University of Louisville

ThinkIR: The University of Louisville's Institutional Repository

Electronic Theses and Dissertations

5-2016

A qualitative analysis of communality in Louisville community gardens.

Victoria Ann Montgomery *University of Louisville*

Follow this and additional works at: https://ir.library.louisville.edu/etd

Part of the <u>Human Geography Commons</u>, and the <u>Other Geography Commons</u>

Recommended Citation

Montgomery, Victoria Ann, "A qualitative analysis of communality in Louisville community gardens." (2016). *Electronic Theses and Dissertations*. Paper 2432.

https://doi.org/10.18297/etd/2432

This Master's Thesis is brought to you for free and open access by ThinkIR: The University of Louisville's Institutional Repository. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of ThinkIR: The University of Louisville's Institutional Repository. This title appears here courtesy of the author, who has retained all other copyrights. For more information, please contact thinkir@louisville.edu.

A QUALITATIVE ANALYSIS OF COMMUNALITY IN LOUISVILLE COMMUNITY GARDENS

Ву

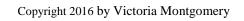
Victoria Ann Montgomery B.A., Indiana University Southeast, 2012

A Thesis
Submitted to the Faculty of the
College of Arts and Sciences of the University of Louisville
in Partial Fulfillment of the Requirements
for the Degree of

Master of Science in Applied Geography

Department of Geography and Geosciences University of Louisville Louisville, KY

May 2016



All rights reserved

A QUALITATIVE ANALYSIS OF COMMUNALITY IN LOUISVILLE COMMUNITY GARDENS

By

Victoria A. Montgomery B.A., Indiana University Southeast, 2012

A Thesis Approved on

April 12, 2016

by the following Thesis Committee:

Thesis Advisor Margath A. Walker

Thesis Second Committee Member Carol Hanchette

Thesis Third Committee Member Lauren Heberle

ACKNOWLEDGEMENTS

I would like to thank my thesis advisor Dr. Margath Walker for her guidance, inspiration and patience. I would also like to thank the University of Louisville's Department of Geography and Geosciences for making this thesis proposal possible, in particular Dr. Carol Hanchette for the assistance and guidance throughout my time in the program. I would also like to thank my other committee member, Dr. Lauren Heberle for her input and guidance. In addition, many thanks to the community garden members who participated in this research. I would also like to express my sincere appreciation to my husband, Anthony, for his understanding and patience during those times when there was no light at the end of anything; he truly is my knight in shining armor. I would also like to thank my children whom are the source of my inspiration and drive to be successful. I would like to thank my mother who taught me to persevere through difficulties. Finally, I would like to thank my family and friends. Without them, I would not have been able to make this thesis possible.

ABSTRACT

A QUALITATIVE ANALYSIS OF COMMUNALITY IN LOUISVILLE COMMUNITY GARDENS

Victoria A. Montgomery

April 12, 2016

Environmental change and food security issues boost interest in green initiatives, which in turn motivate policy makers and the general public toward the support and maintenance of urban community gardens. In Louisville Kentucky, an urban heat island in the United States, support for community gardens requires greater community support and volunteers. Objectives and organization of community gardens vary, as issues in production and sustainability are not the same for all garden communities and are contributing factors to their degree of success. Community gardens represent elements from both communal living and community but vary in their degree of communality. Using qualitative data obtained through interviews and participation observation, this study examines the relationship between community gardens and communalism. Specifically, I investigate how community gardens operate differently with the idea of communality, which depends on leadership, stakeholders, and knowledge production.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	
CHAPTER 1 INTRODUCTION	1
Introduction	1
Statement of Purpose	2
Study Area	3
Historical and Contemporary Context	6
Socioeconomic Significance	12
CHAPTER 2 LITERATURE REVIEW	16
Introduction	16
Contextualization of Framework	17
Themes of Communality	19
Contemporary Communes	24
CHAPTER 3 METHODS	28
Introduction	28
Methodology	28
Data and Methods	30
CHAPTER 4 RESULTS	35
Introduction	35
Garden Categorization	36
Networking	45
Communality Index	47
Results and Findings	50

CHAPTER 5 NARRATIVE	59
Introduction	59
Urban and Public Affairs Horticultural Zone	60
RAPP and the extension office	67
CHAPTER 6 CONCLUSION	76
REFERENCES	81
FIGURES	
Figure 1. Data collection and analysis methods used through a series of 3 phases	32
Figure 2. Communality scale to measure degree of communalism	42
Figure 3. Bar graph represents degree of communality and categorization of community gardens part of study	51
APPENDICES	
Appendix A Community Garden Study Semi-Structures Interview Questions	86
Appendix B Community Garden Study Communality Index	89
CURRICULUM VITA	155

CHAPTER 1 INTRODUCTION

Introduction

Over the past few decades, environmental change and food security issues have boosted interest in green initiatives within the United States (Stone, Vargo, and Habbeb 2012). This increased attention provided a drive for both policy makers and the general public to seek out and support local campaigns that promote sustainability efforts. As issues surrounding climate change and food security issues continued to gain importance, green initiatives like community gardens (hereinafter "CG") increased in popularity (Okvat and Zautra 2011). In recent years, a growing field of environmental research identified Louisville, Kentucky as an urban heat island and is a city experiencing the most significant escalation of urban warming in the United States (Stone 2007; Stone, Vargo and Habeeb 2012; City of Louisville, Kentucky 2015b). Since then local policy makers, leaders and activists have played a greater role and increased their support in sustainable development and green initiatives. This renewed sense of interest by local government and community members led to the endorsement and founding of at least thirteen new community gardens in the Louisville Metropolitan area (Louisville Grows 2014). Support for this type of environmental initiative is important for communities like Louisville as they have a variety of functions, such as; feeding people, fostering a sense of community and place, and combating urban sprawl and climate change (Holland 2004). While this is a significant achievement, little attention has been given to the social functions at work within these gardens (Glover, Parry and Shinew 2005). For example, community gardens have also been sites of communality, both historically and in the contemporary moment (Ferris, Norman, and Sempik 2001; Holland 2004). As an object of analysis, community gardens provide a window on larger processes of cooperative and communal movements.

