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Physical, Social, and Restrictive Accessibility of Urban Green Space in Philadelphia

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Abstract

Urban Green Spaces are a valuable asset for every city and its citizens, and the City of Philadelphia is no exception. The benefits of Urban Green Spaces include improved mental and physical health, opportunities for recreation and community gatherings, and contributions to environmental sustainability. Access to Urban Green Spaces within Philadelphia is critical for the well-being of the population these spaces serve; however, this raises an urgent question: How exactly do we define 'access'? Typically, access is based on a superficial and incomplete measurement of physical distance. This thesis demonstrates the shortcomings of characterizing accessibility to green space solely by such proximity-based metrics, specifically within the context of allocating resources for new green space development or maintenance and improvement of existing green space. This thesis advances the hypothesis that more effective, inclusive, and context-sensitive measures of accessibility are necessary to evaluate how an Urban Green Space serves the population for which it is intended. It proposes the concepts of physical accessibility, social accessibility, and restricted accessibility to highlight the importance of measures of accessibility beyond proximity-based metrics. Case studies of four well-known UGSs within Philadelphia are presented to demonstrate how naive, proximity-based measures of accessibility fail to consider the context of accessibility in these areas and how using such ineffective measures adversely affects the citizens that these Urban Green Spaces are meant to serve. Alternative accessibility metrics are discussed in these case studies to reveal how the context of the area and its citizens affect locally perceived accessibility. Through these case studies, this thesis illustrates the need for metrics of accessibility that blend traditional historical data with contemporary survey-based techniques to provide a sound evidence base for allocating resources dedicated to future Urban Green Space development and improvement.

Executive Summary

Urban Green Spaces and parks are essential parts of any city, including Philadelphia. Parks offer numerous benefits, such as boosting mental and physical health, providing places for recreation and community gatherings, and aiding environmental sustainability. Park accessibility is about creating environments that are inclusive, equitable, and responsive to the needs of diverse communities, fostering social cohesion, health, and well-being for all individuals. However, not all Philadelphia residents have equal access to parks. "Accessibility" has different, situation-dependent definitions, and this thesis defines and expands on what park accessibility means and why the definition needs to be less dependent on physical attributes. This includes three kinds of accessibility: *physical*, *social*, and *restrictive*. This thesis goes through each kind of accessibility, explores its pros and cons, and uses a case study in Philadelphia to illustrate the importance of an expanded definition.

First, the Physical Accessibility chapter will use existing literature to discuss why park accessibility is an environmental justice issue and explore why proximity matters. Environmental justice is a concept and movement that recognizes the disproportionate impact of environmental hazards and inequality of access to environmental benefits. It is the idea that everyone has the right to a healthy environment, regardless of race, ethnicity, income, or other socio-economic factors. The environmental justice movement seeks to address these inequalities and promote fair treatment and meaningful involvement in environmental decision-making for all. Living within proximity to a park has health benefits to which all residents should have access. This chapter explains the Urban Heat Island effect, where specific areas within a city have hotter temperatures because they don't have enough tree coverage to help decrease temperatures compared to other areas within the same city. It will also discuss how ParkServe, an organization that measures and

analyzes physical park accessibility, mischaracterizes its data, which can change the public and government's understanding of access. ParkServe draws a service area around each park and declares that everyone inside that area can walk to the park within 10 minutes. There are clear issues with ParkServe's methodologies, but they are cited in multiple academic and government publications. The city relies on data to make its decisions about adding or redoing existing parks to expand access. Therefore, it is crucial to question and understand from where this data comes. This chapter uses Philadelphia's largest park, Fairmount Park, as a model of accessibility to explore the development of the Philadelphia Parks and Recreation Department and how physical geography plays a large role in pre-determined access. But just being close to these spaces isn't enough. This paper argues that relying solely on proximity-based measures to gauge access to parks in Philly overlooks crucial aspects of how these spaces serve the people who need them most.

Second, the Social Accessibility chapter will examine the complicated relationship between higher education and the neighborhoods in proximity to University City, comparing it to the collaborative relationship between Bartram's Garden and its surrounding neighborhoods. *Social accessibility* is defined by who can use parks based on unspoken social limitations developed over time. It is based on cultural norms, safety, and personal experiences. Social accessibility is more challenging to measure than physical accessibility because it varies from person to person. Since the 1960s, the University of Pennsylvania (Penn) has played an integral role in redeveloping West Philadelphia. This includes the destruction of the historical neighborhood, Black Bottom. The University has continued to expand its boundaries, making it harder for unaffiliated residents to access many neighborhood amenities, including parks. The main park example of this section is Penn Park, a previously undeveloped space along the

Schuylkill River. While the addition of a new park is usually good for the community because the park is owned by Penn, West Philadelphia residents do not have the same social accessibility as Penn students and faculty. If this area were developed into a public park, it would be more socially accessible, but then Penn would be giving up the control they so desperately want. The contrasting example of this is just a mile and a half south. Bartram's Garden also recently went through renovations, but it became an even more enhanced asset to the community. Bartram Association worked closely with the community using qualitative research methodologies, including door-to-door surveys, to understand the neighborhood's wants. By prioritizing the social accessibility of the local community, the association was able to improve its space without risking setting off the green space paradox. The green space paradox is the idea that improving neighborhood green spaces could make the neighborhood more desirable, which could trigger gentrification. Bartram's Garden is now physically and socially accessible to the community, a significant step forward in combating environmental justice and an incredible example for the rest of Philadelphia and cities at large. These two parks have affected the social accessibility of their green spaces by including or excluding the public in the decision process.

Finally, the Restrictive Accessibility chapter will tell the story of how skateboarders fell in love with Love Park in Center City, Philadelphia, and how the city forced them out. The history of Love Park is a crucial example that sheds light on how accessibility can be established and maintained to either include or exclude particular community members. Initially, Love Park was intended to be a public space that could be accessed by everyone. However, the park's history shows that accessibility can become a contentious issue due to certain restrictive policies. Despite not being designed as a skate park, the park became a popular spot for the skating community. Skateboarders found a way to use the park's unique features and turned it into a

world-renowned skateboarding destination. However, city officials later decided to ban the skating community from using the park. They restricted the space for a targeted group of people based on stereotypes and prejudices instead of working with the skaters to find a solution that didn't criminalize the sport they loved. Through a set of laws and multiple remodeling projects, skateboarders were restricted from using public space. The decision to restrict access to the park revealed a larger issue of who gets to use public spaces and who has the power to decide how they can be used. After discussing the case study of Love Park, the discussion transitions to analyzing the work of scholars including Mitchell, Eidelman & Safransky, and Cianciotto to stress the importance of understanding the connections and differences between common and public space. These arguments are fundamental to understanding urban green spaces and how their accessibility is altered based on physical, social, and restrictive attributes. By restricting Love Park, the City of Philadelphia controlled who could access the commons and how public space could be occupied. Love Park is still physically and socially accessible to some but restricted to others.

Park accessibility is about creating environments that are inclusive, equitable, and responsive to the needs of diverse communities and fostering social cohesion, health, and well-being for all individuals. Every resident of Philadelphia should be able to access and benefit from the parks system. Ultimately, this paper emphasizes the importance of using a mix of traditional data and modern surveys to guide future decisions about park development and improvement. Understanding where physical data comes from and combining it with qualitative data is a crucial step in the decision-making process. Only by taking a nuanced approach to accessibility can we ensure that these green spaces truly benefit all Philadelphians. Urban Green Space

accessibility must be discussed and understood as a combination of physical, social, and restrictive attributes.

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Introduction

The City of Brotherly Love was built on the importance of community. Philadelphia was established as a place of tolerance and acceptance, which are still essential characteristics of the city. Like any other American city, Philadelphia has faced its fair share of challenges, but it has consistently shown that it can persevere together as a community. Having physical space to come together is essential for a thriving and vibrant community. One example of community space is parks. This thesis will use Philadelphia's park system to illustrate the importance of Urban Green Space accessibility. But first, let's explore Philadelphia's history and why parks have played a significant role since its founding.

Philadelphia's History

This thesis sets out to understand the nuances of green space accessibility within Philadelphia. Before diving into the larger arguments, it is critical to understand the city's urban history. Philadelphia has a complex history intertwined with the indigenous inhabitants of the region. Before European colonization, the Lenape, also known as the Delaware Indians, lived in the area that would later become Southeast Pennsylvania and Delaware. William Penn's founding of Philadelphia marked the beginning of significant changes for the Lenape and their relationship with the land.[1] Penn's policy of purchasing land from the indigenous peoples rather than seizing it by force initially led to a relatively peaceful coexistence between settlers and the Lenape.

[1] Roger D. Simon, *Philadelphia A Brief History*, Revised and Updated Edition (Temple University Press, 2017) 2.

However, tensions arose as European colonization expanded, and land became increasingly scarce.[2]

As European settlers established dominance in the region, the Lenape were gradually pushed out of their traditional lands.[3] Many were displaced or forced to relocate to distant territories, disrupting their communities and way of life. The relationship between Philadelphia and the Lenape serves as a poignant reminder of the complexities of colonialism and the enduring legacy of indigenous peoples in shaping the history of the region. Efforts to acknowledge and honor the contributions of the Lenape to the cultural and historical tapestry of Philadelphia are ongoing, reflecting a growing awareness of the importance of indigenous perspectives in understanding the city's past and present.

The history of parks in Philadelphia is rich and varied, reflecting the city's evolution from its colonial beginnings to its status as the 6th most populated city in the US.[4] The development of Philadelphia's parks can be traced back to its founding in 1682.[5] William Penn founded Philadelphia as a haven for religious freedom and tolerance. Penn's Quaker principles influenced the city's early governance, fostering a culture of tolerance and egalitarianism. His vision laid the groundwork for Philadelphia's growth into a thriving metropolis and enduring legacy as the "City of Brotherly Love."[6] He envisioned a city on a grid plan with ample green spaces or, as he put it, "a Greene Country Towne."[7] Penn's original plan for the city (figure 1) included five public squares: Centre Square (now occupied by City Hall), Northeast Square (now Franklin Square), Southeast Square (now Washington Square), Northwest Square (now Logan Square), and

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[2] Elizabeth Milroy, *The Grid and the River: Philadelphia's Green Places, 1682-1876* (University Park, Pennsylvania: The Pennsylvania State University Press, 2016) 90.
[3] Milroy, *The Grid and the River*, 90.
[4] Simon, *Philadelphia A Brief History*, 121.
[5] Simon, *Philadelphia A Brief History*, 1.
[6] Milroy, *The Grid and the River*, 27.
[7] Milroy, *The Grid and the River*, 13.

Southwest Square (now Rittenhouse Square).[8] These squares became the foundation of Philadelphia's layout and continue to serve as a reminder of Penn's vision.

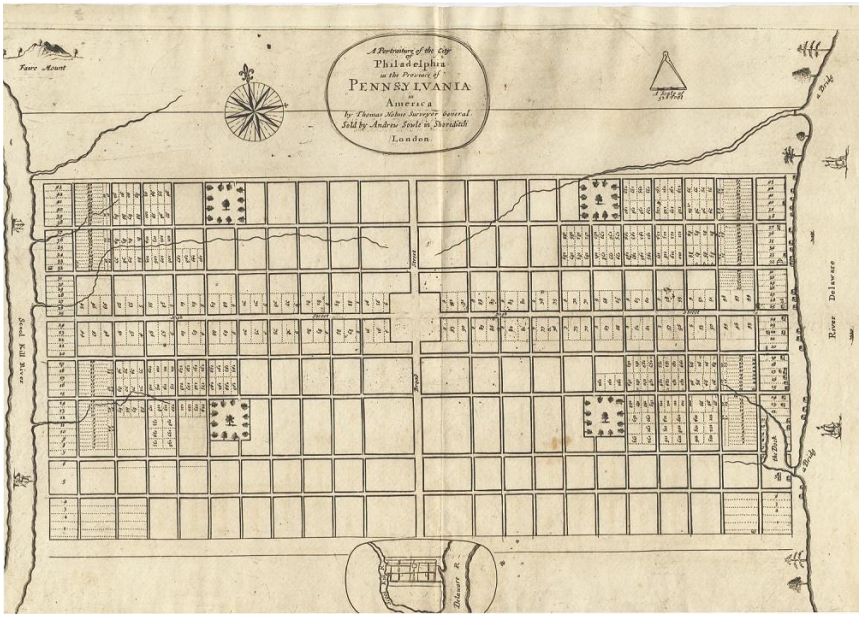

Figure 1- William Penn's Vision for Philadelphia

Throughout the 18th and 19th centuries, Philadelphia's park system expanded and evolved. Fairmount Park, one of the largest urban parks in the world, was established in 1812 and encompasses over 2,000 acres along the Schuylkill River.[9] Fairmount Park's history will be explored further in the first chapter (see "Physical Accessibility"). In the late 19th and early 20th centuries, Philadelphia experienced rapid industrialization and urbanization, leading to increased concerns about overcrowding, pollution, and the loss of green spaces. Substantial efforts were made during this time to expand and improve Philadelphia's parks. New parks, such as FDR Park and Pennypack Park were established during this time to meet the recreational needs of Philadelphia's growing population.[10]

[8] Simon, *Philadelphia A Brief History*, 3.
[9] Simon, *Philadelphia A Brief History*, 41.
[10] Simon, *Philadelphia A Brief History*, 56.

In the latter half of the 20th century and into the 21st century, Philadelphia's park system evolved in response to changing social, economic, and environmental trends. Initiatives such as creating the Schuylkill River Trail and revitalizing neglected spaces like Dilworth Park have helped enhance the city's park offerings and promote outdoor recreation and community engagement. Today, Philadelphia boasts diverse parks and green spaces, ranging from vast forests to neighborhood parks and playgrounds. The Parks and Recreation Department currently oversees 10,200 acres of green space (see Figure 2).[11] These parks serve as vital resources for residents and visitors, providing relaxation, exercise, and community spaces while preserving the city's natural beauty and history. Philadelphia has an incredible park system, but not every Philadelphian has equal or adequate access to its parks. Accessibility to parks looks different for everyone, but this thesis will argue that a more nuanced definition of accessibility is critical to understanding the accessibility gaps within the park system.

[11] "Philadelphia Parks & Recreation | Homepage," City of Philadelphia, March 27, 2024, https://www.phila.gov/departments/philadelphia-parks-recreation/.

What is Green Space Accessibility?

