job-growth/

City of Milwaukee. 2013. “ReFresh MKE Plan.” *City of Milwaukee Sustainability Plan*, published July 2013.

City of Milwaukee. 2016. “Green Infrastructure.” *EcoCity of Milwaukee Water Centric City*. https://city.milwaukee.gov/WCC/Principles/Fishable-Swimmable-Water/Healthy-Drinking-Water/Green-Infrastructure

City of Milwaukee. 2022. “Community Improvement Project.” 3/11/22. https://city.milwaukee.gov/DCD/NIDC/CIPs

City of Philadelphia. 2013. Bill No. 130156-A.

City of Philadelphia. 2019a. “City of Philadelphia kicks off first urban agriculture planning process.” Press release, 10/22/2019. https://www.phila.gov/2019-10-22-city-of-philadelphia-kicks-off-first-urban-agriculture-planning-process/

City of Philadelphia. 2019b. “Philadelphia Land Bank Draft Strategic Plan & Performance Report.” 6/5/2019. https://secureservercdn.net/45.40.152.202/k05.f3c.myftpupload.com/wp-content/uploads/2019/07/2019_StrategicPlan_DRAFTREPORT_PublicRelease_060519_PRINT-6.5.19-REDUCED.pdf

City of Seattle. 2022. “Department of Neighborhoods – About Us.” https://www.seattle.gov/neighborhoods/about-us

Clapp, Jennifer. 2019. “The rise of financial investment and common ownership in global agrifood firms." *Review of International Political Economy* 26(4): 604-629.

Classens, Michael. 2015. "The Nature of Urban Gardens: Toward a Political Ecology of Urban Agriculture." *Agriculture and Human Values* 32(2): 229-239.

Clement, D. and M. Kanai. 2015. "The Detroit Future City: How Pervasive Neoliberal Urbanism Exacerbates Racialized Spatial Injustice." *American Behavioral Scientist* 59(3): 369-385.

Clendenning, J., W. H. Dressler, and C. Richards. 2016. “Food justice or food sovereignty? Understanding the rise of urban food movements in the USA.” *Agriculture and Human Values*, 33(1): 165-177.

Cohen, Nevin and Kristin Reynolds. 2014. “Urban agriculture policy making in New York’s ‘new political spaces’: Strategizing for a participatory and representative system.” *Journal of Planning and Education Research* 34(2): 221-234.

Coleman-Jensen, Alisha, Christian Gregory, and Anita Singh. 2014. “Household food security in the United States in 2013.” *USDA-ERS Economic Research Report*, September 2014.

Corrigan, M. P. 2011. "Growing what you eat: Developing community gardens in Baltimore, Maryland." *Applied Geography* 31: 1232-1241.

Cress, Daniel M. 1997. “Nonprofit incorporation among movements of the poor: Pathways and consequences for homeless social movement organizations. *The Sociological Quarterly* 38(2): 343-360.

Cress, Daniel M. and David A. Snow. 1996. “Mobilization at the margins: Resources, benefactors, and the viability of homeless social movement organizations.” *American Sociological Review* 1089-1109.

Cress, Daniel M. and David A. Snow. 2000. “The outcomes of homeless mobilization; The influence of organization, disruption, political mediation, and framing.” *American Journal of Sociology* 105(4): 1063-1104.

Cummins, Steven, and Sally MacIntyre. 2002. “’Food deserts’—evidence and assumption in health policy making. *BMJ* August 24, 436-438.

Cummins, Steven, Mark Petticrew, Cassie Higgins, Anne Findlay and Leigh Sparks. 2005. “Large scale food retailing as an intervention for diet and health: Quasi-experimental evaluation of a natural experiment.” *Journal of Epidemiology & Community Health* 59(12): 1035-1040.

Daftary-Steel, Sarita, Hank Herrera, and Christine M. Porter. 2015. “The unattainable trifecta of urban agriculture.” *Journal of Agriculture, Food Systems, and Community Development* 6(1): 19-32.

DeLind, Laura B. 2002. “Place, work, and civic agriculture: Common fields for cultivation.” *Agriculture and Human Values* 19: 217-224

Declaration of Nyéléni. 2007. *La Via Campesina*, February 27, 2007.

Deephouse, David L., Jonathan Bundy, Leigh Plunkett Tost, and Mark C. Suchman. 2016. "Organizational legitimacy: Six key questions." *The SAGE Handbook of Organizational Institutionalism* 4(2): 27-54.

Deener, Andrew. 2020. *The Problem with Feeding Cities: The Social Transformation of Infrastructure, Abundance, and Inequality in America*. Chicago, IL: University of Chicago Press.

Desmond, Matthew. 2016. *Evicted: Poverty and Profit in the American City*. New York, NY: Crown.

DiMaggio, Paul J. and Walter W. Powell. (1983). "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48(2): 147-160.