According to Markowitz and Brett (2012), objectives and organization of community gardens can vary in terms of production and sustainability. Contributing factors that affect their degree of success include: geographic location, knowledge of cultivation, and level of individual participation (Glover,

Parry, and Shinew 2005; Markowitz and Brett 2012). Okvat and Zautra (2011) assert that in order to create and be successful in green initiatives, understanding how community gardens work and their impact on urban landscapes has become an important subject of study. Although extensive research has been carried out on the various impacts of community gardens in urban landscapes, few studies have investigated the social structures at work within community gardens (Glover, Parry, and Shinew 2005). Considering the increased importance of community gardens success and the limited research available in terms of their social practices, the aim of this thesis is to explore the relationship between community gardens and notions of communalism.

Statement of Purpose

There are unknown elements about community gardens' organization and social practices. Specifically, do the social processes that take place within community gardens manifest communal principals or; is the term communal garden, used as a general reference to community gardens, thus diminishing the term communal?

The objective of this study is to investigate the nature of community gardens, in particular: their constitutive elements, demographic components, internal processes and relationship of Louisville community gardens to communalism. This study operates on the premise that urban community gardens in Louisville operate very differently with respect to the idea of communality depending on participants, leadership, stakeholders and knowledge production. Identifying communal notions and the ways in which these ideas are mobilized across the Louisville area helps in the development of current and future community gardens. Furthermore, this research helps fill in the gap of knowledge about communality in community gardens, public settings and projects.

I organize this thesis in following way. This first chapter provides a historical review of community garden development in the United States and Louisville. Following this, I provide an outline of Louisville city development and population growth along with the current state of community garden activity. Chapter Two begins by laying out the theoretical dimensions of the research, and looks at how social philosophers within the communist and anarcho-communist paradigm frame communalism. This framework is important because it serves as the foundation to the meaning of communality used in this study. In the last section of this chapter, an overview of intentional communities is provided with

discussion about how they put communal ideologies to work. The third chapter is concerned with the methodology used for this study. This study uses a qualitative case study approach to investigate social practices at work within Louisville community gardens. The data were collected through in-depth semistructured interviews and fieldwork observations at various community gardens within Louisville. By employing qualitative modes of enquiry, I identify the themes that are most reflected in ideologies of communalism. These themes are used to evaluate the social practices operationalized in community gardens and analyzed for the degree to which these practices reflect the idea of communalism. In the fourth chapter, I analyze the results of interviews and observation undertaken through fieldwork in four sections. In the first section, I examine how community gardens function and operate by describing the different categories they fit into. In section two, I explain the role and importance of networking to community gardens. The third section of chapter four expounds upon the assessment tool devised for this study and used to evaluate the communality of community gardens. In the final section, I interpret the results of using the tool. In chapter five, I provide a narrative of two community gardens in Louisville with examples of social practices exhibited during this research, how they correlate to communal ideologies and attest to their degree of communality. In the final chapter, I discuss the implications of this study and how it may be used as a framework for future community gardens thus adding to this field.

The remainder of this introductory chapter first provides an outline of how community gardens developed historically in the United States and the city of Louisville. The section that follows characterizes the growth of Louisville in terms of its development and population. I also point out the social issues, such as racial segregation and immigration, which simultaneously materialized. The last section of this introductory chapter focuses on the current existing community gardens and what their roles are in the contemporary moment. Respectively, these insights reveal Louisville community gardens' relevance to this study.

Study Area

In some academic literatures, community gardening in the United States is considered a part of Early American development dating back to its first settlers (Lawson 2005). Community gardening as a term was used to emblematize this concept and is recognized as early as 1893 in Detroit Michigan (Kurtz 2001). Initially referred to as vacant lot or relief gardens, they were developed by local government in

Detroit to help families contend with the economic crisis during that time. Nearly twenty years later, after World War I and during the course of the Great Depression, cities across the U.S. adopted vacant lot gardening. This type of community gardening gained popularity because it supplemented food resources during times of economic hardships and food shortages (Kurtz 2001). Shortly after the start of World War II however, relief gardens were recast as Victory Gardens. Using public service announcements, officials reimagined community gardens as a place to engage in war efforts and fulfill one's civic duty, while simultaneously supplementing individual and community needs during a time when food and services were already limited (Kurtz 2001; Lawson 2005; Moore 2006). This carefully planned measure by the government caused a chain reaction. First, the public's growing desire to participate in Victory Gardens resulted in the rapid development of land for new garden spaces, which proliferated across the United States. Second, Victory Gardens provided subsidies to communities already experiencing food shortages while alleviating the need for commercial food production. Third, by decreasing the demand for commercial food production, ancillary supplies such as metal and services through the railroad system needed by the government were readily available. It was this end result that also served as the main goal: to allow easier access to supplies to ensure a favorable outcome in the war (Kurtz 2001; Lawson 2005; Moore 2006). It is notable that important historic events were often catalysts in how community gardens evolved and developed.