The accessibility of parks and recreational areas is essential to ensure that all community members can enjoy these spaces, regardless of age, ability, socioeconomic status, or other factors. While there are varying definitions of park accessibility, it generally encompasses physical access, amenities, inclusivity, and equitable distribution measures.[12] *Physical access* involves designing and maintaining parks that are easily navigable by individuals with disabilities or mobility challenges, with features like ramps, accessible parking, paved walkways, and seating areas. *Amenities* should also be diverse to accommodate the needs of different users, such as accessible restrooms, inclusive playground equipment, and resting areas. *Inclusivity* efforts aim to create welcoming environments for all, including multilingual signage, outreach to underserved populations, and partnerships with local organizations. *Equitable distribution measures* include

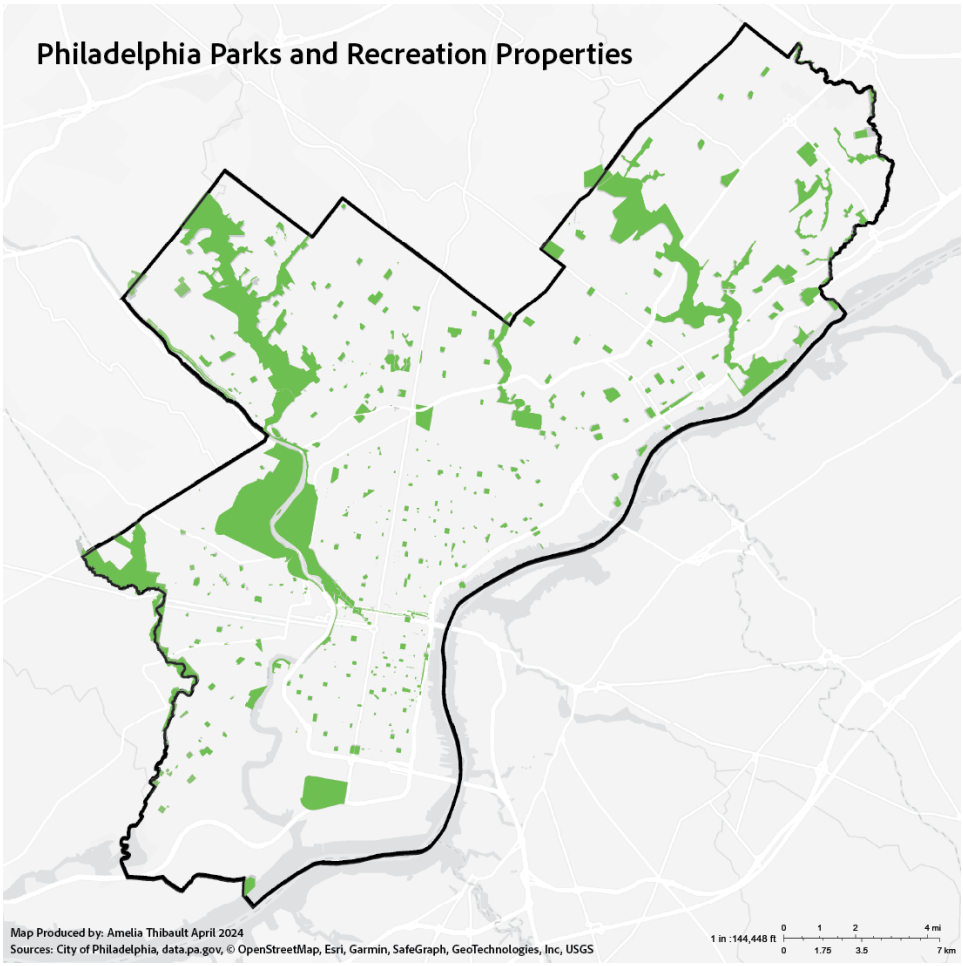

Figure 2- Map of Philadelphia Parks and Recreation Properties

[12] McIntire, Russell K., Tiara Halstead, Devesh Dajee, Meghan Buckley, Kyle McGregor, and Sharon Larson. "Disparities in Neighborhood Park Access among Adults in Philadelphia." *Urban Forestry & Urban Greening* 78 (December 2022), 2.

investing in underserved areas can ensure all residents access quality green spaces and benefit from them. Addressing disparities in park access based on income, race, and geography is crucial to providing green space accessibility for all.

This thesis argues that these attributes are critical to park capability, but a more comprehensive definition of park accessibility is needed. Park accessibility is about creating environments that are inclusive, equitable, and responsive to the needs of diverse communities, fostering social cohesion, health, and well-being for all individuals. This thesis argues that accessibility must be understood in three different but connected categories: *physical, social*, and *restrictive accessibility*. Each chapter will explore each category, starting with the most intuitive definition of accessibility: physical.

First, the Physical Accessibility chapter will use existing literature to discuss why park accessibility is an environmental justice issue and explore why proximity matters. It will also discuss how organizations can mischaracterize that data to change the public's understanding of access. This chapter will use Philadelphia's largest park, Fairmount Park, as a model of accessibility to explore the development of the Philadelphia Parks and Recreation Department and how physical geography plays a large role in pre-determined access.

Second, the Social Accessibility chapter will examine the complicated relationship between higher education and the neighborhoods in proximity to University City, comparing it to the collaborative relationship between Bartram's Garden and its surrounding neighborhoods. These two parks have affected the social accessibility of their green spaces by including or excluding the public in the decision process. This chapter will also examine the differences between quantitative and qualitative data and how they can tell a different story about social accessibility.

Finally, the Restrictive Accessibility chapter will tell the story of how skateboarders fell in love with Love Park in Center City and how the city forced them out. Through a set of laws and multiple remodeling projects, skateboarders were restricted from using public space. This chapter will then transition into discussing *public* vs. *common* space. It will draw on arguments from Geographers Mitchell, Eidelman & Safransky, and Cianciotto to illustrate the complexities of *public* and *common* space. Their arguments directly back to the main argument of this thesis: even if a park is physically accessible, there might be social or restrictive barriers that make it inaccessible.

Chapter One:

Physical Accessibility

Figure 3- Fairmount Park

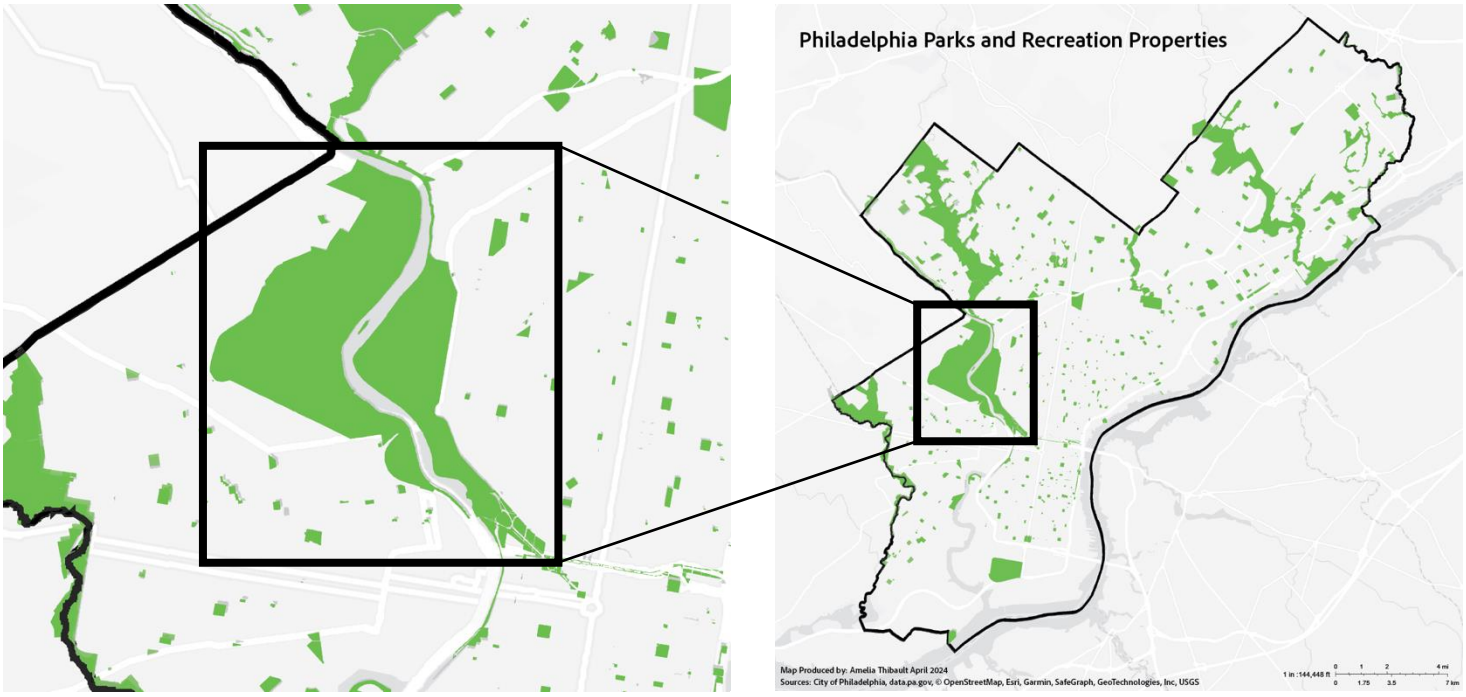

Figure 2- Map of Philadelphia Parks and Recreation Properties

Many authors focus exclusively on physical accessibility when discussing urban green space accessibility. This conversation can take many forms: physical distance to parks, quality of parks and amenities, or the number of parks within an explicitly defined area. Over the past few decades, significant strides have been made in making cities more physically accessible for people with mobility issues and disabilities. While later chapters in this thesis will discuss the social and restrictive characteristics of parks, it is also essential to focus on the physical barriers of parks. This chapter will examine the physical accessibility within Philadelphia through a case study of the city's largest park. Fairmount Park. This chapter will highlight physical accessibility as an environmental justice issue and how physical access can be hard to measure. First, the discussion will draw on articles and primary resources discussing environmental justice and the adverse effects of not living near a park. Then, the discussion will explore ParkServe, a commonly cited source that analyzes park accessibility, and explain why its underlying methodology and presentation of the accessibility data are flawed. Finally, the discussion will use Philadelphia's largest park as a case study to demonstrate why physical factors are crucial to overall accessibility.

Environmental Justice

Environmental justice is a concept and movement that recognizes the disproportionate impact of environmental hazards and inequality of access to environmental benefits. It is the idea that everyone has the right to a healthy environment, regardless of race, ethnicity, income, or other socio-economic factors.[13] The environmental justice movement seeks to address these inequalities and promote fair treatment and meaningful involvement in environmental decision-

[13]Eunyque Sykes, "Environmental Justice beyond Physical Access: Rethinking Black American Utilization of Urban Public Green Spaces," *Environmental Sociology* 8, no. 4 (October 2, 2022): 388.

making for all. This includes access to green spaces, which is essential for physical and mental health, social connection, and overall well-being.

The primary aspect of environmental justice that is connected to park accessibility is the adverse health effects that are connected to the lack of park access. This manifests itself in two ways, either having no easily accessible parks or having nearby parks that are poorly maintained or useable. Parks of any size are critical in creating a sustainable future and providing social, economic, and environmental benefits.[14] Public health studies emphasize the associations between living near large parks and positive physical and mental health outcomes, including lower body mass index, higher levels of physical activity, and enhanced mental well-being.[15] More exposure to nature-based recreation improves psychological and emotional well-being, reduces stress and anxiety, and enhances social connectedness.

Previous studies have shown that low-income people and Black, Indigenous, and People of Color communities have limited access to parks, mainly to large parks, in cities around the world.[16] These inequalities have been considered environmental justice issues, as these publicly funded open spaces can promote human health and well-being. Physical accessibility to parks is crucial to ensuring environmental justice and equity for all.

As a consequence of White flight and loss of jobs, older inner cities, like those in Philadelphia, are characterized by economically marginalized populations typically belonging to minority race/ethnic groups.[17] Low-income groups and people of color are relegated to older,

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[14] Viniece Jennings and Cassandra Gaither, "Approaching Environmental Health Disparities and Green Spaces: An Ecosystem Services Perspective," *International Journal of Environmental Research and Public Health* 12, no. 2 (February 10, 2015): 1953.
[15] Christine A. Vaughan et al., "Park Use in Low-Income Urban Neighborhoods: Who Uses the Parks and Why?," *Journal of Urban Health* 95, no. 2 (April 2018): 222.
[16] Jennings and Gaither, "Approaching Environmental Health Disparities and Green Spaces," 1954.
[17] Christopher G. Boone et al., "Parks and People: An Environmental Justice Inquiry in Baltimore, Maryland," *Annals of the Association of American Geographers* 99, no. 4 (2009): 770.

high-density, and lower-cost neighborhoods with fewer spaces for recreation.[18] Studies have shown that "low-income or minority populations tend to live closer to urban parks, but they are smaller and of lower quality, and comparatively less safe."[19] Even though these residents might have physical accessibility to a park, because of the social circumstances surrounding the park, they cannot benefit from their proximity. This limitation to accessibility can also be experienced as crowded, inadequate parks with poorly maintained facilities. Residents may then perceive these spaces as unsafe or dangerous, leading to a sharp decline in park use. Given that these localities also suffer from disproportionate exposure to undesirable land uses and pollution, poor access to parks in these communities intensifies public health risks.[20]

Urban Heat Islands

Urban heat islands are a significant environmental challenge faced by cities worldwide. Due to the urbanization of the landscape, these areas have higher temperatures than the surrounding rural areas, which can range from slightly elevated to dangerously high local temperatures.[21] Urban heat islands are an environmental justice issue because they disproportionally affect people of color and low-income communities. Even within cities, specific neighborhoods can have a higher temperature because of greater land cover consisting of man-made structures that have replaced the natural environmental landscape. Temperatures are elevated because of the combination of the lack of tree cover and the abundance of vacant lots. One of the best ways to mitigate urban heat islands is through the planting of trees and the

[18] Jennings and Gaither, "Approaching Environmental Health Disparities and Green Spaces," 1954.
[19] Russell K. McIntire et al., "Disparities in Neighborhood Park Access among Adults in Philadelphia," *Urban Forestry & Urban Greening* 78 (December 2022): 1.
[20] Jennings and Gaither, "Approaching Environmental Health Disparities and Green Spaces," 1959.
[21] Hamil Pearsall, "Staying Cool in the Compact City: Vacant Land and Urban Heating in Philadelphia, Pennsylvania," *Applied Geography* 79 (February 2017): 84.

maintenance of parks.[22] Trees provide shade, which reduces the heat absorbed by pavement and buildings. Trees planted in strategic locations, such as near buildings or in parking lots, can be particularly effective at reducing urban heat.[23] Consequently, parks can have a direct effect on the temperature of the surrounding environment. Also, larger parks have a more significant cooling effect than smaller ones.[24] Urban heat islands can range from slightly elevated to dangerous temperatures.

Johnson and Wilson's study of extreme urban heat in Philadelphia found that neighborhoods with the highest surface temperatures had the most deaths and also found that low-income populations suffered from more heat-related deaths than higher-income communities.[25] Not only are low-income populations more likely to live in urban heat islands, but they are also more likely not to be able to afford countermeasures such as air conditioning or medical treatment for the complications due to elevated temperatures. They also found that high heat mortality neighborhoods had correspondingly high percentages of African American residents and low-value homes.[26]

Vacant land contributes to elevated temperatures, and most vacant lots are in temperature hot spots with higher poverty rates, lower median household income, and lower employment rates than the remainder of the city. Philadelphia has an estimated 40,000 vacant lots.[27] From 1960 to 2000, Philadelphia lost half a million residents, or a quarter of its population, resulting in an increase in vacant properties.[28] Most of these vacant lots are in neighborhoods facing

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[22] Pearsall, "Staying Cool in the Compact City," 85.
[23] Keunhyun Park, "Psychological Park Accessibility: A Systematic Literature Review of Perceptual Components Affecting Park Use," *Landscape Research* 42, no. 5 (July 4, 2017): 508
[24] Park, "Psychological Park Accessibility," 509.
[25] Daniel P. Johnson and Jeffrey S. Wilson, "The Socio-Spatial Dynamics of Extreme Urban Heat Events: The Case of Heat-Related Deaths in Philadelphia," *Applied Geography* 29, no. 3 (July 2009): 431.
[26] Johnson and Wilson, "The Socio-Spatial Dynamics of Extreme Urban Heat Events," 432.
[27] Pearsall, "Staying Cool in the Compact City," 84.
[28] Pearsall, "Staying Cool in the Compact City," 85.

economic decline, poverty, and disinvestment. Some vacant lots have become overgrown with vegetation, while others attract dumping and illegal activities. Land cover on vacant lots varies considerably depending on ownership, redevelopment potential, regulatory enforcement, and neighborhood association involvement.[29] Some are seasonally maintained as community gardens, others are periodically mowed, and others are unmaintained year-round. In short, vacant land contributes to social and environmental justice concerns in specific neighborhoods in Philadelphia due to the deleterious effects on the community as well as the effects on the local climate.