Dirr, A. "Milwaukee to lose 120 police officer positions under Mayor Tom Barrett's 'sobering' 2021 proposed budget." *Milwaukee Journal Sentinel* 9/22/2020. https://www.jsonline.com/story/news/local/milwaukee/2020/09/22/milwaukee-police-lose-120-officers-mayor-tom-barretts-budget/5850861002/

Drake, Luke, and Laura J. Lawson. 2015. "Results of a US and Canada community garden survey: Shared challenges in garden management amid diverse geographical and organizational contexts." *Agriculture and Human Values* 32(2): 241-254.

Draus, P. J., J. Roddy, and A. McDuffie. 2014. 'We don't have no neighbourhood': Advanced marginality and urban agriculture in Detroit." *Urban Studies* 51(12): 2523-2538.

Dubin, Murray. 1978. "Bringing in the urban harvest: A Thanksgiving report on how a joint venture by God, man and the federal government is reaping radishes out of the rubble." *Philadelphia Inquirer* November 19, 1978.

Edelman, Lauren B. and Mark C. Suchman. 1997. "The legal environments of organizations." *Annual Review of Sociology* 479-515.

Edwards, Bob, and John D. McCarthy. 2004. "Resources and social movement mobilization." Pp. 116-152 in *The Blackwell Companion to Social Movements*, David A. Snow, Sarah A. Soule, and Hanspeter Kriesi, eds. Malden, MA: Blackwell.

Eizenberg, Efrat. 2013. *From the Ground Up: Community Gardens in New York City and the Politics of Spatial Transformation*. Burlington, VT: Ashgate.

Elbel, Brian, Alyssa Moran, L. Beth Dixon, Kamila Kiszko, Johathan Cantor, Courtney Abrams, and Tod Mijanovich. 2015. "Assessment of a government-subsidized supermarket in a high-need area on household food availability and children's dietary intakes." *Public Health Nutrition* 18(15): 2881-2890.

Employ Milwaukee. 2017. "EARN & LEARN Employers." Employ Milwaukee Programs & Services. https://www.employmilwaukee.org/Employ-Milwaukee/Programs--Services/Job-Placement/Earn--Learn-Summer-Youth-Employment/Earn--Learn-Employers1.htm

Ferris, J., C. Norman and J. Sempik. 2001. "People, Land and Sustainability: Community Gardens and the Social Dimension of Sustainable Development." *Social Policy and Administration* 35(5): 559-568.

Fiorillo, Victor. 2021. "The utterly ridiculous history of corrupt (and allegedly corrupt) Philadelphia politicians." *Philadelphia Magazine*, 11/15/2021. https://www.phillymag.com/news/2021/11/15/bobby-henon-johnny-doc-sentencing/

Florida, Richard. 2002. "Bohemia and Economic Geography." *Journal of Economic Geography* 2(1): 55-71.

Florida, Richard. 2003. "Cities and the Creative Class." *City & Community* 2:1, 3-19.

Florida, Richard. 2005. *Cities and the Creative Class*. New York, NY: Routledge.

Fyall, Rachel, and Michael McGuire. 2015. "Advocating for policy change in nonprofit coalitions." *Nonprofit and Voluntary Sector Quarterly* 44(6): 1274-1291.

Galt, Ryan E., Leslie C. Gray, and Patrick Hurley. 2014. "Subversive and interstitial food spaces: Transforming selves, societies, and society-environment relations through urban agriculture and foraging." *Local Environment* 19(2): 133-146.

Ghose, Rina, and Margaret Pettygrove. 2014. "Actors and networks in urban community garden development." *Geoforum* 53: 93-103.

Ghosh-Dastidar, Madhumita, Gerald Hunter, Rebecca L. Collins, Shannon N. Zenk, Steven Cummins, Robin Beckman, Alvin K. Nugroho, Jennifer C. Sloan, and Tamara Dubowitz. 2017. "Does opening a supermarket in a food desert change the food environment?" *Health & Place* 46: 249-256.

Gibson, Chris, and Natascha Klocker. 2004. "Academic publishing as 'creative' industry, and recent discourses of 'creative economies': Some critical reflections." *Area* 36(4): 423-434.

Girardet, H. 2004. “Cities, People, Planet.” *Livable Cities for a Sustainable World*, Liverpool Schumacher Lectures.

Gittleman, Mara, Carson JQ Farmer, Peleg Kremer, and Timon McPhearson. 2016. “Estimating stormwater runoff for community gardens in New York City.” *Urban Ecosystems* 20(1): 129-139.

Glennie, Charlotte. 2020a. “Growing together: Community coalescence and the social dimensions of urban sustainability.” *Sustainability* 12(22): 9680.

Glennie, Charlotte. 2020b. “Cultivating Place: Urban Development and the Institutionalization of Seattle’s P-Patch Community Gardens.” *City & Community* 19(3): 726-746.

Glennie, Charlotte. 2020c. “Gardens in the growth machine.” Pp. 154–175 in *A Recipe for Gentrification: Food, Power, and Resistance in the City*; Alkon, Allison Hope, Yuki Kato, and Josh Sbicca, eds; New York, NY: NYU Press.

Gray, Barbara, Jill M. Purdy, and Shahzad Ansari. 2015. “From interactions to institutions: Microprocesses of framing and mechanisms for the structuring of institutional fields. *Academy of Management Review* 40(1): 115-143.