There is a large volume of published work about the history and development of Louisville Kentucky. However information is limited in terms of its community gardens. Current community garden publications can be found through a small variety of sources such as local newspapers, flyers, and internet sources such as a public or private CG webpages. For this study, the early history of community gardens in Louisville was tracked through articles published by *The Courier Journal*. An overview of these articles during the period of 1926 to 1945 indicates that community garden development was not fully implemented until after the start of WWII. As with other cities in the United States, Victory Gardens were a large part of the community and became important structures with respect to the city's resources, food supply, and community interaction. While this was due in part to nationalism it was also a consequence of growth, which is discussed further in the next section of this chapter.

Many of the articles reviewed in *The Courier Journal* primarily contained information about: garden maintenance and educational classes, garden associations and clubs, economic support of gardens from multiple levels of government, and the need for additional garden space in urbanized areas. One particular article brought attention to the shortage of vacant land available to develop a community garden, resulting in families being placed on waiting lists. Many of the people placed on these lists were "apartment dwellers and those who live in houses with limited yards" (The Courier Journal 1943, 10). Petitions from the city officials to donate or grant use of vacant land for Victory Gardens were uniformly framed as fulfilling a patriotic contribution (Oberlin 1943). With the end of WWII and a rebounding economy after the Great Depression, Louisville government officials and organizations, as in many U.S. cities, experienced a diminishing desire to organize Victory Gardens. Consequently, the need to find vacant land was alleviated temporarily (Kurtz 2001; Lawson 2005; Hashim 2014). History shows that urbanization and redevelopment shortly thereafter would augment the desire for vacant land, which coincided with times of socio-political and racial tensions. These social-political issues which includes segregation, urban development, and neighborhood empowerment play roles in how community gardens developed once economic distress shifted (Lawson 2005; Hashim 2014) and is explained later in this text.

As early as the 1960s, vacant lots and Victory Gardens were recast once again but not officially as previously had been done. This time individuals and sociopolitical groups who participated in community gardens transformed a site once used to promote patriotism into a site of political activism and unification, to contest growing social tensions within the area (Kurtz 2001; Lawson 2005; Hashim 2014). While the sociopolitical value these spaces once held has decreased over the past few decades, contemporary community gardens address some of the same issues that the 1960s gardens faced: food security, food justice, sustainability and "local economic development" (Lawson 2005; Agyeman 2013, 60).

Additionally, support by both federal and local governments for community gardens has increased since its waning nearly forty years ago. The most recent example of the federal government favoring community gardens is through the United States Department of Agriculture "People's Garden." This initiative encouraged federal employees across the U.S. to develop and maintain a community garden at their respective facility in order to benefit the community in which they reside (United States Department of Agriculture 2015). In Louisville, the Mayor's Healthy Hometown Movement supports participating in

community gardens as part of an initiative to promote healthy eating (City of Louisville, Kentucky 2015a) and provide support to community gardens through a variety of means including grants, advertising, and educational services.

Although goals and initiatives of both community gardens and governmental organizations often align (i.e. provide access to fresh affordable food, promote healthier eating habits, and advocate community involvement), accomplishing these tasks is often difficult in Louisville neighborhoods, with their complex historical backgrounds. Up to now this section provided a historical account of community gardens across the United States and Louisville area with an additional glimpse of current activities. The next section discusses a historical account of Louisville's economic and population growth following World War I along with the coexisting sociopolitical issues.

Historical and Contemporary Context

Over the past century Louisville experienced significant change in both its growth and development in a variety of ways. First, social protests during the second half of the century influenced both political policies and social practices thus alleviating sever racial intolerance. Although racial tensions decreased, some of the racially motivated practices that took place at precise historical moments are seen today. Second, Louisville experienced significant population change through migration and immigration spanning three different time periods. What follows is a narrative of how these changes played a significant role in Louisville's sociopolitical and economic developments, in addition to the coinciding issues faced by minorities. This historical account adds important context to the development and social practices identified in Louisville community gardens.

Due to political issues in different parts of the world during the late 19th century Louisville experienced its first wave of population growth through the arrival of immigrants from Germany, Russia, and Ireland (Wright 1985; Cummings and Price 1990). Then in a second wave during the early 20th century Louisville's population grew again as a result of changes made to U.S. segregation policies. Due to its geographic location African Americans migrating from more southern (previously Confederate) states to more northern ones often travelled through Louisville. Although most of the African American migrant population used Louisville as a passageway to the north, there were many who stayed and made Louisville their new home (Wright 1985; Cummings and Price 1990). The last occasion consequently was during the

nineteen sixties to the nineteen nineties and coincided with a change, this time in U.S. immigration policy. The makeup of this group was different than those who had arrived before in that many were refugees (Cummings and Price 1990; Capps et.al 2006). Many of those who arrived during this time were victims of religious persecution, which was experienced differently respective to country of origin. Although an issue of intolerance was a common theme for those who would arrive, it would not be a uniting factor during times of racial strife in Louisville (Hashim 2014).