In Philadelphia, not all urban neighborhoods experience elevated temperatures, and those with lower temperatures tend to be wealthy, low-density residential neighborhoods with large, wooded municipal parks. Because this is not a city-wide issue, it has taken longer for the city to propose ways to solve it.[30] Greening efforts, such as tree plantings, are a long-term investment that requires management and decades to mature and provide cooling benefits. The City of Philadelphia launched several greening campaigns in 2008, including an ambitious plan to add more green space, plant trees, and install green infrastructure.[31]

Urban heat islands are becoming more prominent and defined in cities across the US, and unfortunately, they will most likely only get worse. Climate change projections anticipate dramatic increases in the frequency and duration of extreme heat events.[32] Many populations that are already expected to be at risk for the effects of climate change are groups that are currently dealing with other environmental justice issues. As a result, populations that are already dealing with urban heat islands will only continue to suffer if such solutions are not implemented soon.

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[29] Pearsall, "Staying Cool in the Compact City," 87.
[30] Pearsall, "Staying Cool in the Compact City," 90.
[31] Pearsall, "Staying Cool in the Compact City," 91.
[32] "Philadelphia Parks & Recreation | Homepage,"

Transportation

As discussed previously, not all neighborhoods have direct access to maintained parks, so residents have to travel to another park to access green space. Senior citizens, individuals with children, and people with disabilities rely greatly on having convenient access to parks as they may have restricted mobility options.[33] In 2022, it was estimated that 9% of residents have an ambulatory disability.[34] Therefore, traveling to distant parks can only be a viable option if they have access to personal transportation or can access affordable public transit.

Low-income residents in urban regions tend to live farther away from larger, well-maintained parks than more socio-economically privileged groups.[35] Although disadvantaged groups often have limited access to personal transportation and rely on public transit to go about their daily activities, research suggests that they also frequently live at a greater distance from public transportation services.[36] The combination of relying on public transportation but not having convenient access to it can make it challenging for someone with mobility issues to access parks.

Accessibility has been a critical goal in urban and transportation planning as "a measure of an individual's freedom to participate in activities in the environment."[37] In transportation research, accessibility can be defined as "the ease with which any land-use activity can be reached from a location using a particular transport system."[38] To provide access to meet the daily needs of transit-dependent populations, many transit systems focus on connecting

[33] Park, "Psychological Park Accessibility," 509.
[34] U.S. Census Bureau, "Disability Characteristics," 2022. *American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1810*, 2022, accessed on April 23, 2024, https://data.census.gov/table/ACSST1Y2022.S1810?q=ambulatory disability in Philadelphia city, Pennsylvania.
[35] Boone et al., "Parks and People: An Environmental Justice Inquiry in Baltimore, Maryland," 243.
[36] Park, "Psychological Park Accessibility," 510.
[37] Park, "Psychological Park Accessibility," 509.
[38] Park, "Psychological Park Accessibility," 510.

economically focused areas. Other areas that contribute to the quality of life, such as recreation, have received very little attention from transit scholars.[39] Public transit should be a viable option to reach parks, especially for people with limited access to personal vehicles. However, if transit systems do not have convenient routes to parks, then their accessibility decreases. For cities like Philadelphia, there is already enough strain on the public transportation system, so the possibility of expanding routes is unlikely.

Measuring Physical Accessibility

For this thesis, physical accessibility is combination as a of distance, time, and access to transportation. This definition has been used by other scholars who have studied physical access on many different scales. Some have looked at the accessibility of Urban Green Spaces, ranging from a singular park to one neighborhood, one city, to the whole state. Access to Urban Green Spaces looks different around the country and the world, so it is crucial to understand that techniques that work in one part of the country might not apply to Philadelphia.

When studying the physical accessibility of Urban Green Spaces, a few main measurements have typically been used. In their article, "Understanding Disparities in Community Green Accessibility under Alternative Green Measures: A Metropolitan-Wide Analysis of Columbus, Ohio, and Atlanta, Georgia," Park and Guldmann identify four common approaches: "percent coverage index, nearest distance index, per-capita-based service area index, and gravity-based index."[40] These indexes fall into two main categories: set area and radius of

[39] Park, "Psychological Park Accessibility," 510.
[40] Yujin Park and Jean-Michel Guldmann, "Understanding Disparities in Community Green Accessibility under Alternative Green Measures: A Metropolitan-Wide Analysis of Columbus, Ohio, and Atlanta, Georgia," *Landscape and Urban Planning* 200 (August 2020), 1.

access. For the first category, the index is based on a *set area*. Access to Urban Green Spaces is calculated by defining an area and comparing many UGS and households there are in the area. The data can be represented as a percentage of how many people can theoretically access a park, how close someone is to a park, or an index of the entire area.[41] The most common areas used are Census Block Groups, which allow for direct comparisons between UGS, and demographics captured through the census. The second category is indexes based on each individual park and the *radius of access* that changes based on the distance to the park.[42] This approach creates rings of access around the park, but there are numerous challenges to executing this effectively, as will be explored in the next section, which dissects the methodologies of "ParkServe," one of the main accessibility tools that implements this method.

ParkServe

The Trust for Public Land is a nonprofit that collects data about urban green spaces to inform the public about the overall landscape of their city. Trust for Public Land uses distance and time to determine access to parks across the US and uses their accessibility data to recommend where local governments create and renovate parks. They are able to do this because of their web application, ParkServe. ParkServe is an online map of parks that uses geographic data with socioeconomic information to show where there is the most need for new parks in cities. It takes each park and draws a "bubble" around the park to show who is within a 10-minute walk from each park. They define physical accessibility as anyone, regardless of mobility, being within a ½ mile of a park (which they say should be within 10 minutes of travel

[41] Li, Xiaojiang. "Investigating the Spatial Distribution of Resident's Outdoor Heat Exposure across Neighborhoods of Philadelphia, Pennsylvania Using Urban Microclimate Modeling." *Sustainable Cities and Society* 72 (September 2021), 2.
[42] Park and Guldmann, "Understanding Disparities in Community Green Accessibility under Alternative Green Measures," 3.

time). For Philadelphia, they concluded that 95% of Philadelphians are within a 10-minute walk or located ½ mile from a park.[43] Upon closer inspection, it becomes readily apparent that this number appears too good to be true and is, in fact, incorrect. There are inconsistencies with how ParkServe defines a park and how they calculate the ½ mile service area. Within Philadelphia alone, both issues affect the ParkServe estimate of accessibility, calling into question the credibility and reliability of the ParkServe methodology and assumptions about accessibility. In this section, the discussion will evaluate ParkServe's methodologies and use my own observation and experience to explore the inconsistencies and issues with their claims.

ParkServe defines a park as "parks, trails, and open space, so long as there is no barrier to entry." They include "Publicly-owned local, state, and national parks, trails, and open space. School[s] with a joint-use agreement with the local government. Privately-owned parks that are managed for full public use." These are quite loose definitions, but the idea of "no barrier to entry" is crucial to physical accessibility. From a purely physical standpoint, some common barriers to entry include gates, cost of admission (including entry or parking fees), and unmaintained land that inhibits unrestricted access. ParkServe also labels non-park green spaces, such as highway medians or street trees, as parks. While these are still valuable assets when considering a city's overall greenness, they are not parks. These barriers make the parks inaccessible, but ParkServe's map of Philadelphia includes multiple examples with these attributes that ParkServe identifies as accessible.

When I started this project, the first park that raised the alarm that there might be issues with ParkServe was Morris Arboretum and Gardens. It has been under the ownership of the

[43] Trust for Public Land, "ParkServe," accessed April 25, 2024, https://parkserve.tpl.org/mapping/#/?CityID=4260000.

University of Pennsylvania (which will be discussed in the Chapter Two) since 1933.[44] As a child, I would go the Arboretum with my family, and I remember it being a beautiful space with a multitude of activities. However, I was confused about why it was listed on ParkServe because I knew you had to pay admission to get in. ParkServe, has it listed as being public and open access, but currently an adult ticket is $20 for admission and parking.[45] There is an option to "walk in or bike in," which still costs $10. The only free tickets are for active military (retired military is still $10), children under 3, and University of Pennsylvania students and staff. Discounted tickets are available for Philadelphia residents who are enrolled in the ACCESS program, which "provides $2 admission to over 80 cultural sites throughout Greater Philadelphia and Delaware for individuals receiving public assistance for food or medical benefits."[46] All of this is to say, this is not a publicly accessible space and should not be listed on their website. Morris Arboretum is a beautiful space that should be able to be enjoyed by everyone, but if they continue to charge admission, it should not be listed by ParkServe as open access.

The next major barrier to access is ParkServe's leading measurement—the ability for the park to be within a 10-minute walk. Because they are measuring based on a walkable distance, the routes must also be free of barriers. This means that there should be a safe and accessible route, preferably sidewalks, in the area surrounding the park. According to their website, they "calculate a ten-minute walk service area for each park in the database by creating a half-mile 'walkable' service area from each of the park's public access points. This service area is created using Esri's Street Map Premium network dataset, which allows us to account for physical

[44] Trust for Public Land, "ParkServe."
[45] Morris Arboretum & Gardens, "Get Tickets," Morris Arboretum & Gardens, accessed April 25, 2024, https://www.morrisarboretum.org/get-tickets.
[46] Art-Reach, "ACCESS," Art-Reach, accessed April 25, 2024, https://www.art-reach.org/access/.

barriers such as highways, train tracks, or rivers without bridges."[47] However, there are multiple examples in Philadelphia where these barriers were not taken into consideration.

The first inaccuracy I found in ParkServe's data is the inclusion of bodies of water as areas where people live and could reach the park. While this doesn't change the number of people who can access the park because no one lives in the water, it changes its boundaries. It demonstrates that bodies of water do not always register as a barrier. Every park along Philadelphia's two major rivers, the Delaware, and the Schuylkill, need to be double checked because there are issues with about half. There were even a few occasions where the park "bubble" crosses the Schuylkill River and included people who did not have access to a footbridge to cross the river within a 10-minute walk. One of the most egregious examples of this is the service area for Bartram's Garden (see Social Accessibility). Located along the Schuylkill River, the service area extends across the river, but there is not a bridge located within the service area. Luckily, Bartram's Garden plans to construct a pedestrian bridge linking it to Grey's Ferry. But until then, ParkServe/Esri's data is painting an incorrect picture of physical accessibility.

The Trust for Public Land only uses physical access as a marker for accessibility. While this is a great starting point, it has too many flaws to be considered accurate. When scholars rely on an exclusively physical definition of accessibility, many social factors are omitted, making the data misleading and incomplete. Only considering physical factors is incomplete and inaccurate, and social accessibility must also be considered, especially when determining the allocation of limited financial resources for green space construction and renovation. It is important to critique the Trust for Public Land's work because it is being cited and utilized by

[47] Trust for Public Land, "The ParkServe Database," Trust for Public Land, accessed April 25, 2024, https://www.tpl.org/parkserve/about.

scholars, news organizations, and governments. If ParkServe is going to continue to be used, its results need to be understood and applied in the context of the environmental justice aspects of green space access.

Physical Accessibility Case Study: Fairmount Park

In this section, I will apply the previously discussed aspects of physical accessibility and environmental justice to explore the gaps in accessibility that prevent equitable access to Philadelphia's largest park, Fairmount Park. This includes issues with public and private transportation, walkable sidewalks, paths in and outside the park, and the general physical accessibility of the park.

Philadelphia has a long history with Urban Green Space dating back to the city's founding. Many originally planned parks were public squares within the city, but in the early 19th century, many inhabitants sought green space in the "countryside."[48] In 1812, the city purchased the area now known as Fairmount for their new waterworks project. The land was also developed into a park with paths, gardens, and landscaping. In 1844, the city purchased the Lemon Hill estate, and in 1854, the park was officially named Fairmount Park.[49] The park continued to expand on both sides of the Schuylkill River. While the park served an essential role for the public as a green space, the park also ensured the protection of the Schuylkill River from pollution. In 1868, the Fairmount Park Commission was established to regulate the park and plan for its expansion up the river to Wissahickon Park.[50]

[48] Elizabeth Milroy, "Fairmount Park," Encyclopedia of Greater Philadelphia, 2016, https://philadelphiaencyclopedia.org/essays/fairmount-park/.
[49] Milroy, "Fairmount Park."
[50] Milroy, "Fairmount Park."

The sheer vastness of Fairmount Park made it the perfect site for the 1876 Centennial Exhibition. The exhibition was modeled after similar celebrations hosted in Europe and was the first "world's fairs" in the US.[51] The Centennial covered 285 acres and had just under 10 million recorded visitors. After the exhibition, many of the structures were demolished, but Memorial Hall was repurposed into an art museum and was renovated in 2008 to be a children's museum.[52] The Centennial was a massive success for Philadelphia and the Fairmount Park Commission.

Throughout the 20th century, Fairmount Park expanded to about 4,500 acres, making it the US's largest urban park at the time.[53] During this time, the Fairmount Park Commission went through different leadership and dealt with corruption and misused funds.[54] However, the Commission was also in charge of most of the other public parks in the city. The Commission continued to regulate Philadelphia Parks until 2010, when the Department of Parks and Recreation was established and took over the duties of the Fairmount Park Commission.[55] Today, Fairmount Park refers specifically to the West and East sections of the park, while other sections that were a part of the Commission are now separate entities. This includes Wissahickon, Pennypack, Cobbs Creek, and FDR Park.

Since the abolishment of the Commission, the city has struggled to maintain Fairmount and Wissahickon Parks. Like many other parks across the city, most of the maintenance now comes from "Friends of" organizations. Friends of Fairmount, Fairmount Park Conservancy, and Friends of Wissahickon are community-run organizations that work to conserve and clean the

[51] Milroy, "Fairmount Park."
[52] Milroy, "Fairmount Park."
[53] Milroy, "Fairmount Park."
[54] Milroy, "Fairmount Park."
[55] Milroy, "Fairmount Park."

parks.[56] [57] [58] These groups are made up of community members who are passionate about their local green spaces. Their contributions attempt to make up for the city's lack of investment and community engagement. They organize community members to volunteer their time and money while encouraging them to participate in meetings with the city to make their voices heard. While the Commission had many internal issues over 142 years, it was a dedicated group separate from the City's politics. The abolishment of the Commission has made Fairmount Park less physically accessible to residents across the city because of the lack of maintenance support it receives.[59] This is one of the many factors that has affected the physical accessibility of Fairmount Park.