Griffin, E. 2019. “Housing Committee Testimony.” The Public Interest Law Center, November 25, 2019. https://www.pubintlaw.org/wp-content/uploads/2019/11/19.11.25-Housing-Committee-Testimony-pubintlaw.pdf

Guthman, Julie. 2008. “’If they only knew’: Color blindness and universalism in California alternative food institutions.” *The Professional Geographe*r 60(3): 387-397.

Haberman, Daniel, Laura Gillies, Aryeh Canter, Valentine Rinner, Laetitia Pancrazi, and Federico Martellozzo. 2014. “The potential of urban agriculture in Montréal: A quantitative assessment.” *ISPRS International Journal of Geo-Information* 3(3): 1101-1117.

Hagan, Erin, and Victor Rubin. 2013. “Economic and Community Development Outcomes of Healthy Food Retail.” *PolicyLink.*

Hagey, Allison, Solana Rice, and Rebecca Flournoy. 2012. “Growing Urban Agriculture: Equitable Strategies and Policies for Improving Access to Healthy Food and Revitalizing Communities.” *PolicyLink.*

Hamilton, Darrick, and William Darity Jr. 2017. “The political economy of education, financial literacy, and the racial wealth gap.” *Federal Reserve Bank of St. Louis Review* 99(1): 59-76.

Harris, Deborah A. and Rachel Romero. 2019. “Race, Four Farms, and a City: Color Blindness and the Austin, TX, Urban Farm Debate.” *Humanity & Society* 43(3): 227-249.

Harvey, David. 1978. “The Urban Process under Capitalism: A Framework for Analysis.” *International Journal of Urban and Regional Research* 2(1-4): 101-131.

Harvey, David. 1989. “From managerialism to entrepreneurialism: the transformation in urban governance in late capitalism.” *Geografiska Annaler*, 71(B): 3-17.

Harvey, David. 2007. “Neoliberalism as creative destruction.” *Annals of the American Academy of Political and Social Science* 610: 21-44.

Hasenfeld, Yeheskel, and Eve E. Garrow. 2012. “Nonprofit human service organizations, social rights, and advocacy in a neoliberal welfare state.” *Social Service Review* 86(2): 295-322.

Hendrickson, Mary, William D. Heffernan, Philip H. Howard, and Judith B. Heffernan. 2001. “Consolidation in food retailing and dairy.” *British Food Journal* 103(10): 715-728.

Heynen, Nik. 2014. “Urban political ecology I: The urban century.” *Progress in Human Geography* 38(4): 598-604.

Heynen, Nik, Maria Kaika, and Erik Swyngedouw. 2006. *In the Nature of Cities*. New York, NY: Routledge.

Heynen, Nik, Harold A. Perkins, and Parama Roy. 2006. “The political ecology of uneven urban green space: The impact of political economy on race and ethnicity in producing environmental inequality in Milwaukee.” *Urban Affairs Review* 42(1): 3-25.

Hite, Emily Benton, Dorie Perez, Dalila D’ingeo, Qasimah Boston, and Miaisha Mitchell. 2017. “Intersecting race, space, and place through community gardens.” *Annals of Anthropological Practice* 41(2): 55-66.

Hsieh, Hsiu-Fang, and Sarah E. Shannon. “Three approaches to qualitative content analysis.” *Qualitative Health Research* 15(9): 1277-1288.

Hodgson, Kimberley, Marcia Caton Campbell, and Martin Bailkey. 2011. “Investing in healthy, sustainable places through urban agriculture.” *Funders’ Network for Smart Growth and Livable Communities.*

Holt-Giménez, Eric, and Miguel A. Altieri. 2012. “Agroecology, food sovereignty and the new green revolution.” *Journal of Sustainable Agriculture* 37(1): 90-102.

Horst, Megan, and Amy Marion. 2019. “Racial, ethnic and gender inequities in farmland ownership and farming in the US.” *Agriculture and Human Values* 36(1): 1-16.

Hoover, Elizabeth. 2017. “"You can't say you're sovereign if you can't feed yourself": Defining and enacting food sovereignty in American Indian community gardening.” *American Indian Culture and Research Journal*, 41(3): 31-70.

Howard, Philip H. 2009. “Consolidation in the North American organic food processing sector, 1997 to 2007.” *International Journal of Sociology of Agriculture & Food* 16(1): 13-30.

Hou, Jeffrey, Julie M. Johnson, and Laura Lawson. 2009. *Greening cities, growing communities*. Seattle, WA: Landscape Architecture Foundation in Association with University of Washington.

Hynes, P. 1996. *A Patch of Eden: America’s Inner City Gardeners*. Chelsea Green Pub.

Jannene, J. 2020. “Milwaukee’s bond rating cut two levels.” *Urban Milwaukee* 9/22/2020. https://urbanmilwaukee.com/2020/09/22/city-hall-milwaukees-bond-rating-cut-two-levels/

Jaramillo, Catalina. 2021. “Philly growers spoke out. The result is an ‘anti-racist lens’ for city’s first urban agricultural plan.” *PlanPhilly*, 1/13/2021. https://whyy.org/articles/philly-growers-spoke-out-the-result-is-an-anti-racist-lens-for-citys-first-agricultural-plan/

Jenkins, J. Craig. 1983. “Resource mobilization theory and the study of social movements.” *Annual Review of Sociology* 527-553.