It is prudent to describe one elemental event which would impact Louisville and be a source of frustration for Louisville residents for many years to come. As previously mentioned, Louisville is situated in a unique geographic location. In addition to being considered a crossroad between the northern and southern states (Cummings and Price 1990), Louisville is situated next to the Ohio River where settlers couldn't traverse past the Falls of the Ohio. This detail was monumental to Louisville's growth because river systems were a main source of transportation for goods. Louisville was an early entry port for steamboats that had to offload and reload downriver until, the construction of the Portland Canal allowed river traffic to bypass the falls. The city's access to water and transportation made Louisville an attractive site for commerce and industry (Yater 2001). Many of the manufacturing companies built plants along the river in the west and southwest part of Louisville. This area commonly referred to as Rubbertown began with the construction of Standard Oil in 1918 and flourished during the war years (Yater 2001). Rubbertown is an embodiment of the companies and the types of products they made. Companies that produced synthetic rubber were: DuPont, Goodrich, and National Synthetic Rubber. The National Carbide Company was a prominent manufacturer that provided acetylene, which is a chemical used in the production of rubber, to the rubber companies (Yater 2001). Other industries that settled in or near Louisville include Naval Ordinance and the Army ammunition plant which was located directly across the river in Charlestown Indiana and produced artillery. This industrial boom may have played a part in population growth due to the jobs created while simultaneously stimulating Louisville's economy (Yater 2001). The benefit of industrial growth in terms of the economy would not be seen, however, until after the end of the war. Thus one can surmise community gardening would be highly favorable, especially since an increasing population put food in high demand.

African American Population and West End Louisville

Louisville's political, economic and urban under-developments, primarily in the West End, stem from its long history of racism (Wright 1985; Cummings and Price 1990) and play a role in current problems faced by these predominately African American neighborhoods. Louisville's history is inundated with racially motivated developments dating back to the pre-Civil war era; many of the current issues experienced by Louisville residents, however, originated shortly before WWII. Changing racial policies, along with the U.S. shifting from an agricultural economy to an industrial one, spurred the (second period) migration of many African Americans from (previously Confederate) southern states to northern and border states (Cummings and Price 1990). Additionally, Louisville's unique location within a border state like Kentucky (Wright 1985; Cummings and Price 1990) was ideal for entrepreneurs and immigrants alike. This influx of population along with Louisville's deep seated racial notions held by white Louisville natives and European immigrants spurred some of the segregation policies during that time. Furthermore, although the housing segregation policy enacted in 1914 was overturned shortly after it was passed; housing patterns still reflected the racial separatist notions held by most residents of all ethnicities in Louisville during the early 20th century, though this would change as the city grew and prospered (Cummings and Price 1990).

The Depression years were tolerable in the West End of Louisville until the late 1930s. River transportation boomed and Shippingport Island buzzed with activity and commerce. Consequently, the West End was a prominent part of town consisting mainly of affluent and working class whites and patches of African American neighborhoods. However, in January of 1937 the Ohio River crested at its highest point in history and flooded much of the Ohio Valley including Louisville. The 1937 flood decimated the west end. Some rebuilt but most left for better conditions in the Highlands and the East End of Louisville. This white flight prompted the growth of Louisville suburbs. Housing segregation forced African Americans to rebuild from what was left of their West End home with no choice of migration (Kleber 2001).

Louisville's economy, like much of the U.S., saw great improvements with the end of the depression and construction of the previously mentioned manufacturing plants (Yater 2001). The creation of jobs combined with the city's growing population stimulated the local economy further, as entrepreneurs

who include some African Americans, became established businessmen (Cummings and Price 1990). By the 1950s however racial ideologies promoted further segregation through uneven housing and business development by white Louisville natives and European immigrants who were influential businessmen and policy makers (Cummings and Price 1990; Hashim 2014). These men influenced local business policies and their dealings with the black community through their wealth and social status. Many financial institutions limited or ceased doing business with African Americans altogether under these elitist pressures while other small business owners in the West End and downtown moved to other parts of the city (Cummings and Price 1990). Furthermore, money lending restrictions imposed on African Americans, forced once prominent businesses started to go out of business (Cummings and Price 1990). Racially motivated standards prompted by white traditions eventually lead to high rates of unemployment and decreased access to common goods as businesses gradually relocated to other parts of the city, taking capital with them.

It was during this time that a demographic shift in West End neighborhoods also took place (Wright 1985; Cummings and Price 1990). Originally the West End was inhabited by middle- and higher-income whites. Racial tensions and redevelopment in other parts of the city, such as the East End of Louisville, however, led to white flight and minority move-in. (Wright 1985; Cummings and Price 1990). This transition, along with the money lending restrictions imposed on African Americans, permitted housing in the West End to start to become old and dilapidated (Cummings and Price 1990; Hashim 2014). Railroad systems surrounded and enclosed the area (Hashim 2014). West End residents were further distressed as their neighborhoods were quickly blighted by the aging housing, industrial development nearby, and lacking interest by the city to maintain the neighborhood surroundings, the effects of which would be seen for many decades to come (Cummings and Price 1990; Yater 2001; Hashim 2014). Racial inequalities combined, further strained the social relationships between the different ethnic and racial groups of the community (Cummings and Price 1990; Hashim 2014).

Wright (1985) describes Louisville's history of racism as "polite racism", whereby whites supported African American issues so long as they accepted and stayed within their assigned lower class status. To put it another way, Louisvillians did not tolerate the activism that took place during the 1960's and 1970's (Wright 1985; Cummings and Price 1990). Thus racial issues were intensified as both whites

and European immigrants reacted negatively to protests and sit-ins organized by community members and organizations, such as the National Association for the Advancement of Colored People (NAACP), that confronted issues of racism and inequality. Resistance and violent retaliation towards the African American community was especially exhibited during sociopolitical developments such as the 1967 open housing act and school desegregation in 1975 (Cummings and Price 1990). Through time and sociopolitical change Louisville residents became acclimatized, although limited, to African American presence in leadership roles during policy development and as neighborhood residents throughout the city (Cummings and Price 1990; Hashim 2014).