Physical Barriers to Fairmount Park

The significant barrier to access is the location of Fairmount Park. Unlike other urban parks, like Central Park in New York or London's Hyde Park, Fairmount Park is not centrally located in the city. Fairmount Park was intentionally established as a place to escape from the city. But now, because it is outside of Center City, it is harder for most of the population to access. This means people must go out of their way to access the park instead of casually cutting through it like a centralized park. There are pros and cons to Fairmount Park's location. Because it is outside of the downtown, it is more secluded and outside of the hustle and bustle of the city. A park this size would not be able to be in the city's downtown area. But this seclusion makes accessing on foot, by bike, car, or public transportation harder.

[56] "Friends of Fairmount Park," accessed October 31, 2023, https://friendsoffairmount.com/about.
[57] "Fairmount Park Conservancy," Fairmount Park Conservancy, accessed April 25, 2024, https://myphillypark.org/.
[58] "Friends of Wissahickon," Friends of Wissahickon, accessed October 31, 2023, https://fow.org/.
[59] Fairmount Park Conservancy,"

As discussed previously, many issues connected to environmental justice explain why parks that are farther away are harder to access for low-income residents. Without access to a private vehicle, Fairmount Park becomes challenging to access. Many cities, including Philadelphia, do not prioritize public transportation routes that connect residents to recreation or leisure areas.[60] This is exemplified by the limited number of routes and stops that connect Fairmount Park to the city. The Southeastern Pennsylvania Transportation Authority (SEPTA) serves Philadelphia residents and has a number of routes that stop at Fairmount Park. However, their own "Plan Trip" web app shows just how tricky it can be to actually utilize their system.[61] Many routes suggest walking as the faster route over public transportation, even if it would take over an hour. They also have alerts that warn about potential issues for wheelchair users. Unfortunately, many routes are labeled inaccessible due to the lack of loading ramps or out-of-order elevators. Not having accessible or reliable public transportation can further isolate residents and make this incredible park inaccessible.

Fairmount Park is located in West Philadelphia, along the Schuylkill River. Because the Schuylkill River separates the park, there are inequalities in access on each side of the river. West Fairmount Park covers 1,400 acres, and East Fairmount Park is 650 acres.[62] There are only three open bridges connecting each side of the river. These are also vehicle bridges, so pedestrians and bikers have to cross alongside vehicles safely. This division makes it challenging to access the full park. On top of this natural division, West Fairmount Park has also been cut into two because of Interstate I-76. The Schuylkill Expressway, as it is better known, is one of the busiest roads in Pennsylvania and connects King of Prussia to the Walt Whitman Bridge and

[60] Park and Guldmann, "Understanding Disparities in Community Green Accessibility under Alternative Green Measures," 2.
[61] SEPTA, "Trip Planner," accessed April 25, 2024, https://plan.septa.org/#/.
[62] Fairmount Park Conservancy,"

New Jersey. Having this major highway cut through the park not only disrupts the natural environment but also makes traversing the park challenging. There is a section of the park between the highway and the river, which can only be accessed by going under the highway. This is another barrier between the East and West sections of the park. All of this to say, not only is the park challenging to reach, but once at the park, it can be challenging to traverse and move between areas.

Fairmount Park has been praised as a grand example of a sprawling urban park. However, its location and inaccessibility make it difficult for Philadelphians to use it daily. ParkServe estimates that nearly 77,000 people are within a 10-minute walk of a part of the park.[63] However, there are many limitations both inside and outside the park that make it hard for residents even within proximity to the park to access it. Fairmount Park is an incredible space for Philadelphians, but it could be more accessible if more time and resources were put towards accessible infrastructure. More bus stops and routes within the park and pedestrian bridges could make the park more accessible along with making it more sustainable. Fairmount park has a rich history of being a place to escape the city and enjoy nature, but it needs to be a place accessible to everyone.

Physical accessibility is just one way of understanding who can access parks. Park access is directly tied to physical proximity and environmental justice. People who live near parks are more likely to use them and benefit from their multitude of health, social, and environmental effects. As explained above, there are certain groups who historically and presently do not live within proximity to safe, maintained, or accessible parks. Neighborhoods with parks can benefit

[63] Trust for Public Land, “ParkServe.”

from their effects just by having one near them. Parks and street trees provide fresh air and shade and protect communities from the Urban Heat Island Effect. Creating parks and planting trees now will help cities tackle climate change and environmental justice.

As these communities wait to have a neighborhood park of their own, it is crucial that they are given the opportunity to access other parks with public or private transportation. Transportation departments have to prioritize connecting communities to more than just commercial centers. Creating routes that connect people to leisure activities allows more people to use public transportation in their daily lives outside of work. This not only benefits people who rely on public transportation, but it also attracts people to use it instead of private transportation. Advancing public transportation is a crucial step in creating more accessible parks and a more sustainable future.

ParkServe is a great tool on the surface, but its data presentation can be misleading. Their map has issues properly categorizing parks and avoiding physical barriers that make park access impossible. Proximity-based measurements are invaluable when quickly understanding the landscape of a city. But when it comes to making decisions that will affect its residents, cities must investigate their data and understand what they're measuring. ParkServe definitively stating that 95% of Philadelphians are within a 10-minute walk is just wrong. Even if they just changed it to “within ½ mile,” the statistic would at least be inclusive of those who are unable to walk. Their metrics are a jumping-off point, not the final destination. Measuring physical accessibility is crucial, but there are many gaps that need to be filled in order to create a more equitable parks system. This thesis will now transition into discussing social accessibility and why it must be understood in conjunction with physical.

Chapter Two: Social Accessibility

Figure 4- University of Pennsylvania's Penn Park

Figure 5- Bartram's Garden

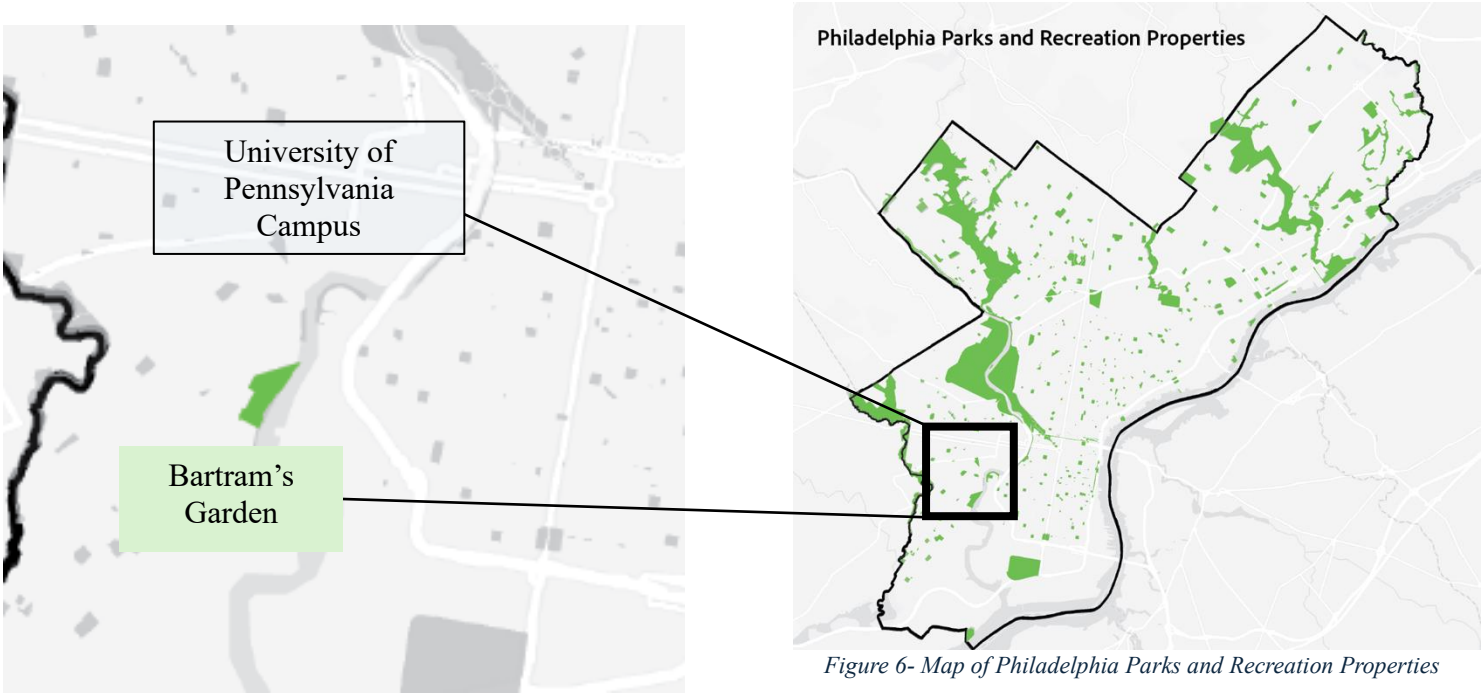

Figure 6- Map of Philadelphia Parks and Recreation Properties

Social accessibility is defined by who can use parks based on unspoken social limitations developed over time. It is based on cultural norms, safety, and personal experiences. Social accessibility is more challenging to measure than physical accessibility because it varies from person to person. Two people could be the same distance from a park, but their social accessibility can be completely different. Many demographic factors affect whether someone feels accepted and safe at different parks. Someone's social accessibility can be different at their neighborhood park vs. a park outside of their neighborhood. While many factors contribute to social accessibility, it can be broadly analyzed based on neighborhood trends and studies using participatory research methods. This chapter will examine two Urban Green Spaces and how their opposing social characteristics change who can access them. This chapter will explore the social accessibility of two urban green spaces in West and Southwest Philadelphia neighborhoods. First the chapter will introduce the history of University City and how the University of Pennsylvania has damaged neighborhood connections by limiting the social accessibility of its "public" space. In contrast, the discussion will shift and demonstrate how Bartram's Garden strengthened its connection with the community by inviting the public to access its green space. Then, the chapter will transfer into a theoretical discussion of the differences between qualitative and quantitative methodologies in studying social accessibility. The chapter will conclude by examining the "Green Space Paradox," one of the possible negative outcomes of not taking social accessibility into consideration.

Social Accessibility Case Study: University City versus Bartram's Gardens

University City and "Penntrification"

University City is a neighborhood in West Philadelphia that extends from the Schuylkill River along the east to 52nd Street on the west.[64] The area is appropriately named after the many university campuses, most notably the University of Pennsylvania ("Penn") and Drexel University. These institutions define the neighborhood and surrounding area. Penn moved to West Philadelphia in 1872 and has continued to be a commanding force in the area's social fabric.[65] Soon after, in 1891, Drexel was founded right next door.[66] Most of the neighborhood is occupied by the universities, affiliated housing, and amenities geared toward students and faculty. But it was not always this way.

Since the schools' founding, they have continued to expand further and further into West Philadelphia. Both universities have bought up vacant and developed property to build new university facilities and housing. While some projects have given new life to vacant and unused spaces, many have displaced unaffiliated West Philadelphia residents. The clearest example of this is the now non-existent neighborhood of Black Bottom. In the 1960s, Penn and Drexel led an "urban renewal" project in this historic African American neighborhood.[67] The universities used the "Federal 1949 Housing Act, and they were able to label the tight-knit, working-class community as a 'slum'".[68] The Act allowed the government to strip the community of their

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[64] Ehlenz, Meagan M. "Neighborhood Revitalization and the Anchor Institution: Assessing the Impact of the University of Pennsylvania's West Philadelphia Initiatives on University City." *Urban Affairs Review* 52, no. 5 (September 2016): 716.
[65] University Archives and Records Center, "Penn's West Philadelphia Campus," University Archives and Records Center, accessed April 25, 2024, https://archives.upenn.edu/exhibits/penn-history/campuses/west-philadelphia-campus/.
[66] Drexel University, "History | Drexel University," August 11, 2020, http://drexel.edu/about/history.
[67] Susaneck, Adam Paul. "Segregation by Design." *TU Delft Centre for the Just City*, 2024. https://www.segregationbydesign.com/
[68] Susaneck, "Segregation by Design."

homes using eminent domain, and the whole neighborhood was bulldozed. The exact number is unknown, but it is estimated that around 2,700 people were displaced, and about 78% were African Americans.[69] The Black Bottom community was razed, and now, parking garages and office buildings have taken its place.

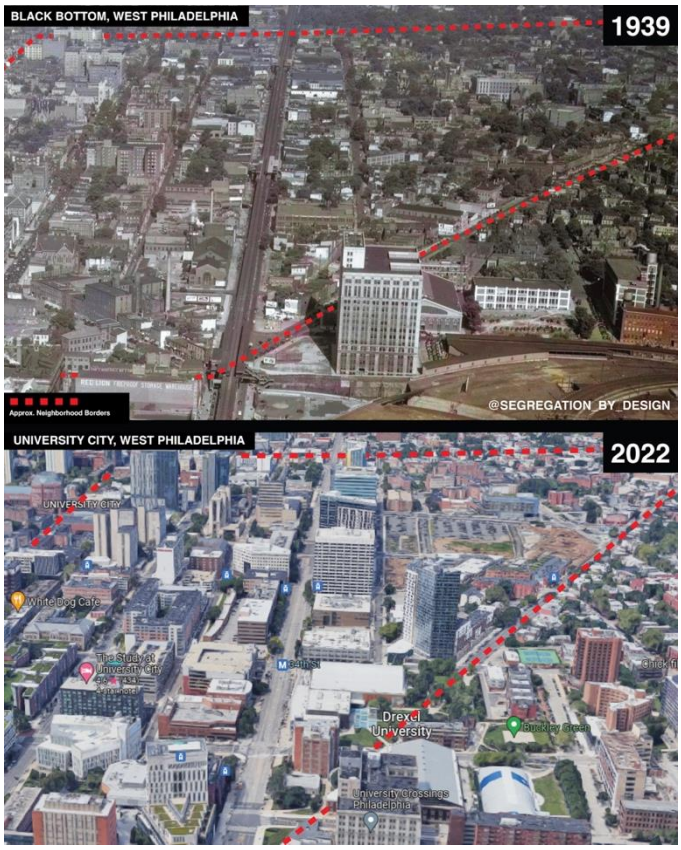

Figure 7- Black Bottom Between 1939 to 2022 by Segregation by Design

In the 1990s, Penn started tracking the declining conditions of University City.[70] Like other neighborhoods in Philadelphia, University City and West Philadelphia faced disinvestment and rising poverty and crime rates.[71] Penn intervened and developed the West Philadelphia Initiatives (WPI), which first focused on public safety but then turned its long-term focus to housing. Just over ten years after the start of WPI, the Median housing value in University City (adjusted to 2010 dollars) increased from $125,600 in 2000 to $326,400 in 2010.[72] This increase was substantial, but it is even more extreme when compared to the 2010 Median housing value in West Philadelphia, which was $79,600.[73] University City had become extremely cost-prohibitive, allowing the "Penn bubble" to expand with thicker, more exclusive walls. These "redevelopment" and "renewal" projects have hurt the

[69] Susaneck, "Segregation by Design."
[70] Ehlenz, "Neighborhood Revitalization and the Anchor Institution," 719.
[71] Ehlenz, "Neighborhood Revitalization and the Anchor Institution," 724.
[72] Ehlenz, "Neighborhood Revitalization and the Anchor Institution," 731.
[73] Ehlenz, "Neighborhood Revitalization and the Anchor Institution," 731.

surrounding community and made it more complicated for their citizens to think of Penn as a usable green space.