Jonas, Andrew E.G., and David Wilson. 1999. *The Urban Growth Machine: Critical Perspectives, Two Decades Later.* Albany, NY: SUNY Press.

Joseph, L. 2014. “Philadelphia Land Bank 101: Will it fight blight, or enrich the rich?” *BillyPenn* 11/20/2014. https://billypenn.com/2014/11/20/philadelphia-land-bank-101-will-it-fight-blight-or-enrich-the-rich/

Kato, Yuki. 2013. “Not just the price of food: Challenges of an urban agriculture organization in engaging local residents.” *Sociological Inquiry* 83(3): 369-391.

Kirk, Frank. 1998. “Notes from the president.” *P-Patch Post*, Winter 1998.

Kitschelt, Herbert P. 1986. “Political opportunity structures and political protest: Anti-nuclear movements in four democracies.” *British Journal of Political Science* 16(1): 57-85.

Koopmans, Ruud, and Paul Statham. 1999. “Political claims analysis: Integrating protest event and political discourse approaches.” *Mobilization: An International Quarterly* 4(2): 203-221.

Krätke, Stefan. 2011. “The new urban growth ideology of ‘creative cities’.” Pp 138-149 in *Cities for People, Not for Profit*, Neil Brenner, Peter Marcuse, and Margit Mayer, eds. New York, NY: Routledge.

Kremer, P. and Z. Hamstead. 2015. “Transformation of urban vacant lots for the common good: an introduction to the special issue.” *Cities and the Environment* 8(2): 1.

Kurtz, Hilda. 2001. “Differentiating multiple meanings of garden and community.” *Urban Geography* 22(7): 656-670.

Lawson, Laura. 2005. *City Bountiful: A Century of Community Gardening in America*. Berkeley, CA: University of California Press.

LeDoux, Timothy F., and M. W. Conz. 2017. “Hunger for justice: Building sustainable and equitable communities in Massachusetts.” *Global Urban Agriculture* 2017, 93-105.

Legal-Miller, Althea. 2022. “Race, Policing, and Black Lives Matter.” Pp. 33-48 in *Developments in American Politics 9*, Peele, Gillian, Bruce E. Cain, Jon Herbert, and Andrew Wroe, eds. Palgrave Macmillan, Cham.

Leslie, Deborah, and John Paul Catungal. 2012. “Social justice and the creative city: Class, gender and racial inequalities.” *Geography Compass* 6(3): 111-122.

Levine, Jeremy R. 2016. “The privatization of political representation: Community-based organizations as nonelected neighborhood representatives.” *American Sociological Review* 81(6): 1251-1275.

Logan, John R., and Harvey Molotch. 1987. *Urban Fortunes: The Political Economy of Place*. Berkeley, CA: University of California Press.

Lovell, Sarah Taylor. 2010. “Multifunctional urban agriculture for sustainable land use planning in the United States.” *Sustainability* 2(8), 2499-2522.

Loyd, Jenna M., and Anne Bonds. 2018. “Where do Black lives matter? Race, stigma, and place in Milwaukee, Wisconsin.” *The Sociological Review* 66(4): 898-918.

Lu, Jiahuan. 2016. “Fear the government? A meta-analysis of the impact of government funding on nonprofit advocacy engagement.” *The American Review of Public Administration* 48(3): 203-218.

Lyson, Thomas A. 2000. “Moving toward civic agriculture.” *Choices* 15(3): 42-45.

Lyson, Thomas A. 2012. *Civic Agriculture: Reconnecting Farm, Food, and Community*. Hanover, NH: University Press of New England.

Mares, Teresa M. and Devon G. Peña. 2010. “Urban agriculture in the making of insurgent spaces in Los Angeles and Seattle.” In Hou, ed., *Insurgent Public Space: Guerrilla Urbanism and the Remaking of Contemporary Cities*, 241-254.

Martinez, M. 2010. *Power at the Roots: Gentrification, Community Gardens, and the Puerto Ricans of the Lower East Side*. Lanham, MD, Lexington Books.

Marwell, Nicole P. 2004. "Privatizing the Welfare State: Nonprofit Community-Based Organizations as Political Actors." *American Sociological Review* 69: 265-291.

Marwell, Nicole P. 2007. *Bargaining for Brooklyn: Community Organizations in the Entrepreneurial City*. Chicago, IL: University of Chicago Press.

Marx, Karl. 1978 [1867]. *Capital, volume 1.* London: Penguin.

Marx, Leo. 2000 [1964]. *The Machine in the Garden: Technology and the Pastoral Ideal in America.* Oxford University Press.

Massey, Douglas S., and Nancy A. Denton. 1993. *American Apartheid: Segregation and the Making of the Underclass*. New York, NY: Routledge.