Since the 1990s the city of Louisville and its residents have made great strides in social and cultural developments regarding race, compared to the first half of the 20th century. However, Cummings and Price (1990) point out that, despite these positive developments, Louisville's black population overall continues to face large disparities in education, poverty, and unemployment. Similarly, it is the culmination of historical events and inadequate redevelopment that has led to the creation of Louisville's West End food desert, adding further complications to an already struggling community (Hashim 2014).

The Louisville Metro Health Equity Report (Center for Health Equity 2014) suggests that community members living in the West End are at a higher risk of developing health issues as access to fresh affordable food is limited while cheap unhealthy fast food stores are abundant. Louisville's food desert is not unique. Other cities such as Detroit and Chicago are facing similar issues through their own complex sociopolitical and development backgrounds (Lawson 2005; Hashim 2014). Like Louisville, these cities combat health and economic issues faced by those living in a food desert through the support and development of community gardens (Hashim 2014).

Louisville's West End is a prime example of community underdevelopment, making it an ideal location for the establishment of community gardens. Over the past two decades the formation of community gardens in Louisville, especially in the West End, has been slow and tenuous. In recent years however community activism, along with support of local political leaders, has increased; lending hope to those living in communities negatively impacted by social and economic inequality (Hashim 2014).

Immigrant and Refugee Population

The immigrant and refugee population play a rather large role in Louisville (Wright 1985) and in community garden development. As previously mentioned, the population of Louisville changed in three time periods (Izyumov, Nahata and Coomes, 2002). The initial population change occurred in the late 19th and early 20th centuries. As a result of the political and religious upheavals taking place in Europe such as the Great Potato Famine or the more axiomatic issues surrounding WWI (Marrus 1985) combined with U.S. immigration policies such as the Johnson-Reed Act, many of those who settled in Louisville were of German and Irish descent (Cummings and Price 1990 and Price 1997; Izyumov, Nahata and Coomes, 2002; Marrus 1985). Those are the people who settled in the eastern downtown areas commonly known as Limerick and Germantown, just to name a few (Wright 1985; Cummings and Price 1990). Interestingly while these people left their countries for reasons of oppression or mistreatment, issues surrounding race and segregation of African Americans were not curtailed. Instead racial issues and segregation of African Americans were instigated by immigrants, especially in terms of employment (Cummings and Price 1990). This would be significantly different with the more recent or third time period of population when immigrants entered a more diversified United States.

The latest surge of immigrants entered Louisville during the latter part of the 20th century which began in the 1970s. This group was different in terms of ethnicity and included more refugees primarily because "immigration policy switched from country-based quotas to a family-unification principle, an increasing proportion of immigrants have been coming from the relatively poor countries of Latin America and Asia" (Izyumov, Nahata and Coomes 2002, 909). Refugees from Bosnia and "undocumented immigrants from Mexico" are also a part of this recent surge (Izyumov, Nahata and Coomes 2002, 911). According to Izyumov, Nahata and Coomes (2002) the Louisville metropolitan area foreign born population during the nineteen nineties grew by 60 percent compared to the previous decade and in the year 2000 accounted for 3.4 percent of Louisville Jefferson County's total population (Capps et al. 2006). Although immigration into the U.S. has slowed over the past decade there is a small but growing population of Bhutanese (Shrestha 2011) and Somali refugees (Capps et al. 2006) settled in Louisville.

Having a basic understanding of Louisville population characteristics is important for this study. Ethnic and cultural backgrounds are often reflected through social practices, which can impact the world around them (Shrestha 2011). The historical narrative and description of how Louisville changed in terms

of its social practices, economic policies, and population change provides a context for the next section.

The following provides a description of the different types of community gardens and services they offer.

Consequently these descriptions bring the previous sections together as these historical events and population play important roles in how they develop and who they serve in the community.

Socioeconomic Significance

Research shows the majority of African Americans and immigrants who are of Latin American or African descents are the most impoverished groups in Louisville in terms of income, housing, education, and employment. This is in contrast to Louisville white natives and immigrants who are European or Asian (Capps et al. 2006; Center for Health Equity 2014). As expected, the development and purpose of different community gardens in Louisville reflect these contrasts too. The needs and services offered by community gardens are typically dependent on those involved in the garden. Public organizations manage most of the public gardens in Louisville, such as the Louisville Jefferson County Extension Service (hereinafter "extension office"), which serves as a means of financial help for the economically challenged. Similarly, charitable organizations such as Louisville Catholic Charities operate in order to meet the needs of poorer groups but often direct their services to specific groups, which in this case are refugees and immigrants.

Generally speaking, larger community gardens like these offer low cost spaces or plots, educational services, and opportunities to participate in market gardens. Many of the gardeners who participate in these larger types of community gardens live in food deserts, therefore community gardens not only offer access to fresh food, but their income is supplemented in a variety of ways. First, gardeners do not have to buy fresh food, which is often expensive, especially when organically grown or culturally specific (which are sometimes hard to come by). Second, production of large amounts or excess food allows gardeners the opportunity to store or can food to be used at a later date or sell it at a farmers market. These gardens offer education related to basic gardening tips, growing organically, and in some cases offer courses in developing a farm. A few of the larger community organizations, like the ones previously mentioned also offer classes or seminars ranging from basic gardening tips to developing a farmstead, in hopes that the skills learned lead to future employment. Conversely private gardens consist of people who are economically stable yet lack the space needed to grow a fresh food garden. Services are limited and generally do not include advanced educational courses.