Most of the businesses and amenities on and around Penn's campus cater to the students and faculty. This includes grocery stores, restaurants, schools, and Urban Green Spaces. Because Penn is a private institution, their green spaces are, too. While these green spaces appear (and claim) to be physically open to the public, the public does not have the social accessibility enjoyed by the affiliated students and faculty. When people are on university property, they are subject to the university's spoken and unspoken rules. Like many other college campuses, Penn is open to guests, but guests are not the priority, which is understandable, as it is a private institution. However, because they control most of the urban green spaces in University City, they also control the social accessibility to these spaces.

In 2007, Penn bought twenty-four acres of U.S. Postal Service property adjacent to the Penn campus to develop Penn Park. The park is the "centerpiece" of Penn Connects, Penn's development plan created in 2006.[74] Penn Park was completed in 2011 and includes a sports complex comprising fields and courts, biking trails, and green space. While the park is open to the public, there is a long list of rules the public must follow. Also, the location is almost surrounded exclusively by other Penn properties. The onerous rules governing park use and the park's secluded location within university property limit the social accessibility to this centerpiece park to most non-affiliated West Philadelphia residents. While Penn did not physically close off their space, they effectively pushed the University City community out and made them feel unwanted. Even though the addition of a new park is usually good for the community because Penn Park is owned by Penn, West Philadelphia residents do not have the

[74] University of Pennsylvania, "Penn Connects: A Vision for the Future," accessed April 25, 2024, https://www.pennconnects.upenn.edu/.

same social accessibility as Penn students and faculty. If this area were developed into a public park, it would be more socially accessible, but then Penn would be giving up the control they so desperately want. Penn has been able to create a monopoly on green space in University City, thus limiting the social accessibility of residents outside of Penn.

Southwest Philadelphia and Bartram's Garden

Bartram's Garden is located south of University City and borders the Schuylkill River. It is in Bartram Village, a small neighborhood named after the Bartram family, a Philadelphia family known for its roots in botany.[75] It is usually grouped with Kingsessing, a larger, nearby neighborhood. Unlike the previous discussion of University City, which started with the neighborhood and zoomed in on the urban green spaces, the discussion of Bartram's Gardens and Southwest Philadelphia will start with the urban green spaces and zoom out to the neighborhood.

John Bartram was born in Pennsylvania in 1699 and bought 112 acres along the Schuylkill River in 1728.[76] Bartram was passionate about botany. He cultivated his nursery, which exported "new" North American plants to Europe, and his business flourished. He was so successful that he was named the "Royal Botanist" by King George III and was friends with Benjamin Franklin.[77] Bartram's son, William, took over and then passed the business on to his niece, Ann. Ann Bartram Carr continued the business as long as possible until financial trouble forced her to sell the property in 1850.[78] In 1891, The City of Philadelphia took over the

[75] Bartram's Garden, "Bartram History," Bartram's Garden, accessed April 25, 2024, https://www.bartramsgarden.org/bartram-history/.
[76] Bartram's Garden, "Bartram History."
[77] Bartram's Garden, "Bartram History."
[78] Bartram's Garden, "Bartram History."

management of the property and made it public. The property changed hands a few more times, but in 1980, the John Bartram Association took over and began restoring the property.[79] Since then, the property has expanded and become an asset to the Southwest Philadelphia community. Now, the property features walking trails, botanical gardens, and year-round activities open to the public. They host free bike riding rentals, fishing lessons, meditation workshops, and kayaking.[80] They do all of this to educate and connect the community through exploration and appreciation of nature in their neighborhood.

In the last five to ten years, Bartram's Garden has undergone a major transformation. The Garden has completely changed from being a tourist location and botanical garden to a space meant for the community. Most importantly, this was achieved without disturbing the surrounding community. "Assessing the Relationship Between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia" focuses on Bartram's Garden and the surrounding community.[81] The authors used three categories to measure how the community responded to Bartram's Garden and its new programming and improvements: community engagement, ownership, and social fabric. They surveyed residents within a ½ mile of the park and "hired and trained field interviewers from the local community to help establish rapport with survey respondents and ensure that community members had representation in the research process."[82] At each step in the process, the community remained the priority, which is the key to understanding their thoughts and desires. This was demonstrated in the article's conclusion, "community members indicated their voice was heard, their community was represented in the

[79] Bartram's Garden, "Bartram History."
[80] Bartram's Garden, "Bartram History."
[81] Mullenbach, Lauren E., Birgitta L. Baker, Jacob Benfield, Benjamin Hickerson, and Andrew J. Mowen. "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia." *Journal of Leisure Research* 50, no. 3 (May 27, 2019): 201–19.
[82] Mullenbach et al., "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia," 207.

renovations, and their voice mattered for what happens at Bartram's Garden generally. In addition, given the general agreement that the park is a community asset, there is some moderate evidence that residents do not feel displaced from their neighborhood social environment."[83] Their conclusions and survey results demonstrate a way to renovate an urban green space that benefits the surrounding community without disturbing that same community.

Green Space Paradox

Unfortunately, there is no easy solution to social accessibility or park inequality. It usually goes unseen; even when known, little can be done without the risk of negative consequences. When a poorly maintained of park or vacant lot is "beautified," it rarely goes unnoticed. A new or renovated park can start a domino effect of other beautification projects in the area. This means a new park can be the misplaced spark that creates gentrification.[84]

If a neighborhood is now viewed as "nice" or "safe," a new demographic will show interest in living there. Once an area or neighborhood starts to be gentrified, very little can be done to stop it. Gentrification causes displacement, rendering all work done to create more social accessibility and park equality useless for the displaced original residents. This is not a one-off phenomenon; this is the *Green Space Paradox*.[85]

The green space paradox refers to the phenomenon of marginalized communities' access to green spaces, which are meant to promote health and well-being, being often limited for these communities. This paradox arises due to various reasons, including historical discrimination,

[83] Mullenbach et al., "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia," 213.
[84] Pearsall, Hamil, and Jillian K. Eller. "Locating the Green Space Paradox: A Study of Gentrification and Public Green Space Accessibility in Philadelphia, Pennsylvania." *Landscape and Urban Planning* 195 (March 2020): 2.
[85] Pearsall and Eller, "Locating the Green Space Paradox."

uneven resource distribution, and gentrification. Historically, marginalized communities have been systematically excluded from accessing green spaces due to discriminatory policies and practices. For example, redlining, a practice in which banks and other institutions refuse to invest in certain neighborhoods based on racial or ethnic demographics, led to the neglect, and underfunding of parks and green spaces in these areas.[86] This has resulted in a legacy of disinvestment and lack of access to green spaces for marginalized communities.

The uneven distribution of resources also contributes to the green space paradox. Wealthier neighborhoods often have more and better-maintained green spaces, while low-income neighborhoods have fewer and lower-quality green spaces. This is because funding for parks and green spaces is often tied to property taxes, meaning that wealthier neighborhoods can afford to invest more in green spaces.[87] This is a cyclical issue where low-income neighborhoods don't have the tax base to afford to pay for green spaces, which doesn't attract people to move in, which limits the tax base, and so on. Low-income residents also typically have less representation in local government, due to funding or time restraints, which makes many of these decisions.

Gentrification also plays a role in the green space paradox. As neighborhoods become more affluent, green spaces are often redeveloped to cater to the new residents rather than serve the needs of the existing community. These new amenities attract other new residents, and once all of the vacant properties are filled, the existing neighborhood is taken over.[88] Many landlords will sell their properties to developers or raise the rents so high that residents can no longer

[86] Pearsall and Eller, "Locating the Green Space Paradox" 3.
[87] Pearsall and Eller, "Locating the Green Space Paradox" 11.
[88] Pearsall and Eller, "Locating the Green Space Paradox" 3.

afford them. This can lead to the displacement of long-term residents and further exacerbate the lack of access to green spaces for marginalized communities.

The green space paradox highlights the need for more equitable and inclusive policies and practices to ensure that all communities have access to green spaces. This includes addressing historical discrimination, investing in under-resourced neighborhoods, and involving local communities in the planning and development of green spaces. Bartram's Garden avoided triggering the green space paradox by including and advocating for the local community during its development process. This was only possible because of their use of qualitative methods, which will be explored next.

Quantitative VS. Qualitative Methodologies

Park accessibility can be measured both quantitative and qualitatively. Most discussions of physical accessibility are done quantitatively. An example of this is ParkServe, which was discussed previously. Relying solely on quantitative measurements does not take into consideration any personal aspects of the area. As seen earlier, this creates an incomplete picture of park accessibility. This section will explain the benefits of qualitative methodologies and the importance of working with the community to understand their wants and needs. This is not an issue specific to park accessibility, but it is often an issue in academic-based projects.

While physical geography and accessibility are crucial in understanding Urban Green Space, other scholars have taken a more social approach to understanding access. Like physical accessibility, there are multiple ways to calculate and predict social accessibility. Most studies

use historical data to predict how specific social factors affect park access.[89] In contrast, some use participatory methods to collect current data from neighbors and stakeholders.[90] The latter is more demanding and time-consuming, but it is a better contemporary reflection of a community's perceptions of access. The more information the community provides, the better the solutions can be for new or renovated parks. Social accessibility can, in theory, be studied without the community. Still, participatory methods must be used, when possible, to have the best and most current neighborhood thoughts and opinions.

Because studying social accessibility has many challenges, some articles rely on previously collected data to form their argument. For example, the authors of the study "Disparities in Neighborhood Park Access Among Adults in Philadelphia" use data collected from the Household Health Survey (HHS), which was conducted in 2018 by the Public Health Management Corporation.[91] This survey had also been conducted previously multiple times. This survey focuses on health topics, including physical activity, mental health, and neighborhood and social factors. While many of their questions are helpful when painting an overall picture of the health of Philadelphians, the most critical question for this paper is in the "neighborhood" section. The survey poses the question, "Is there a park or other outdoor space in your neighborhood that you're comfortable visiting during the day?"[92] This survey question is nuanced, allowing park access to be analyzed for more than just physical accessibility. First, it asks about parks and other Urban Green Spaces, which include unofficial parks, community

[89] Vaughan, Christine A., Natalie Colabianchi, Gerald P. Hunter, Robin Beckman, and Tamara Dubowitz. "Park Use in Low-Income Urban Neighborhoods: Who Uses the Parks and Why?" *Journal of Urban Health* 95, no. 2 (April 2018): 222–31.
[90] K. Animashaum Ducre, *A Place We Call Home: Gender, Race, and Justice in Syracuse*, 1. ed (Syracuse, NY: Syracuse Univ. Press, 2012).
[91] Russell K. McIntire et al., "Disparities in Neighborhood Park Access among Adults in Philadelphia," *Urban Forestry & Urban Greening* 78 (December 2022) 2.
[92] McIntire et al., "Disparities in Neighborhood Park Access among Adults in Philadelphia," 2.

gardens, and other green spaces. Second, it contains the answer to an informal radius of their neighborhood. While not everyone has the exact definition of their neighborhood, it allows the respondent to choose what defines their neighborhood. Making surveys easy to understand and flexible provides better data because the participants have power over how they answer. Finally, this question explicitly asks about social accessibility by asking about comfort. Using language like "comfortable" asks participants to consider their *experience*, not just their *proximity*. It asks about their perceived accessibility, not the distance to the nearest park. To effectively study accessibility, perceived and physical access must be assessed.

The "neighborhood" question in the Household Health Survey was crucial in forming a baseline understanding of social park accessibility in Philadelphia. While the collection of the original survey used participatory methods, the survey was not created to address social accessibility specifically. The authors of the study "Neighborhood Park Access Among Adults in Philadelphia" are fortunate that the Public Health Management Corporation asked such a great question. Still, a more nuanced and comprehensive understanding could be gained with a survey focused on urban green spaces and accessibility. This article is a great starting point, but it demonstrates the downfalls of repurposing other data.

Repurposing preexisting data is a step forward in considering social factors in determining park accessibility; however, relying solely on demographics or repurposed data limits the scope and success of the study. It can create an overview of the historical gaps in social access based on presumed barriers to access. Nevertheless, current community members must be consulted for their lived experiences to be understood. Using participatory methodologies is a crucial part of capturing a sample of the community's beliefs, experiences, and concerns. Some participatory methods include open community meetings, interviewing, surveying, and

community mapping.[93] When done well, participatory methods permit a more applicable and useful picture of the community that can better inform local governments and park systems about green space accessibility and use. It is essential that the research that comes out of using participatory methods does not stay in academia but is shared with the community and park stakeholders.[94]

The article "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia" uses participatory methods to examine the social accessibility of Bartram's Garden.[95] They surveyed residents within a ½ mile of the park about their experiences with the recent developments made to the park.[96] The authors used three categories to measure how the community has responded to Bartram's Garden and its new programming and improvements: "*community engagement*, *community ownership*, and *social fabric"*.[97] They specifically hired locals to facilitate the survey to help connect better with the community. The community remained prioritized at each process step, making for more accurate results. Because of their participatory methods, "community members indicated their voice was heard," referring to the improvements made to the park and the study results.[98] While using participatory methods is not the only option for studying social access to urban green space, it dives deeper into the issue of accessibility. By collecting current perceptions of accessibility,

[93] Jerry Shannon et al., "Practicing Community Geography in Times of Crisis," *GeoJournal* 87, no. S2 (August 2022): 151–57.
[94] Shannon et al., "Practicing Community Geography in Times of Crisis," 156.
[95] Mullenbach et al., "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia."
[96] Mullenbach et al., "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia," 207.
[97] Mullenbach et al., "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia," 204.
[98] Mullenbach et al., "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia," 213.

community members feel heard and represented while also better informing Urban Green Space stakeholders about improvements that can be made.

The successful example of Bartram's Garden is an essential model for social accessibility because of how the efforts to improve the green space also considered surrounding neighborhood demographics. Bartram Village and Kingsessing are predominantly African American and low-income neighborhoods. In 2016, the census tract that includes Bartram's Garden was 88% African American, and the median household income was $21,505.[99] Because of Bartram's Garden's proximity to these neighborhoods, it was possible that when the park was renovated and renewed, it could start the Green Space Paradox. However, because the John Bartram Association worked closely with the community using qualitative research methodologies, the space is now a vital and integral part of the fabric of Southwest Philadelphia. By prioritizing the social accessibility of the local community, the association was able to improve its space without risking setting off the green space paradox. Bartram's Garden is now physically and socially accessible to the community, a significant step forward in combating environmental justice and an incredible example for the rest of Philadelphia.

[99] Mullenbach et al., "Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia," 209.