Maurer, Megan. 2021. “Chickens, weeds, and the production of green middle-class identity through urban agriculture in deindustrial Michigan, USA.” *Agriculture and Human Values* 38(2): 467-479.

Mazur, Laurie. 2017. “Milwaukee is showing how urban gardening can heal a city.” *Civil Eats* 10/4/17, https://civileats.com/2017/10/04/milwaukee-is-showing-how-urban-gardening-can-heal-a-city/

McAdam, Doug. 1988. *Political Process and the Development of Black Insurgency, 1930-1970*. Chicago: University of Chicago Press.

McAdam, Doug, John D. McCarthy, and Mayer N. Zald. 1996. *Comparative Perspectives on Social Movements: Poltical Opportunities, Mobilizing Structures, and Cultural Framings*. New York, NY: Cambridge University Press.

McCammon, Holly. 2013. “Discursive Opportunity Structure.” *The Wiley-Blackwell Encyclopedia of Social and Political Movements*.

McCammon, Holly, Courtney Sanders Muse, Harmony D. Newman, and Teresa M. Terrell. 2007. “Movement framing and discursive opportunity structures: The political successes of the US women’s jury movements.” *American Sociological Review* 72(5): 725-749.

McClintock, Nathan. 2010. “Why farm the city? Theorizing urban agriculture through a lens of metabolic rift.” *Cambridge Journal of Regions, Economy and Society* 3(2): 191-207.

McClintock, Nathan. 2014. “Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture’s contradictions.” *Local Environment* 19(2): 147-171.

McClintock, Nathan. 2018a. “Urban agriculture, racial capitalism, and resistance in the settler-colonial city.” *Geography Compass* 12(6): e12373.

McClintock, Nathan. 2018b. “Cultivating (a) sustainability capital: Urban agriculture, ecogentrification, and the uneven valorization of social reproduction.” *Annals of the American Association of Geographers* 108(2): 579-590.

McClintock, Nathan, Jenny Cooper, and Shehee Khandeshi. 2013. “Assessing the potential contribution of vacant land to urban vegetable production and consumption in Oakland, California.” *Landscape and Urban Planning* 111: 46-58.

McCormick Myers, A., and M. A. Painter. 2017. “Food insecurity in the United States of America: An examination of race/ethnicity and nativity.” *Food Security* 9(6): 1419-1432.

McCutcheon, P. 2013. ""Returning Home to Our Rightful Place": The Nation of Islam and Muhammad Farms." *Geoforum* 49: 61-70.

McQuarrie, M. 2015. “No Contest: Participatory Technologies and the Transformation of Urban Authority.” In *Democratizing Inequalities: Dilemmas of the New Public Participation*. New York: NYU Press.

McQuarrie, Michael and Nicole P. Marwell. 2009. "The Missing Organizational Dimension in Urban Sociology." City and Community 8(3): 247-268.

Meals, Kate. 2012. “Nurturing seeds of food justice: Unearthing the impact of institutionalized racism on access to healthy food in urban African-American communities.” *Scholar* 15: 97.

Meenar, Mahbubur, and Brandon Hoover. 2012. “Community food security via urban agriculture: Understanding people, place, economy, and accessibility from a food justice perspective.” *Journal of Agriculture, Food Systems, and Community Development* 3(1): 143-160.

Melamed, S. 2021. “A decades-old money-making cheme has trapped hundreds of poor Philly blocks in limbo.” *Philadelphia Inquirer* 10/6/2021. https://www.inquirer.com/news/philadelphia-community-garden-tax-lien-us-bank-gentrification-20211006.html

Meyer, John W. 2004. “Protest and Political Opportunities” *Annual Review of Sociology* 30:125-145.

Meyer, John W., and B. Rowan. 1991. “Institutionalized organizations: Formal structure as myth and ceremony.” Pp. 41-62 in Powell and DiMaggio, Eds., *The New Institutionalism in Organizational Analysis*. Chicago, IL: University of Chicago Press.

Meyer, John W., and W. Richard Scott. 1983. *Organizational Environments: Ritual and Rationality*. Beverly Hills, CA: Sage.

Miller, M., G. Middendorf, and S. D. Wood. 2015. “Food availability in the heartland: Exploring the effects of neighborhood racial and income composition.” *Rural Sociology* 80(3): 340-361.

Millington, Nate. 2013. “Post-industrial imaginaries: Nature, representation, and ruin in Detroit, Michigan.” *International Journal of Urban and Regional Research* 37(1): 279-296.

Minkoff, Debra C. 2002. “The emergence of hybrid organizational forms: Combining identity-based service provision and political action.” *Nonprofit and Voluntary Sector Quarterly* 31(3): 377-401.

Minkoff, Debra C., and Walter W. Powell. 2006. “Nonprofit mission: Constancy, responsiveness, or deflection.” *The Nonprofit Sector: A Research Handbook* 2: 591-611.

Minkoff-Zern, Laura Anne. 2014. "Knowing “good food”: Immigrant knowledge and the racial politics of farmworker food insecurity." *Antipode* 46(5): 1190-1204.