Although community gardens vary, in terms of whom and how they aid the different residents of Louisville, there are some things that they have in common with each other in the city and across the United States. For instance, community gardens promote sustainable measures such as growing organically and using water catchment systems. In some gardens using organic or environmentally conscious methods is framed as a way to get back to nature, where the act of gardening is presented as cathartic; these methods are thought to aid in relieving stress (Lawson 2005). Furthermore, current studies show community gardens promote unification, wellbeing, and in many instances supplement finances, making them an invaluable asset to impoverished neighborhoods (Gottlieb and Fisher 2000; Lawson 2005; Pudup 2008; Corrigan 2011).

One similar issue faced by community gardens of the past and present is the need for more space. According to many of the community garden coordinators interviewed for this study, access to land to develop a community garden space is limited within the urban landscape. The main reasons are issues of ownership and the funds needed to buy or rent a parcel of land. Organizations that develop community gardens generally have limited income and so they are dependent on partnerships for space. In Louisville, partnerships are often formed with local government such as Louisville-Metro Sewer District (MSD) and Louisville-Metro Parks and Recreation, and occasionally with local churches or individual landowners. Partnerships are either verbal or written contracts between two parties who agree to use vacant land for the purpose of developing a community garden. Rules and restrictions are part of most partnerships and typically concern the following: responsibility for water bill, pesticide and herbicide use, general maintenance, property or garden boundaries.

At present there are approximately fifty five community gardens in Louisville-Jefferson County. This does not include twenty six elementary school gardens, as those are not available to the public. Community gardens in the scope of this study are a combination of public, private, and semi-private (limited) community gardens. Organizations that operate them are: the Jefferson County Extension Service, Catholic Charities, Louisville Grows, and Billy Goat Garden, just to name a few. Availability, plot sizes, and rental fee vary and are dependent upon garden location and organization. For instance, the extension office offers a 40 ft² garden plot at their Parkland Community Garden located in an urban area of West Louisville with a plot fee of ten dollars for one year. However at the extension office's 7th Street

location, which is southwest of Louisville and in an area not as urbanized, the plots are 30 ft² and cost slightly more at twenty dollars for one year (Jefferson County Cooperative Extension Service 2016). Usually, community gardens are used by gardeners who live in the neighborhood in which the community garden resides, primarily due to convenience or community involvement. Community garden coordinators encourage gardeners to sign up for a plot near their residence, as convenience is usually a factor in the successfulness of a garden plot.

Community gardens categorized as public allow anyone from Louisville-Jefferson County to join and use a plot where available. These spaces are generally granted on a "first come first serve" basis; gardeners from a previous year are given preference, on occasion. Preference generally refers to location of a plot, which is assigned before the start of the growing season by the person who organizes the garden activities. Semi-private community gardens, which are also nonprofit, grant plots to a limited or specific group of individuals, such as refugees. This allows the semi-private gardens the ability to tailor their assistance to the group's needs but limits them to specific and typically private grants. Private gardens, while typically nonprofit, do not hold the tax exempt status, thus don't qualify for grants. Private garden coordinators are selective in who is able to join and manage a garden plot. They rely heavily on gardeners' participation in meetings and garden maintenance. Plot fees collected and the occasional private donation are only means to provide garden supplies, equipment, and space. Interviews reveal there are three main interests for growing food in a community garden: to gain access to fresh food in an area where there is limited availability, to supplement individual income by growing food for personal use or to sell at a farmers market, and where personal growing space is either limited or non-existent. Location, plot availability; and the services provided are other considerations individuals take into account when examining which community garden is preferred.

Lack of space, planning strategies, and food desert issues contribute to Louisville residents' need or desire for community garden plots. Likewise, educational programs, community outreach and increasing minority populations impact Louisville's socio-political landscapes. Through these complex transformations, Louisville residents likely adapt new social structures in response to changing social roles. This makes Louisville an attractive site for socio spatial studies. In this chapter context was provided to gain a better understand of Louisville's past and present and the role of community gardens during specific

historical moments. Additional research about this subject would contribute to our knowledge of whether the mistrust developed in marginalized neighborhoods like those in the West End plays a role in the development and embracement of community gardens. This study identifies the different levels of communality in Louisville community gardens through an analysis of their organizational and social practices, thus reflecting neighborhood challenges contributing to current knowledge and future projects.

CHAPTER 2 LITERATURE REVIEW

Introduction

To date, several studies have investigated the effects of community gardens in terms of their role and impact on the community in which they reside. Overall, there seems to be some evidence to indicate that community gardens are more than just a general space for gardening. Respectively, community gardens often take on a sense of place or meaning as they serve as a common multi-purpose area used for the enrichment of individual or community social relationships (Lawson 2005; Alaimo, Reischl, and Allen 2010). To put it another way, while all community gardens have the same goal – to grow food — community gardens respectively are socially constructed sites imbued with meaning through specific practices embedded within and through them. Moreover, they often have different social practices depending on location, identities of those participating, geographical context, and contingent or non-contingent factors that directly affect the community garden (e.g. public funding for water). This point is relevant because this study evaluates the interactions that take place within and throughout community gardens.

Few studies examine the idea of communalism in community gardens; moreover, authors within this field of research regularly use the terms "community" and "communal" synonymously as a general reference to community gardens. A particular concern with this practice is the lack of clarity imposed by these words, which could carry with it various research limitations. Alternatively, careful discernment and use of these concepts prevent obscurity and preserve the function, purpose, and ideology of community gardens examined within a collection of works. For this project the term "communal" generally refers to: a group of people who share common ideas, have similar goals, share resources and responsibilities within a (defined) common area or living space and are often self-sufficient (Meijering, Huigen and Van Hoven 2006). In comparison, the term "community" is a group of people who collaborate with the intention to resolve issues or tasks within a common space (Holland 2004). Community gardens represent elements of

both communal and communities but vary in terms of their degree of communality. In this research, "communality" refers to the state of being or quality derived from a particular set of social ideologies (e.g. democracy, equality, capitalism, volunteerism, and mutualism).