Chapter Three: Restrictive Accessibility

Figure 8- Love Park

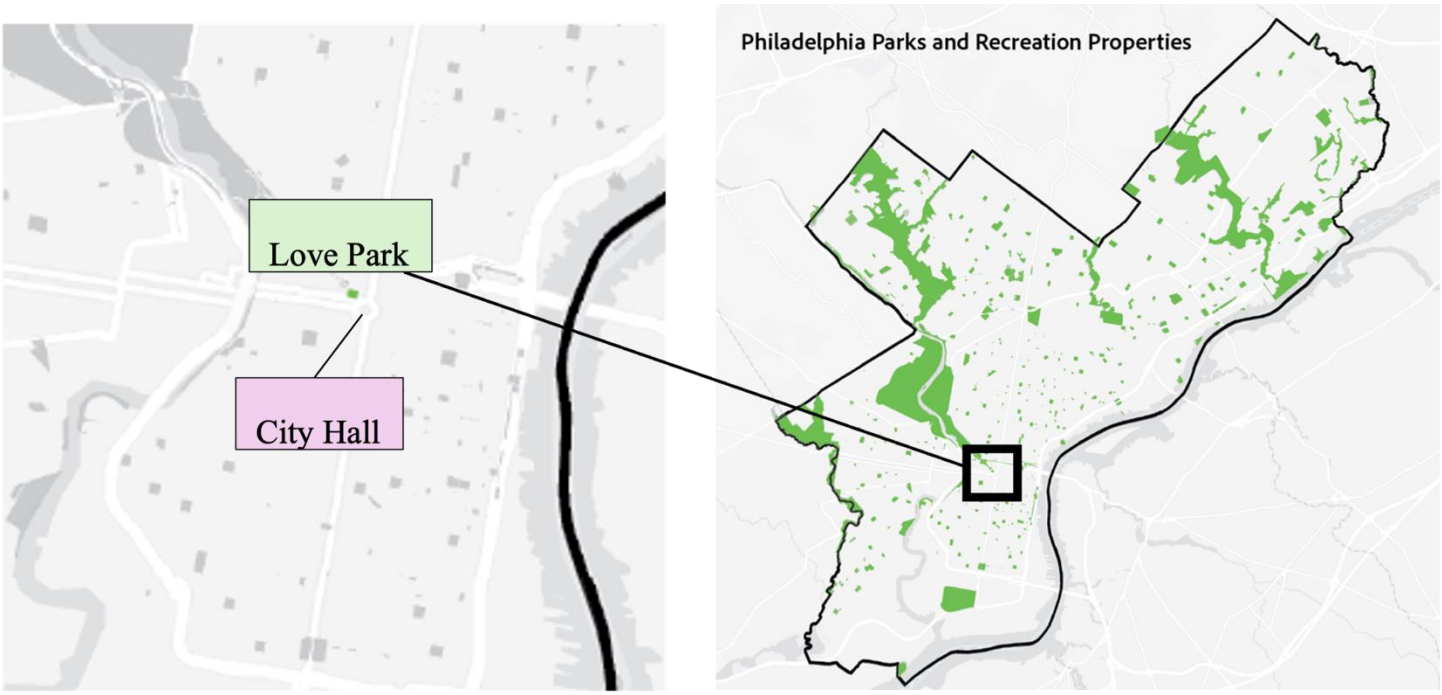

Figure 9- Map of Philadelphia Parks and Recreation Properties

The final category of accessibility that will be discussed is *restrictive accessibility*. While there are aspects of physical and social accessibility that can be restrictive, my definition of restrictive accessibility refers to public urban green spaces with a predetermined audience and a purposeful restriction of access to others. The social chapter discusses how the University of Pennsylvania oversees the social accessibility of its spaces, but this is different because the University is a private institution that claims that its spaces are open to the public. For this chapter, restrictive accessibility will specifically look at public urban green spaces owned and managed by the Philadelphia Parks and Recreation Department. This chapter will illustrate that not all public spaces are equally accessible because of restrictions or predetermined levels of accessibility created by the Philadelphia Parks and Recreation Department.

As I argue in my thesis, accessibility is often viewed as a function of physical proximity. However, we should also be focusing on the restrictive aspects of accessibility. Drawing on criticisms from geographers regarding public spaces and referencing the work of Don Mitchell and Luke Cianciotto, this chapter uses the story of John F. Kennedy Plaza ("Love Park") to illustrate how accessibility is created and maintained to include and restrict access, purposely and intentionally, to specific community members.

Restrictive Accessibility Case Study: Love Park

History of John F. Kennedy Plaza

John F. Kennedy Plaza was built in the mid-1960s as part of the redevelopment of Center City.[100] Center City is a prominent neighborhood that includes City Hall and the business district,

[100] Jeremy Németh, "Conflict, Exclusion, Relocation: Skateboarding and Public Space," Journal of Urban Design 11, no. 3 (October 2006), 300.

and it is a popular destination for tourists. The plaza was a part of preeminent city planner Edmund Bacon's "master redevelopment scheme" for Penn Center and Center City.[101] Bacon was the Director of Planning for the City of Philadelphia from 1949 to 1970, but his plans for JFK Plaza dated back to his 1932 planning thesis at Cornell.[102] Like William Penn, Bacon believed in the importance of open green space and protecting the plaza. He worked with architect Vincent King to design the park, which was completed in 1965.[103] The plaza was dedicated to John F. Kennedy, but when Robert Indiana's iconic "LOVE" sculpture was installed in 1976, the plaza became known as Love Park.[104] The sculpture has become an enduring symbol for the City of Brotherly Love, but the park's history is not one of love and acceptance.

Love Park is located in Center City Philadelphia, across from City Hall, and in the 1970s, it became a popular spot for lunch breaks and relaxing activities like chess. However, because of its location, it also became a site for protests and demonstrations. By the late 1980s, Philadelphia dealt with an increasing population of unhoused residents.[105] Many factors contributed to this, but one of the major ones was the significant cuts to welfare programs. Because of its central location and secluded architecture, Love Park became a place where the city's growing unhoused population gathered. At the same time, Love Park also became a popular place for drug dealers. These two populations caused the park to decline in popularity with the surrounding residents. By 1989, the Philadelphia Inquirer was reporting that residents were "watching JFK Plaza turn

[101] Németh, "Conflict, Exclusion, Relocation," 300.
[102] Gregory L. Heller and Alexander Garvin, *Ed Bacon Planning, Politics, and the Building of Modern Philadelphia* (Philadelphia: University of Pennsylvania Press, Inc, 2016), 222.
[103] Howell, Ocean. "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park." Journal of Architectural Education (1984-) 59, no. 2 (2005): 33.
[104] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 34.
[105] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 32.

into an open-air dormitory" and an "open-air mental-health clinic".[106] Unfortunately, there were "several violent drug-related incidents" that caught the attention of the police force.[107]

In October 1993, the city implemented a new plan to address homelessness. The city banned eating in Love Park in 1997, citing concerns about the rat population.[108] However, many believed the policy was created to discourage the unhoused population from staying in the area. When these new restrictions were put in place, the city was now able to control how the park could be used and who had access. The police, with the support of the city, "cracked down on those who were suddenly, by law, out of place."[109] While these laws were publicly aimed at the unhoused population, they were also privately aimed at another population that had started growing in the park: skateboarders.

An Accidental Skatepark

Figure 10- Skating at Love Park

Across the country, skateboarding grew in popularity in the late 80s and early 90s. Skateboarding attracted different demographics across races, social classes, and skating styles. While teenagers and young adults made up the majority of skateboarders, older and younger populations skated as well. It

[106] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park."
[107] Németh, "Conflict, Exclusion, Relocation," 300.
[108] Cianciotto, Luke M. "Public Space, Common Space, and the Spaces In–Between: A Case Study of Philadelphia's LOVE Park." City & Community 19, no. 3 (September 2020): 689.
[109] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 684.

was both a practical and creative method of transportation. When Bacon and King designed the park, they had no idea they had created a unique but perfect street skating park. The park attracted skaters because of "its open plan, stairs, handrails, marble benches, and granite planters."[110] These elements were not only great for skating but were also accidentally thrown together, making skating at Love Park different than what would be normally found at a traditional, planned skate park.

The word on Love Park spread across Philadelphia, the US, and the world, thanks to famous skaters and videographers. "Love Park provided the perfect means to "put Philly on the map" as it had ledges, steps, and the city gave them leeway to skate at the time."[111] People started to come specifically to skate or to simply watch skaters at Love Park. The park later became known as a "Mecca for skateboarding."[112] It became a world-famous icon after appearing in skating videos and video games. This attracted new skaters and new businesses that benefited the city. But the city and some residents didn't see it the same way.

Because of the combination of skateboarding, drug dealing, and the unhoused population in the park, the police and government decided to act. "The primary users of the park during the early 1990s were the homeless and the skateboarders, and both were occasionally painted with the same brush in popular discourse,"[113] "Three different Inquirer articles compared skaters to 'roaches'; deemed them 'skate rats'; and depicted them as "dudes in backward baseball caps who dart between cars, plow into pedestrians, and gouge the granite in public plazas..[and are] dangerous, destructive, even anti-social."[114] However, it is important to note that these

[110] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 34.
[111] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 684.
[112] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 38.
[113] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 34.
[114] Németh, "Conflict, Exclusion, Relocation," 304.

characterizations were unfair and based on stereotypes. Skaters were using the park to enjoy their sport and were not inherently "dangerous" or "anti-social."[115] In 1995, a Common Pleas Court Judge, Richard B. Klein, complained that "The average person has been taken off the plaza. This is a total waste of city money and frankly, gross stupidity." [116] Despite the negative attitudes towards skaters at the time, the popularity of skateboarding continued to grow. By the late 90s and early 2000s, it became clear that the city of Philadelphia would take legal action. In 2000, City Councilman and future mayor Michael Nutter proposed Municipal Code § 10-610.

Skateboarding, Rollerblading and Bicycling on Public Property

(1) No person shall use a skateboard on public property unless use of a skateboard on such property is authorized by regulation, ordinance or statute, or is otherwise authorized by the governmental agency, department or commission responsible for such property.

(a) "Public Property" does not include public roads, highways, bicycle and/or skateboard paths, or sidewalks abutting private property. "Public Property" also shall not include Recreation Department facilities, which facilities shall be subject to the rules and regulations of the Recreation Department.

(b) "Public Property" includes, but is not limited to:

(. a) The area bounded by Arch street, Fifteenth street, Broad street, and John F. Kennedy boulevard (the Municipal Services Building plaza and sidewalks).

(. b) The area bounded by John F. Kennedy boulevard, Fifteenth street, South Penn square, and Juniper street (City Hall, Dilworth Plaza, and surrounding sidewalks).

(.c) The area bounded by Arch street, Sixteenth street, John F. Kennedy boulevard, and Fifteenth street (Love Park and surrounding sidewalks).

(5) Penalties.

(a) The penalty for a violation of subsection (1) or (2) shall be a civil penalty of three hundred dollars ($300.

(c) An additional penalty for a violation of this Section shall be forfeiture of any skateboard, rollerblade or bicycle used in violation of this Section, unless it is proven to the Court by a preponderance of the evidence that the defendant does not own the item and the owner did not or could not have reasonably known that the item would be used in violation of this Section.

(6) Enforcement.

(a) Whenever a police officer has probable cause to believe a skateboard, rollerblade or bicycle was used or is being used in violation of this Section the officer may seize the item.

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[115] Németh, "Conflict, Exclusion, Relocation," 304.

[116] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 34.

> (b) Any person authorized to enforce ordinances may issue a ticket to any person in violation of this Section.[117]

Because of this legal action, there was an increased police presence within Love Park. But that did not stop the skaters. For them, it became a game to see how long you could skate before having to elude the cops. The skaters tended to win those chases, so the police changed their strategy. The police started sending in undercover cops who were dressed like other skaters so they could lure the skaters into a false sense of security. The cops would issue tickets for $300 and seize skateboards.[118] But this strategy backfired on the police. As Love Park grew in fame, it became more exclusive because only the skaters willing to "risk it all" would skate at Love Park. Despite all of the City's attempts to thwart skateboarding, Love Park still attracted crowds worldwide, and in 2001, it seemed as if Philadelphia was finally ready to accept it.

X Games

At the turn of the 21st century, Love Park was renowned for skateboarding and had garnered enough attention as a potential host site for ESPN's X Games in 2001 and 2002.[119] The mayor, other city officials, and representatives from the Commonwealth of Pennsylvania worked tirelessly to attract the event, with the government even contributing a whopping $1.2 million to fund the bid.[120] The X Games drew a massive television audience of approximately 150 million people worldwide, making it a crucial event for Philadelphia. ESPN was keen on holding the event at the plaza, but the mayor's office proposed Dilworth Plaza on the west side of City Hall

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[117] The City of Philadelphia Municipal Code § 10-610. *Skateboarding, Rollerblading and Bicycling on Public Property*
[118] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 664.
[119] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 666.
[120] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 667.

across the street instead. While Love Park is what drew the game to Philadelphia, ultimately, the X Games were held at Dilworth Plaza.[121]

The official Skateboard Street competition was held on August 11, 2001, and Center City was packed with spectators.[122] This was the first "raw street contest" hosted by a competition of this caliber. Josh Kalis, a local Philadelphia skater, was in attendance and was amazed at "the place we get kicked out of every day [being a place] we can skate legally and there's obstacles, it's amazing".[123] Because of the competition, the laws were relaxed, so not only could the competitors skate at City Hall, but Philadelphians could skate at Love Park without any restrictions.

However, after the successful conclusion of the X Games, Love Park was once again closed to skateboarders.[124] Many disagreed with the city's actions. One community member found it deceitful that the city would gloat over the success of the X Games while "criminalizing the children who participate in it."[125] In 2002 the X Games returned to Philadelphia with the same structure. Both games were major successes for the city and the street skating community. But once the games were done, the laws went back into place and the city decided to make Love Park even more restrictive.[126]

Love Park's First and Second Remodeling

After the 2002 X Games, the plaza was closed for remodeling. When it reopened later that year, it was adorned with grassy areas, planters placed where skaters gathered speed, wood

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[121] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 34.
[122] *X Games 2001 SKATEBOARD STREET FULL COMP: X GAMES THROWBACK*, 2021, https://www.youtube.com/watch?v=Gvp7UxsWZ10.
[123] *X Games 2001 SKATEBOARD STREET FULL COMP*.
[124] Németh, "Conflict, Exclusion, Relocation," 306.
[125] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 690.
[126] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 691.

benches with armrests that obstructed skating and sleeping, and a constant police presence.[127] These permanent changes signaled that the city's priority was to get rid of skateboarders, not to improve the park for everyone.[128] The city continued to alter the park, making it harder for the space to be used by anyone the city deemed unwelcome. One member of the Planning Commission planner explained: "Part of the redesign was making it so that it wasn't attracting skaters, so you don't have to be like 'No skateboarders.' They just weren't attracted to it in the first place."[129] The second major remodeling was finished in 2016, and the final price tag was $19.7 million.[130]

By the 2010s, Love Park had become a focal point in the "Philadelphia food truck revolution.".[131] The Christmas Village in Love Park had grown into a corporate-sponsored, Christkindlmarkt-themed shopping center, and the Love Park farmers' market had become a Sunday fixture.[132] These new events and amenities are used and enjoyed by many, encouraging people to visit Love Park. But all of these changes and "improvements" are used to "help legitimize conventional orders and power . . . to help validate the business- and commodity-oriented city."[133] The actions taken by the City to ban skateboarding represent a normative (re)construction of Love Park as a secure space for the **consumption of adults, business people, and tourists**.[134] "When Love Park is considered in terms of its commonness, it is clear that the new Love Park is also less common."[135] The story of Love Park is about much more than

[127] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 686.
[128] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 35.
[129] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 691.
[130] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 691.
[131] Howell, "The 'Creative Class' and the Gentrifying City: Skateboarding in Philadelphia's Love Park," 36.
[132] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 691.
[133] Németh, "Conflict, Exclusion, Relocation," 307.
[134] Németh, "Conflict, Exclusion, Relocation," 307.
[135] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 693.

skateboarding. Rather, it is an important case with deep implications for how the uses and users of public space are treated in cities.[136]

Figure 11- Graffiti Before Love Park's Second Renovation

Public vs Common Space

Don Mitchell and Public Space

In his paper *People's Park Again: on the End and Ends of Public Space,* Mitchell draws on arguments from Mike Davis and the authors of *Variations on a Theme Park.*[137] Davis analyzed how private interests such as capital, homeowners, and business associations encroach on public space. This encroachment has transformed the city into a violent frontier of capital accumulation. Public space was the space where the contradictions and changes were fought out. Public space is often not adequately defined but assumed to be an accessible area with little

[136] Németh, "Conflict, Exclusion, Relocation," 315.
[137] Mitchell, Don. "People's Park Again: On the End and Ends of Public Space." Environment and Planning A: Economy and Space 49, no. 3 (March 2017): 503–18.

control over its functioning and little policing. In other words, Mitchell defines "it by what it's not: private space."[138] Mitchell explores how "the city" is being remade to reflect particular class interests and what that means for living in and using the city.