Molotch, Harvey W. 1976. “The City as a Growth Machine: Toward a Political Economy of Place.” *American Journal of Sociology* 82:2, 309-332.

Morland, Kimberly, Steve Wing, Ana Diez Roux, and Charles Poole. 2001. “Neighborhood characteristics associated with the location of food stores and food service places.” *American Journal of Preventive Medicine* 22(1): 23-29.

Morris, Brian. 2018. *Kropotkin: The Politics of Community*. Oakland, CA: PM Press.

Mosley, Jennifer E. 2012. “Keeping the lights on: How government funding concerns drive the advocacy agendas of nonprofit homeless service providers.” *Journal of Public Administration Research and Theory* 22(4): 841-866.

Mougeot, L. J. A. 2006. *Growing Better Cities: Urban Agriculture for Sustainable Development*. Ottawa: International Development Research Centre.

Myers, Justin Sean. 2022. *Growing Gardens, Building Power: Food Justice and Urban Agriculture in Brooklyn*. Rutgers, NJ: Rutgers University Press.

Newman, Kathe, and Robert W. Lake. 2006. "Democracy, bureaucracy and difference in US community development politics since 1968." *Progress in Human Geography* 30(1): 44-61.

Obach, Brian K. and Kathleen Tobin. 2014. "Civic agriculture and community engagement." *Agriculture and Human Values* 31(2): 307-322.

Obama, First Lady Michelle. 2012. "Let's Move! Raising a healthier generation of kids." *Childhood Obesity* 8(1): 1.

Odoms-Young, A., and M. A. Bruce. 2018. "Examining the impact of structural racism on food insecurity: Implications for addressing racial/ethnic disparities." *Family & Community Health* 41(2): S3-S6.

Onyx, Jenny, Lisa Armitage, Bronwen Dalton, Rose Melville, John Casey, and Robin Banks. 2010. "Advocacy with gloves on: The 'manners' of strategy used by some third sector organizations undertaking advocacy in NSW and Queensland." *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations* 21(1): 41-61.

Passidomo, Catarina. 2013. "Going 'beyond food': Confronting structures of injustice in food systems research and praxis." *Journal of Agriculture, Food Systems, and Community Development* 3(4): 89-93.

Passidomo, Catarina. 2014. "Whose right to (farm) the city? Race and food justice activism in post-Katrina New Orleans." *Agriculture and Human Values* 31(3): 382-396.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge, MA: Harvard University Press.

Piven, Frances Fox, and Richard Cloward. 2012 [1971]. *Regulating the Poor; The Functions of Public Welfare.* New York, NY: Vintage.

Powell, T. 2019. "Wisconsin's unemployment disparity between blacks and whites is worst in the United States." *WUWM 89.7 FM*, 11/12/2019. https://www.wuwm.com/news/2019-11-12/wisconsins-unemployment-disparity-between-blacks-whites-is-worst-in-the-united-states

Pudup, Mary Beth. 2008. "It takes a garden: Cultivating citizen-subjects in organized garden projects." *Geoforum,* 39(3): 1228-1240.

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

Raja, Samina, Branden M. Born, and Jessica Kozlowski Russell. 2008. “Planners guide to community and regional food planning.” *American Planning Association*.

Ramírez, Margaret Marietta. 2015. “The elusive inclusive: Black food geographies and radicalized food spaces." *Antipode* 47(3): 748-769.

Reese, Ashanté M. 2018. “’We will not perish; we’re going to keep flourishing’: Race, food access, and geographies of self-reliance.” *Antipode* 50(2): 407-424.

Reynolds, Kristin. 2014. Disparity despite diversity: Social injustice in New York City’s urban agriculture system. *Antipode* 47(1): 240-259.

Reynolds, Kristin, and Nevin Cohen. 2016 *Beyond the Kale: Urban Agriculture and Social Justice Activism in New York City*. Volume 28. Athens, GA: University of Georgia Press.

Rolland, N. 2015**.** “Preserving Radishes and Snapdragons in the City: A Historical Perspective of Community Gardens in Milwaukee.” *e.polis* 7(Spring 2015): 59-80. https://uwm.edu/urban-studies/wp-content/uploads/sites/231/2015/12/Rolland59-81.pdf

Rothstein, M. 2019. “Philadelphia Housing Development Corp. absorbs Redevelopment Authority, Land Bank in department merger.” *BisNow* 10/13/2019. https://www.bisnow.com/philadelphia/news/economic-development/philadelphia-housing-development-corp-redevelopment-authority-land-bank-department-merger-101254

Saldivar-Tanaka, Laura, and Marianne E. Krasny. 2004. “Culturing community development, neighborhood open space, and civic agriculture: The case of Latino community gardens in New York City.” *Agriculture and Human Values* 21(4): 399-412.

Sampson, Robert J., Doug McAdam, Heather MacIndoe, and Simon Weffer-Elizondo. 2005. “Civil society reconsidered: The durable nature and community structure of collective civic action.” *American Journal of Sociology* 111(3): 673-714.