Using the historical works of social philosophers, the first section of this chapter contextualizes and highlights notions of both communism and anarchy. In the second section, I describe in greater detail some of the frameworks prevalent in both ideologies and how they have been imported into the idea of what constitutes communality. The third section of this chapter briefly summarizes the development and evolution of communal ideologies and practices, many of which are noticed in past and present communal societies. In evaluating the complicated elements and mechanisms of communal living, a deeper understanding of community gardens communality is developed.

Contextualization of Framework

There are a variety of frameworks which help us to understand the roots of community and communalism. They represent different and sometimes divergent ideologies. In order to grasp communality it is important to first recognize its connection to the existence of class systems and the hierarchical component within them. One of the first and most widely known analyses of class systems is by Karl Marx and Frederick Engels (1946) in their theory of capitalism. Marx and Engels (1946) illustrate class struggles through specific historical moments and societies; some examples of these are: chiefdoms (e.g. chief and tribe member), feudalism (e.g. lord and serf), and the caste system. The most common labels associated with Marx and Engels (1946) were: bourgeois – rich, elite, capitalist; and proletariat – poor, common, working. Their main argument is that class systems result in the oppression of one person (or group) by another; and that oppression and exploitation are the result of the socio-economic system, specifically, capitalism (Marx and Engels 1946). Their works have been the focus of many scholarly debates and are centered on the capitalist economic system -- and the means by which power and control is acquired and maintained -- and the issues faced by the different social classes forged through the inequalities created through capitalism (Gibson-Graham 2008). As a further consequence of these inequalities, whereby choice and freedom are diminished, people within society are left to experience forms of alienation (Harvey 1996). According to Zablocki (1980, 8), alienation is characterized as a "person

experiencing a sense of powerlessness, meaninglessness, normlessness, isolation, self-estrangement, social isolation".

One central aspect of capitalism is the extraction of value with the aim of creating and maintaining individual wealth. To accomplish this, control over the extraction of value (through labor, production, consumption and commodification) is sustained by the concept of private property ownership (Marx and Engels 1946). Capital, expressed among other things as private property ownership and the control of value extraction is the means by which social power is reproduced between class systems (Marx and Engels 1946). A classic example of this social system is the commodification of labor by the bourgeois as a source of wealth. The proletariat is left to struggle in poverty as surplus is not distributed equally (Marx and Engels 1946; Bottomore 1985). Community gardens exist within a capitalist society (Graeber 2004) and use of capitalist practices and their purpose is a component used to evaluate communality.

In order to resist the social and spatial inequalities created through capitalism a Marxist geographical approach evaluates: social interactions within space, uses of space to produce social interactions, and how space is developed through social practices (Cresswell 2013). Marx's solutions for the proletariat are sketched out in three approaches. First is the abolition of inheritance and remove private property from bourgeois control, as these actions create and reiterate class systems through ownership and its private acquisitions (Marx and Engels 1946). The second is to place property, economy, and education in the hands of the proletariat state, to be managed and distributed equally (Marx and Engels 1946). The third approach is to employ standardization practices thought to promote equality and negate alienation and otherness created by capitalism (Nisbet 1973). While many collaborators of Marx adopted the ideology that inequalities are maintained through capitalism, there were some who critiqued his methods for resistance, ultimately resulting in an ideological divide, such as anarchism.

Anarchism, an offshoot of communism, acknowledges Marx and Engels' critique of capitalism and the oppression created through it, but differs in how to contend with these issues (Graeber 2004). Primarily these differences came about because anarchist philosophers felt communist solutions were still too restrictive. A key difference between the ideologies is that Marxism is a theory of society with a focus on oppressive structures rather than the individualized actions and behaviors of human beings.

As previously stated, communist ideologies place economy and education in the control of the proletariat state. Anarchism mainly takes issue with control. Anarchist philosophers believe government and ownership of property, even in the hands of the proletariat state, would still allow a form of control to exist which would eventually lead to the formation of yet another class system (Proudhon 1969a; Miller 1976). Furthermore, the standardization of education and the economy put in place by the proletariat state does not account for the individual needs of people within society.

Their solution to this is the elimination of government systems and ownership of property altogether (Eltzbacher 1960; Oved 1992; Graeber 2004). Rather, mutualism and volunteerism remedy issues of inequality, oppression and alienation. For example, according to Proudhon (1969a), society would truly be free by allowing people to live in smaller groups with common goals (and beliefs) who are dependent on each other for help through the practice of mutual aid (Proudhon 1969a; Oved 1992). Above all, anarchists believe capitalism promotes competition while "direct democracies" like communism (Graeber 2004, 2) are too restrictive; both interfere with and prevent natural mutualism, an integral part of anarchist communal spaces (Bakunin 1972; Oved 1992).

Capitalism is an economic system that has been at the center of debate both historically and in the contemporary moment. Understanding the solutions offered by social philosophers and how they are used is important when trying to observe how and to what degree they are used in community gardens. I now move on to describe in detail the framework of these ideologies that make up communality.

Themes of Communality

So far I have provided an historical background for the social ideologies used in this project along with an overview of the framework used in their development. As previously mentioned there are elements of both communism and anarchism. They are different however in terms of how they contend with issues of inequality and capitalism.