Analyzing the 1991 riot sparked by the University of California's plans to redevelop Berkeley's People's Park, Mitchell sought to show how what might be called existing public space was produced through struggle around two contrasting ideals of public space: public space as a space of politics and struggle and public space as a space of retreat and leisure. Mitchell then questions whether public space was common space, constructed through practice or a gift from the state. Mitchell further questions whether public space was space for living or space only to visit, a space in which we are always only guests. Mitchell examines the contradictory roles public space plays in urban politics and economics, the functions it serves for the housed and unhoused, and the degree it aids or does not aid in the formation of publics and counterpublics. These are questions of the relationship between public and private, the domestic and the civic, and the structures of inclusion and exclusion. He asks questions about who owns and controls public space. Mitchell turns to Henri Lefebvre and his famous arguments on common space to suggest there is an ongoing struggle between efforts to implant representations of space (ordered, planned, controlled space) and representational space (appropriated, lived space).[139] This discussion of Lefebvre is continued in Eidelman and Safransky's article on common space.

Mitchell discusses the concept of public space and its changing nature due to private interests encroaching. Mitchell argues that public space is a site of struggle, where the contradictions and changes within a city are fought out. The text analyzes the struggle around two contrasting ideals of public space: the space of politics and struggle and the space of retreat

[138] Mitchell, "People's Park Again," 504.
[139] Mitchell, "People's Park Again," 513.

and leisure. It discusses public space's contradictory roles in urban politics and economics and the structures of inclusion and exclusion.

Urban Commons

The idea of the urban commons stems from the medieval idea of the commons, where the community managed public space and farmlands. The term was popularized in academia in 1968 in Garrett Hardin's "The Tragedy of the Commons".[140] Since then, his article and ideas have been taught in many Geography and Environmental Sciences, warning of the effects of not protecting "common" resources and spaces. Now, "commons" also has multiple definitions. This paper focuses on urban commons, which are shared spaces and resources within cities collectively managed and maintained by their communities. These spaces can include public parks, community gardens, public squares, and other areas accessible to all community members.[141] Urban commons are essential for creating resilient and sustainable cities. They provide opportunities for social interaction, cultural expression, and environmental stewardship. By promoting collaboration and collective decision-making, urban commons can also help foster a sense of community ownership and responsibility for these shared resources.[142]

As mentioned earlier, Lefebvre's intellectual and political project was an attempt to get people to see urban space as an urban common.[143] Not all urban space is public, and therefore, not all urban space is always considered an urban common. But Lefebvre, wants residents to see their city space as commons because it is also on them to take care of it even if it is not public.

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[140] Garrett Hardin, "The Tragedy of the Commons," *Science* 162, no. 3859 (1968): 1243–48.
[141] Tessa A. Eidelman and Sara Safransky, "The Urban Commons: A Keyword Essay," *Urban Geography* 42, no. 6 (July 3, 2021): 792–811.
[142] Eidelman and Safransky, "The Urban Commons: A Keyword Essay."
[143] Henri Lefebvre, *Writings on Cities*, ed. Eleonore Kofman, 11. [print] (Malden, Mass.: Blackwell, 2008).

The foundation of Lefebvre's ideas is that the residents of the city have a right to use the city.[144] But these rights also include the silent agreement that the residents will take care of the city like it is a common resource. The right to the city encompasses the right to access, inhabit, and use urban space and shape and govern it. This includes organizing for the right to be involved in decision-making about urban issues and urban development, using public services and goods and public spaces, and claiming land where people have historically been dispossessed.

For many urban scholars, much of what makes an urban common is a collectively managed resource. These are spaces where strangers meet and work together for some common purpose. Vinay Gidwani and Amita Baviskar write that the "distinctive public culture of a city is perhaps the most generative yet unnoticed of urban commons."[145] The urban commons are a meaningful category because it is distinct from "public" and "private," which the state regulates. "Public" is a legal category firmly in the ambit of state and law, which is in contrast to that which is "private." The commons historically lie at the frontiers, or within the interstices, of the territorial grid of law. They exist as a dynamic and collective resource governed by emergent customs and constantly negotiate, rebuff, and evade the fixity of law. Commons thrive in and out of the state's gaze because notice invariably brings the desire to transform them into state property or commodity.

For the urban commons to become common, Stavrides suggests that "commoning practices" create city spaces. Thus, commoning and urban commons are not only about sharing a space in the city but also sharing "a set of practices and inventive imaginaries which explore the emancipating potentialities of sharing".[146] **A more critical engagement with the urban**

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[144] Lefebvre, *Writings on Cities*.
[145] Vinay Gidwani and Amita Baviskar, "Urban Commons," *Economic and Political Weekly* 46, no. 50 (2011): 795
[146] Eidelman and Safransky, "The Urban Commons: A Keyword Essay," 43.

commons requires recognition that space is not experienced the same way by everyone and that claims to the commons are multiple.[147] For example, contestations over urban space can quickly become tricky when claims by one group to the commons don't acknowledge that others simultaneously claim the land.

These ideas of urban commons and commoning practices are essential to understanding why Love Park became such a contested area. The space was public, and the skateboarders made it their common space. They were able to create a sense of community tied to a location, which made Love Park their urban commons. Regardless of their demographics, if someone was respectful and wanted to skate, they became a part of the Love Park community. Their commons were only disrupted when the city government got involved and chose to make the space "uncommon" to them by retrofitting the park and establishing anti-skateboard laws. Love Park became an uncommon space for skateboarders because the authorities determined how the space was used. Urban commons play an important role in city life because they set aside space for communities to come together. Commons also allow for the mixing and mingling of city dwellers who might otherwise never meet each other. By keeping space common, cities can be more cohesive spaces where people can live together, and space is not restricted by the desires of the government. The next section will dive deeper into this argument and examine how commonness and ownership are connected within cities and Love Park.

Cianciotto's Framing of Public and Common Space

One of the most essential theoretical arguments that supports this thesis is Luke Cianciotto's breakdown of the differences between public and common space.[148] His article

[147] Eidelman and Safransky, "The Urban Commons: A Keyword Essay," 43.
[148] Cianciotto, "Public Space, Common Space, and the Spaces In–Between."

discusses the conflict between the public and skateboarders over Philadelphia's Love Park. The paper argues that Love Park was made up of two distinct spaces: the public space created by the city and the common space produced by skateboarders. His theoretical argument is that public and common spaces have different rules and uses based on who is restricted from accessing them. He concludes that Love Park's 2016 redesign demonstrates how common space can be removed from public spaces.

The heart of Cianciotto's argument is that there are distinct differences between *public* and *common* spaces. Cianciotto defines *public space* "as a property-bound relationship predicated on assumed openness and accessibility to all contingent on one's use of the space for circumscribed purposes."[149] The concept of public space centers around being in public or the nature of being public. This is called "publicity," the establishment, through laws, social norms, and legitimization practices, of who can be considered as the public and how they can use the space.[150] Public spaces, generally considered public property, are increasing in cities worldwide despite the growing privatization of cities. This is due to growth coalitions aiming to create more "livable" cities that attract new citizens and consumers.[151]

According to Cianciotto's definition, a *common space* is an area created through the commoners' specific practices. Unlike public space, common space is produced through use and exists regardless of property rights. *Commoning* is the act and practice of using space, developing relationships with other users, and producing shared sites of knowledge that contribute to creating common space.

[149] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 677.
[150] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 678.
[151] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 678.

When public spaces are restricted, certain groups of people become less visible and represented. As a result, these spaces cannot be considered truly public because they are no longer common. They do not serve as a place for meaningful communication and interaction between different parts of society. This affects specific communities and their use of these spaces, including *counterpublics* (such as unhoused populations, protestors, and teenagers) that are often targeted in the process of homogenization and elimination.

Unlike public space, characterized by relative geographic and temporal persistence, common space's temporal and scalar flexibility means an infinite multiplicity of possible common spaces exist. The processes behind anti-commonness are explicated in the literature on the "death" of public spaces but must be contextualized as they relate to the particular common spaces in question. This entails framing anti-common space in terms of what specific groups (commoners) and behaviors (commoning practices) a public space is hostile towards. Common space exists outside of the rigid structure of public or private space. Cianciotto makes it clear that "spaces can be and are both public and common; as well as private and common; public and private; and also, public, private, and common space."[152] Examples of these differences can be seen in *Table 1*. By contrasting public and private (physical/legal categories) and common and anti-common (social categories), a new definition of accessibility emerges *restrictive accessibility*.

[152] Cianciotto, "Public Space, Common Space, and the Spaces In–Between," 696.

	Public	Private
Common	Fairmount Park - A public park with an amplitude of different amenities open to many different communities	An Eagles game at Lincoln Financial Field - A private ticketed event for Eagles fans to celebrate their community
Anti-Common	Love Park - A public park with restrictive laws that purposely disallow certain communities	Philadelphia International Airport - A ticketed space that does not foster a sense of community

Table 1- Public Vs. Private and Common Vs. Anti-Common

Love Park is still a public common space for some commoners, but for the skateboarders, it is now a public anti-common space. Skateboarders have been restricted from using a public space while other groups have not. “The new Love Park is no longer a public-common space in the ways it once was. It is indeed still a public space, but how it is common has been harshly enclosed and regulated.”[153] This lens of restrictive accessibility is essential because it gives presence to commoners' experiences, memories, and collective imaginaries, even though the physical and social traces of those narratives may be obfuscated or obliterated. It makes their absence evident. In this process of commoning, anti-commonness explores not only who is or is not represented in public spaces but who can or cannot participate in the ways they see fit.

The history of Love Park is a crucial example that sheds light on how accessibility can be established and maintained to either include or exclude particular community members. Initially, Love Park was intended to be a public space that could be accessed by everyone. However, the park's history shows that accessibility can become a contentious issue due to certain restrictive

[153] Cianciotto, “Public Space, Common Space, and the Spaces In–Between,” 696.

policies. Despite not being designed as a skate park, the park became a popular spot for the skating community. Skateboarders found a way to use the park's unique features and turned it into a world-renowned skateboarding destination. However, city officials later decided to ban the skating community from using the park. They restricted the space for a targeted group of people based on stereotypes and prejudges instead of working with the skaters to find a solution that didn’t criminalize the sport they loved. The decision to restrict access to the park revealed a larger issue of who gets to use public spaces and who has the power to decide how they can be used. Scholars like Mitchell, Eidelman & Safransky, and Cianciotto stress the importance of understanding the connections between common and public space. These arguments are fundamental to my own understanding of urban green spaces and how their accessibility is altered based on physical, social, and restrictive attributes. Comparing public/private and common/anti-common allows for the direct comparison of physical and social accessibility to understand restrictive accessibility. By making Love Park a public space uncommon, the city of Philadelphia restricted who could access the commons and how public space could be occupied.

Conclusion

Urban Green Spaces and parks are essential parts of any city, including Philadelphia. Parks offer numerous benefits, such as boosting mental and physical health, providing places for recreation and community gatherings, and aiding environmental sustainability, which every resident should benefit from. Park accessibility is about creating environments that are inclusive, equitable, and responsive to the needs of diverse communities, fostering social cohesion, health, and well-being for all individuals. "Accessibility" has different, situation-dependent definitions, and this thesis defined and expanded on what park accessibility means and why the definition needs to be less dependent on physical attributes. This includes three kinds of accessibility: *physical*, *social*, and *restrictive*. This thesis has given examples of case studies of each type of accessibility and outlined why they must be studied and understood together. This thesis emphasized the importance of using a mix of traditional data and modern surveys to guide future decisions about park development and improvement.

It is crucial to understand that this is not just a theoretical deliberation. Cities across the country are making decisions about parks and who will benefit from them every day. In order to combat environmental justice, there needs to be a serious discussion about how to involve marginalized communities in the decision-making process. When you give a neighborhood a park to enjoy and take pride in, they will nurture the space along with the community. Every resident should be able to experience the benefits of living near a park. Parks are meant to be used by everyone and everyone should be able to use parks. Parks are a public common good, and no one should feel restricted from using a park, not physically or socially restrictive.

Only by taking a nuanced approach to accessibility can we ensure that these green spaces truly benefit all Philadelphians. By combining physical data, social surveys, and less restrictive

regulations, we will have a clearer picture of what cities can do to improve their green spaces for a more diverse community of users. Urban Green Space accessibility must be discussed and understood as a combination of physical, social, and restrictive attributes in order to create a more inclusive city landscape.

Bibliography

"§ 10-610. Skateboarding, Rollerblading and Bicycling on Public Property." Accessed April 22, 2024. https://codelibrary.amlegal.com/codes/philadelphia/latest/philadelphia_pa/0-0-0-282234.

Art-Reach. "ACCESS." Art-Reach. Accessed April 25, 2024. https://www.art-reach.org/access/.

Bartram's Garden. "Bartram History." Bartram's Garden. Accessed April 25, 2024. https://www.bartramsgarden.org/bartram-history/.

Boone, Christopher G., Geoffrey L. Buckley, J. Morgan Grove, and Chona Sister. "Parks and People: An Environmental Justice Inquiry in Baltimore, Maryland." *Annals of the Association of American Geographers* 99, no. 4 (2009): 767–87.

"Campus Plan | University of Pennsylvania Facilities and Real Estate Services." Accessed April 25, 2024. https://facilities.upenn.edu/about/campus-plan#PC30.

Cianciotto, Luke M. "Public Space, Common Space, and the Spaces In–Between: A Case Study of Philadelphia's LOVE Park." *City & Community* 19, no. 3 (September 2020): 676–703. https://doi.org/10.1111/cico.12454.

City of Philadelphia. "Philadelphia Parks & Recreation | Homepage," March 27, 2024. https://www.phila.gov/departments/philadelphia-parks-recreation/.

Drexel University. "History | Drexel University," August 11, 2020. http://drexel.edu/about/history.

Ducre, K. Animashaum. *A Place We Call Home: Gender, Race, and Justice in Syracuse*. 1. ed. Syracuse, NY: Syracuse Univ. Press, 2012.

Ehlenz, Meagan M. "Neighborhood Revitalization and the Anchor Institution: Assessing the Impact of the University of Pennsylvania's West Philadelphia Initiatives on University City." *Urban Affairs Review* 52, no. 5 (September 2016): 714–50. https://doi.org/10.1177/1078087415601220.