Sbicca, Josh, and Justin Sean Myers. 2017. “Food justice racial projects: Fighting racial neoliberalism from the Bay to the Big Apple.” *Environmental Sociology* 3(1): 30-41.

Scanlan, Stephen J. 2009. “New direction and discovery on the hunger front: Toward a sociology of food security/insecurity.” *Humanity 7 Society* 33(4): 292-316.

Schmelzkopf, Karen. 1995. “Urban Community Gardens as Contested Space.” *Geographical Review* 85(3): 364-381.

Schmelzkopf, Karen. 2002. “Incommensurability, land use, and the right to space: Community gardens in New York City.” *Urban Geography* 23(4): 323-343.

Schutte, Ray. 1996. “A deal’s a deal: Let P-Patch be.” *Queen Anne News* Letters to the Editor, 5/15/1996.

Seligman, Hilary K., Andrew B. Bindman, Eric Vittinghoff, Alka M. Kanaya and Margot B. Kushel. 2007. “Food insecurity is associated with diabetes mellitus: Results from the National Health Examination and Nutrition Examination Survey (NHANES). 1999-2002.” *Journal of General Internal Medicine* 22(7): 1018-1023.

Seligman, Hilary K., Barbara A. Laraia and Margot B. Kushel. 2010. “Food insecurity is associated with chronic disease among low-income NHANES participants.” *The Journal of Nutrition* 140(2): 304-310.

Selznick, Philip. 1980 [1949]. *TVA and the grass roots.* Volume 3. Berkeley, CA: University of California Press.

Shields, Y. 2020. “Milwaukee draws second downgrade this year.” *The Bond Buyer* 12/3/2020. https://www.bondbuyer.com/news/milwaukee-draws-second-downgrade-this-year

Shinew, Kimberly J., Troy D. Glover, and Diana C. Parry. 2004. “Leisure spaces as potential sites for interracial interaction: Community gardens in urban areas.” *Journal of Leisure Research* 36(3): 336-355.

Shliefer, A. 2009. “The Age of Milton Friedman.” *Journal of Economic Literature* 47(1): 123-135.

Silverman, Robert Mark. 2009. “Sandwiched between patronage and bureaucracy: The plight of citizen participation in community-based housing organizations in the US.” *Urban Studies* 46(1): 3-25.

Slocum, Rachel. 2007. “Whiteness, space and alternative food practice.” *Geoforum* 38(3): 520-533.

Smith, Neil. 1996. *The New Urban Frontier: Gentrification and the Revanchist City*. New York, NY: Routledge.

Snow, David A. and Robert D. Benford. 1988. “Ideology, frame resonance, and participant mobilization.” *International Social Movement Research* 1: 197-217.

Soil Generation. 2021. “About Us.” https://soilgeneration.org/about-us

Soroko, John J. 2008. “Observations on the greening of Philadelphia: Intangible—and tangible—benefits result from investment in green initiatives.” *The Pennsylvania Lawyer* Sept/Oct 2008: 22-24.

Staggenborg, Suzanne. 1988. “The consequences of professionalization and formation in the pro-choice movement.” *American Sociological Review* 585-605.

Suchman, Mark C. 1995. “Managing legitimacy: Strategic and institutional approaches.” *Academy of Management Review* 20(3): 571-610.

Suh, Doowon. 2001. “How do political opportunities matter for social movements? Political opportunity, misframing, pseudosuccess, and pseudofailure.” *The Sociological Quarterly* 42(3): 437-460.

Surls, Rachel, Gail Feenstra, Sheila Golden, Ryan Galt, Shermain Hardesty, Claire Napawan, and Cheryl Wilen. 2015. “Gearing up to support urban farming in California: Preliminary results of a needs assessment.” *Renewable Agriculture and Food Systems* 30(1): 33-42.

Swyngedouw, Erik. 1996. “The city as a hybrid: On nature, society and cyborg urbanization.” *Capitalism Nature Socialism* 7(2): 65-80.

Tarrow, Sydney. 1994 [2011]. *Power in Movement: Social Movements and Contentious Politics*. New York, NY: Cambridge University Press.

Tornaghi, Chiara. 2014. "Critical geography of urban agriculture." *Progress in Human Geography* 38(4): 551-567.

Travaline, Katharine, and Christian Hunold. 2010. “Urban agriculture and ecological citizenship in Philadelphia.” *Local Environment* 15(6): 581-590.

Treuhaft, Sarah, Michael J. Hamm and Charlotte Litjens. 2009. “Healthy food for all: Building equitable and sustainable food systems in Detroit and Oakland.” *PolicyLink*.

Tsu, C. M. 2017. “’If you want to plow your field, don’t kill your buffalo to eat’: Hmong farm cooperatives and refugee resettlement in 1980s Minnesota.” *Journal of American Ethnic History* 36(3): 38-73.

Ubinas, H. 2013. “No Philly Shrug at the Land Bank Hearing.” *Philadelphia Inquirer* 10/29/2013.

University of Wisconsin – Milwaukee. 2014. “Antoine Carter, Program Manager Milwaukee Urban Gardens, Groundwork Milwaukee, speaks at the 2014 Henry W. Maier State of Milwaukee Summit.” Vimeo video by *L&S @UWM*. https://vimeo.com/114792048

US EPA 2008. ***Find this, a report about CSOs and climate change, maybe from link below.***

US EPA. 2021. “Combined Sewer Overflows (CSOs).” United States Environmental Protection Agency, National Pollutant Discharge Elimination System. https://www.epa.gov/npdes/combined-sewer-overflows-csos

UW Extension Milwaukee County. 2021. “Urban Agriculture.” University of Wisconsin-Madison. https://milwaukee.extension.wisc.edu/agriculture/

Van Kersbergen, K. and F. Van Waarden. 2004. “‘Governance’ as a bridge between disciplines: Cross-disciplinary inspiration regarding shifts in governance and problems of governability, accountability and legitimacy.” *European Journal of Political Research* 43(2): 143-171.

Vargas, C. 2013. “Land Bank Bill in Limbo.” *Philadelphia Inquirer* 12/3/2013.

Vitiello, Domenic, and Catherine Brinkley. 2014. “The hidden history of food system planning.” *Journal of Planning History* 13(2): 91-112.

Vitiello, Domenic, and Michael Nairn. 2009. "Community Gardening in Philadelphia: 2008 Harvest Report." *University of Pennsylvania Planning and Urban Studies, Philadelphia*.

Voicu, Ioana, and Vicki Been. 2008. “The effect of community gardens on neighboring property values.” *Real Estate Economics* 36(2): 241-283.

Wacquant, Loic W. 2008. *Urban Outcasts: A Comparative Sociology of Advanced Marginality*. Malden, MA: Polity Press.

Wacquant, Loic W. 2012. “Three steps to a historical anthropology of actually existing neoliberalism.” *Social Anthropology* 20(1): 66-79.

Walker, Janvier Elizabeth. 2014. “Homegrown in Detroit: How urban agriculture has not only brought food security to Detroit but has also had social and political implications that resist the pressures of a consumer culture.” Master’s thesis, Weber University. Publication No. 1525448, *ProQuest Dissertations and Theses Global*.

Walker, Samuel. 2016. "Urban agriculture and the sustainability fix in Vancouver and Detroit." *Urban Geography* 37(2): 163-182.

Walker, Renee E., Christopher R. Keane and Jessica G. Burke. 2010. “Disparities and access to healthy food in the United States: A review of food deserts literature.” *Health & Place* 16(5): 876-884.

Walker, Edward T., and John D. McCarthy. 2010. “Legitimacy, strategy, and resources in the survival of community-based organizations.” *Social Problems* 57(3): 315-340.

Weissman, Evan. 2015. “Entrepreneurial endeavors: (Re)producing neoliberalization through urban agriculture youth programming in Brooklyn, New York.” *Environmental Education Research* 21(3): 351-364.

While, Aidan, Andrew E. G. Jonas, and David Gibbs. 2004. “The environment and the entrepreneurial city: Searching for the urban ‘sustainability fix’ in Manchester and Leeds.” *International Journal of Urban and Regional Research* 28(3): 549-569.

White, Monica M. 2011a. “Environmental reviews & case studies: D-town farm: African American resistance to food insecurity and the transformation of Detroit.” *Environmental Practice* 13(4): 406-417.

White, Monica M. 2011b. "Sisters of the Soil: Urban Gardening as Resistance in Detroit." *Race/Ethnicity: Multidisciplinary Global Contexts* 5(1): 13-28.

White, Monica M. 2017. Freedom's seeds: Reflections of food, race, and community development: Voices of the food movement in Detroit. *Journal of Agriculture, Food Systems, and Community Development,* 7(3):9-11.

Wisconsin Budget Project. 2019. “With the state going back on its commitment to communities, local governments are pushed to consider regressive tax and fee increases.” 12/16/2019. http://www.wisconsinbudgetproject.org/with-the-state-going-back-on-its-commitment-to-communities-local-governments-are-pushed-to-consider-regressive-tax-and-fee-increases

Wisconsin Historical Society. 2021. “Milwaukee Sewer Socialism.” *Turning Points in Wisconsin History*. https://www.wisconsinhistory.org/turningpoints/tp-043/?action=more_essay

Williams, David R. and Chiquita Collins. 2001. “Racial residential segregation: A fundamental cause of racial disparities in health.” *Public Health Reports* 116(5): 404-416.

Wolf-Powers, Laura. 2017. “Food deserts and real-estate-led social policy.” *International Journal of Urban and Regional Research* 41(3): 414-425.

Zenk, Shannon N., Amy J. Schulz, Barbara A. Israel, Sherman A. James, Shuming Bao, and Mark L. Wilson. 2005. “Neighborhood racial composition, neighborhood poverty, and the spatial accessibility of supermarkets in metropolitan Detroit.” *American Journal of Public Health* 95(4): 660-667.

Zukin, Sharon. 2010. “The Billboard and the Garden: A Struggle for Roots.” In *Naked City: The Death and Life of Authentic Urban Places*. Oxford: Oxford University Press.