Eidelman, Tessa A., and Sara Safransky. "The Urban Commons: A Keyword Essay." *Urban Geography* 42, no. 6 (July 3, 2021): 792–811. https://doi.org/10.1080/02723638.2020.1742466.

Fairmount Park Conservancy. "Fairmount Park Conservancy." Accessed April 25, 2024. https://myphillypark.org/.

Fitzgerald, Joan, and Joshua Laufer. “Governing Green Stormwater Infrastructure: The Philadelphia Experience.” *Local Environment* 22, no. 2 (February 1, 2017): 256–68. https://doi.org/10.1080/13549839.2016.1191063.

“Friends of Fairmount Park.” Accessed October 31, 2023. https://friendsoffairmount.com/about.

Friends of Wissahickon. “Friends of Wissahickon.” Accessed October 31, 2023. https://fow.org/.

Gelormino, Elena, Giulia Melis, Cristina Marietta, and Giuseppe Costa. “From Built Environment to Health Inequalities: An Explanatory Framework Based on Evidence.” *Preventive Medicine Reports* 2 (2015): 737–45. https://doi.org/10.1016/j.pmedr.2015.08.019.

GIDWANI, VINAY, and AMITA BAVISKAR. “Urban Commons.” *Economic and Political Weekly* 46, no. 50 (2011): 42–43.

Gupta, Kshama, Arijit Roy, Kanishka Luthra, Sandeep Maithani, and Mahavir. “GIS Based Analysis for Assessing the Accessibility at Hierarchical Levels of Urban Green Spaces.” *Urban Forestry & Urban Greening* 18 (August 1, 2016): 198–211. https://doi.org/10.1016/j.ufug.2016.06.005.

Hardin, Garrett. “The Tragedy of the Commons.” *Science* 162, no. 3859 (1968): 1243–48.

Heller, Gregory L., and Alexander Garvin. *Ed Bacon Planning, Politics, and the Building of Modern Philadelphia*. Philadelphia: University of Pennsylvania Press, Inc, 2016.

Howell, Ocean. “The ‘Creative Class’ and the Gentrifying City: Skateboarding in Philadelphia’s Love Park.” *Journal of Architectural Education (1984-)* 59, no. 2 (2005): 32–42.

Jennings, Viniece, and Cassandra Gaither. “Approaching Environmental Health Disparities and Green Spaces: An Ecosystem Services Perspective.” *International Journal of Environmental Research and Public Health* 12, no. 2 (February 10, 2015): 1952–68. https://doi.org/10.3390/ijerph120201952.

Johnson, Daniel P., and Jeffrey S. Wilson. “The Socio-Spatial Dynamics of Extreme Urban Heat Events: The Case of Heat-Related Deaths in Philadelphia.” *Applied Geography* 29, no. 3 (July 2009): 419–34. https://doi.org/10.1016/j.apgeog.2008.11.004.

Kamarudin, Hikmah, Aida Fazlin Bakri, and Nurulhusna Qamaruz Zaman. “Identifying Physical Barriers through a Real-Life Experience with Mobility Difficulties City Travelers: A Go-along Interview Method.” *IOP Conference Series: Earth and Environmental Science*

1067, no. 1 (October 1, 2022): 012008. https://doi.org/10.1088/1755-1315/1067/1/012008.

Knobel, Pablo, Michelle Kondo, Roser Maneja, Yuzhe Zhao, Payam Dadvand, and Leah H. Schinasi. "Associations of Objective and Perceived Greenness Measures with Cardiovascular Risk Factors in Philadelphia, PA: A Spatial Analysis." *Environmental Research* 197 (June 2021): 110990. https://doi.org/10.1016/j.envres.2021.110990.

Koh, Celina, Michelle C. Kondo, Heather Rollins, and Usama Bilal. "Socioeconomic Disparities in Hypertension by Levels of Green Space Availability: A Cross-Sectional Study in Philadelphia, PA." *International Journal of Environmental Research and Public Health* 19, no. 4 (February 11, 2022): 2037. https://doi.org/10.3390/ijerph19042037.

Leary-Owhin, Michael E., and John P. McCarthy. *The Routledge Handbook of Henri Lefebvre, The City and Urban Society*. Edited by Michael E. Leary-Owhin and John P. McCarthy. 1st ed. Routledge, 2019. https://doi.org/10.4324/9781315266589.

Lefebvre, Henri. *Writings on Cities*. Edited by Eleonore Kofman. 11. [print]. Malden, Mass.: Blackwell, 2008.

Li, Xiaojiang. "Investigating the Spatial Distribution of Resident's Outdoor Heat Exposure across Neighborhoods of Philadelphia, Pennsylvania Using Urban Microclimate Modeling." *Sustainable Cities and Society* 72 (September 2021): 103066. https://doi.org/10.1016/j.scs.2021.103066.

Liang, Huilin, Di Chen, and Qingping Zhang. "Walking Accessibility of Urban Parks in a Compact Megacity." *Proceedings of the Institution of Civil Engineers - Urban Design and Planning* 170, no. 2 (2017): 59–71. https://doi.org/10.1680/jurdp.16.00030.

Liu, Shu, and Xinhao Wang. "Reexamine the Value of Urban Pocket Parks under the Impact of the COVID-19." *Urban Forestry & Urban Greening* 64 (September 2021): 127294. https://doi.org/10.1016/j.ufug.2021.127294.

Mancus, Gibran C., Andrea N. Cimino, Md Zabir Hasan, Jacquelyn C. Campbell, Phyllis Sharps, Peter J. Winch, Kiyomi Tsuyuki, and Jamila K. Stockman. "Greenness and the Potential Resilience to Sexual Violence: 'Your Neighborhood Is Being Neglected Because People Don't Care. People With Power Don't Care.'" *Journal of Interpersonal Violence* 37, no. 19–20 (October 1, 2022): NP17344–68. https://doi.org/10.1177/08862605211028009.

McIntire, Russell K., Tiara Halstead, Devesh Dajee, Meghan Buckley, Kyle McGregor, and Sharon Larson. “Disparities in Neighborhood Park Access among Adults in Philadelphia.” *Urban Forestry & Urban Greening* 78 (December 2022): 127790. https://doi.org/10.1016/j.ufug.2022.127790.

Milroy, Elizabeth. “Fairmount Park.” Encyclopedia of Greater Philadelphia, 2016. https://philadelphiaencyclopedia.org/essays/fairmount-park/.

———. *The Grid and the River: Philadelphia’s Green Places, 1682-1876*. University Park, Pennsylvania: The Pennsylvania State University Press, 2016.

Mitchell, Don. “People’s Park Again: On the End and Ends of Public Space.” *Environment and Planning A: Economy and Space* 49, no. 3 (March 2017): 503–18. https://doi.org/10.1177/0308518X15611557.

Morris Arboretum & Gardens. “Get Tickets.” Morris Arboretum & Gardens. Accessed April 25, 2024. https://www.morrisarboretum.org/get-tickets.

Moye, Richard. “Neighborhood Racial–Ethnic Change and Home Value Appreciation: Evidence from Philadelphia.” *Urban Geography* 35, no. 2 (February 17, 2014): 236–63. https://doi.org/10.1080/02723638.2013.856194.

Mullenbach, Lauren E., Birgitta L. Baker, Jacob Benfield, Benjamin Hickerson, and Andrew J. Mowen. “Assessing the Relationship between Community Engagement and Perceived Ownership of an Urban Park in Philadelphia.” *Journal of Leisure Research* 50, no. 3 (May 27, 2019): 201–19. https://doi.org/10.1080/00222216.2019.1581719.

Németh, Jeremy. “Conflict, Exclusion, Relocation: Skateboarding and Public Space.” *Journal of Urban Design* 11, no. 3 (October 2006): 297–318. https://doi.org/10.1080/13574800600888343.

———. “Controlling the Commons: How Public Is Public Space?” *Urban Affairs Review* 48, no. 6 (November 2012): 811–35. https://doi.org/10.1177/1078087412446445.

———. “Defining a Public: The Management of Privately Owned Public Space.” *Urban Studies* 46, no. 11 (October 2009): 2463–90. https://doi.org/10.1177/0042098009342903.

Németh, Jeremy, and Stephen Schmidt. “The Privatization of Public Space: Modeling and Measuring Publicness.” *Environment and Planning B: Planning and Design* 38, no. 1 (2011): 5–23. https://doi.org/10.1068/b36057.

Park, Keunhyun. “Psychological Park Accessibility: A Systematic Literature Review of Perceptual Components Affecting Park Use.” *Landscape Research* 42, no. 5 (July 4, 2017): 508–20. https://doi.org/10.1080/01426397.2016.1267127.

Park, Yujin, and Jean-Michel Guldmann. “Understanding Disparities in Community Green Accessibility under Alternative Green Measures: A Metropolitan-Wide Analysis of Columbus, Ohio, and Atlanta, Georgia.” *Landscape and Urban Planning* 200 (August 2020): 103806. https://doi.org/10.1016/j.landurbplan.2020.103806.

Parr, Adrian. “Urban Debt, Neoliberalism and the Politics of the Commons.” *Theory, Culture & Society* 32, no. 3 (May 2015): 69–91. https://doi.org/10.1177/0263276414536234.

Pearsall, Hamil. “Staying Cool in the Compact City: Vacant Land and Urban Heating in Philadelphia, Pennsylvania.” *Applied Geography* 79 (February 2017): 84–92. https://doi.org/10.1016/j.apgeog.2016.12.010.

Pearsall, Hamil, and Jillian K. Eller. “Locating the Green Space Paradox: A Study of Gentrification and Public Green Space Accessibility in Philadelphia, Pennsylvania.” *Landscape and Urban Planning* 195 (March 2020): 103708. https://doi.org/10.1016/j.landurbplan.2019.103708.

Rigolon, Alessandro, and Jeremy Németh. “Green Gentrification or ‘Just Green Enough’: Do Park Location, Size and Function Affect Whether a Place Gentrifies or Not?” *Urban Studies* 57, no. 2 (February 2020): 402–20. https://doi.org/10.1177/0042098019849380.

SEPTA. “Trip Planner.” Accessed April 25, 2024. https://plan.septa.org/#/.

Shade, Charlotte, and Peleg Kremer. “Predicting Land Use Changes in Philadelphia Following Green Infrastructure Policies.” *Land* 8, no. 2 (February 1, 2019): 28. https://doi.org/10.3390/land8020028.

Shannon, Jerry, Hannah Torres, Kathryn A. Mariner, and Timothy L. Hawthorne. “Practicing Community Geography in Times of Crisis.” *GeoJournal* 87, no. S2 (August 2022): 151–57. https://doi.org/10.1007/s10708-021-10529-9.

Shokry, Galia, James Jt Connolly, and Isabelle Anguelovski. “Understanding Climate Gentrification and Shifting Landscapes of Protection and Vulnerability in Green Resilient Philadelphia.” *Urban Climate* 31 (March 2020): 100539. https://doi.org/10.1016/j.uclim.2019.100539.

Simon, Roger D. *Philadelphia A Brief History*. Revised and Updated Edition. Temple University Press, 2017.

Stauridēs, Stauros, and Penny Travlou, eds. *Housing as Commons: Housing Alternatives as Response to the Current Urban Crisis*. First edition. London New York Oxford New Delhi Sydney: Bloomsbury Academic, 2022.

Susaneck, Adam Paul. "Segregation by Design," n.d. https://www.segregationbydesign.com/.

Sykes, Eunyque. "Environmental Justice beyond Physical Access: Rethinking Black American Utilization of Urban Public Green Spaces." *Environmental Sociology* 8, no. 4 (October 2, 2022): 388–99. https://doi.org/10.1080/23251042.2022.2057649.

Talal, Michelle L., and Mary V. Santelmann. "Visitor Access, Use, and Desired Improvements in Urban Parks." *Urban Forestry & Urban Greening* 63 (August 1, 2021): 127216. https://doi.org/10.1016/j.ufug.2021.127216.

Tower, Sondra M, and Elizabeth Groff. "Examining the Disorder–Crime Connection in Philadelphia Parks." *Security Journal* 29, no. 3 (July 2016): 520–37. https://doi.org/10.1057/sj.2014.1.

Trust for Public Land. "ParkServe." Accessed April 25, 2024. https://parkserve.tpl.org/mapping/#/?CityID=4260000.

———. "The ParkServe Database." Trust for Public Land. Accessed April 25, 2024. https://www.tpl.org/parkserve/about.

University Archives and Records Center. "Penn's West Philadelphia Campus." University Archives and Records Center. Accessed April 25, 2024. https://archives.upenn.edu/exhibits/penn-history/campuses/west-philadelphia-campus/.

University of Pennsylvania. "Penn Connects: A Vision for the Future." Accessed April 25, 2024. https://www.pennconnects.upenn.edu/.

Vaughan, Christine A., Natalie Colabianchi, Gerald P. Hunter, Robin Beckman, and Tamara Dubowitz. "Park Use in Low-Income Urban Neighborhoods: Who Uses the Parks and Why?" *Journal of Urban Health* 95, no. 2 (April 2018): 222–31. https://doi.org/10.1007/s11524-017-0221-7.

Vîlcică, E. Rely, and John S. Goldkamp. "Bail Prediction: Exploring the Role of Neighborhood Context in Philadelphia." *Criminal Justice and Behavior* 42, no. 11 (November 2015): 1159–82. https://doi.org/10.1177/0093854815599022.

Wang, Dong, Gregory Brown, and Yan Liu. “The Physical and Non-Physical Factors That Influence Perceived Access to Urban Parks.” *Landscape and Urban Planning* 133 (January 1, 2015): 53–66. https://doi.org/10.1016/j.landurbplan.2014.09.007.

White, Monica M. “Sisters of the Soil: Urban Gardening as Resistance in Detroit.” *Race/Ethnicity: Multidisciplinary Global Contexts* 5, no. 1 (2011): 13–28. https://doi.org/10.2979/racethmulglocon.5.1.13.

Williams, Raymond. *Keywords: A Vocabulary of Culture and Society*. Rev. ed. New York: Oxford University Press, 1985.

Wo, James C. “Understanding the Differential Effects of Land Uses On Crime: An Examination Across Philadelphia Neighbourhoods.” *The British Journal of Criminology* 59, no. 6 (September 21, 2019): 1432–54. https://doi.org/10.1093/bjc/azz019.

Wojnowska-Heciak, Magdalena, Marzena Suchocka, Magdalena Błaszczyk, and Magdalena Muszyńska. “Urban Parks as Perceived by City Residents with Mobility Difficulties: A Qualitative Study with In-Depth Interviews.” *International Journal of Environmental Research and Public Health* 19, no. 4 (2022): 2018. https://doi.org/10.3390/ijerph19042018.

X Games 2001 SKATEBOARD STREET FULL COMP: X GAMES THROWBACK, 2021. https://www.youtube.com/watch?v=Gvp7UxsWZ10.

Zidar, Kate, Timothy A. Bartrand, Charles H. Loomis, Chariss A. McAfee, Juliet M. Geldi, Gavin J. Rigall, and Franco Montalto. “Maximizing Green Infrastructure in a Philadelphia Neighborhood.” *Urban Planning* 2, no. 4 (October 31, 2017): 115–32. https://doi.org/10.17645/up.v2i4.1039.

Appendix