In consideration of the significant overlap between notions of communalism, specifically between communism and anarchy, some of the frameworks prevalent or unique in both have been imported into the idea of what constitutes 'communality.' For this project the elements most prominent in the idea of communality are: equality, democracy, capitalism, volunteerism, and mutualism. There are two things to

remember while reading this section: first, social philosophers generally frame their principles in opposition to capitalist inequalities and themes is discussed in those same terms; second, the order in which each of these frameworks are discussed does not imply hierarchical importance.

Equality

Equality is perhaps one of the points most frequently discussed in sociopolitical literature and is a particular element of communality in this project. Equal treatment and a lack of hierarchical position are not only key tenets in communality, but necessary components for a communal garden as well. However, communism and anarchism have conflicting views of equality. Marx and Engels (1946, 31) said "the history of all hitherto existing society is the history of all class struggles" a phrase which they use to summarize issues of inequality both historically and in the contemporary moment. Both communist and anarchist philosophies seek to end class systems as a means of achieving equality for all members of society. Their methods of accomplishing this however are different. To better understand how they are different I draw on the works of Miller (1997) who offers a clearer understanding about the types of equality found in this discourse, which are social and distributive. The first type "identifies a social ideal, the ideal of a society in which people regard and treat one another as equals, in other words a society that is not marked by status divisions such that one can place different people in hierarchically ranked categories (Miller 1998, 23)." Distributive equality, on the other hand is defined as "benefits of a certain kind –rights, for instance – should be distributed equally" (Miller 1998, 23). Equality is one of the most discussed and highly debated topics seen in many philosophical literary works, including those used for this project. Furthermore freedom is often a goal discussed in terms of equality. In order to understand better how communism and anarchism subscribe to these different types of equalities, more or less, it is first necessary to explain the principles they employed to achieve it.

Democracy

Under communism, equality is achieved by the governance of a Democratic Proletariat State (hereinafter "The State") which is a centralized system democratically controlled by worker associations (Marx and Engels, 1946; Proudhon 1969b). Ideally, workers' associations represent the proletariat. This design allows the proletariat control of labor, production and consumption practices collectively (Marx and Engels, 1946; Lee 1983). In theory this system dissolves class systems and promotes "free development of

each (which) is the condition for the free development of all" (Marx and Engels, 1946, 53). This form of government is critiqued by anarchist philosophers as they maintain these newly formed groups would continue the power struggle of class systems identified throughout history (Proudhon 1969a). For instance, centralization through the communist democratic system employs standardization of education, "laws, measures, customs, and beliefs" in order to promote equality for the entire community (Scott 1998, 32) which represents a distributive equality. On the other hand, anarchism promotes social equality, as it promotes personal and collective communities, freedom of choice and freedom to cooperate, in all matters of society (Graeber 2004).

To amplify the anarchist idea of equality, all forms of government must be rejected because of the regulations and restrictions imposed by them, which inhibit freedom and thus equality. Moreover, methods of standardization imposed by the state do not account for individual needs and are based upon the labor that they provide; thus, by not accounting for individual needs they construct inequalities (Kropotkin 1972). Degree of communality is dependent upon how decisions are made by a group of people, the level of decision making by participants and on terms meeting the individual's need.

Capitalism

A component of communality is the role of capitalism. As previously stated, a central aspect of capitalism is the extraction of value with the aim of creating and maintaining individual wealth sustained by the concept of private property. Within both communist and anarchist systems, social power would end with the discontinuation of private property ownership. Again, the differences between these credos are in their processes. Within communist ideology the state would be in possession and make use of all land, property and means.

This means the state is also in control of all economic and non-economic processes. Once all of the citizens received their standard needs, any and all surplus would be redistributed back into the state government system (Marx and Engels 1946). Ideally, this system represents all the classes or in communism, the proletariat. The problem according to anarchist philosophers is control and power are still in place. According to anarchism, the only difference between capitalism and communism is that property is owned by the state (a public entity) which allows a recurrence of class struggle (Bakunin 1972; Kropotkin 1972; Scott 1998). The state established standards for labor and wages, but not all labor was

deemed the same. If individuals did not meet these standards they faced the threat of having their basic needs taken away by The state (Lee 1983). Therefore, not only would an individual again be forced to provide labor of a certain standard, the extraction of value from labor would still exist through ownership of property. Kropotkin (1972, 49) stated "All belongs to all", a saying that represents an anarchist ideology that advocates for the dissolution of property ownership altogether. Dissolution of property ownership does not equate to having to share all space and items, rather Kropotkin (1972) distinguishes between ownership and possession. Kropotkin (1972) addresses the need for individual space through possession. In his works he states each person has a right to land and property so that he may be able to provide for himself, family and the collective. A person is in possession of their land so long as they are responsible for it and a steward over it (Proudhon 1969a).

Communality in community gardens depends on what capital a garden has at its disposal and how it chooses to use its land and produce, for profit or mutual benefit of participants. So far this section has discussed themes that are shared by communism and anarchism: equality, democracy, and capitalism. Now we deal with themes unique to anarchism: volunteerism and mutualism.

Volunteerism and Mutualism

Voluntarily participation and mutual aid are keys tenets in determining communality. This tenet overlaps mutualism as education and labor is provided to and by all members for the benefit of everyone in society. Education is important to volunteerism because it makes a more capable labor force and provides motivation to perform labor. Community gardeners receive training from each other and from agricultural experts to better hone their crafts. This is done on a voluntary basis, however, just as helping each other with gardening tasks is done for the collective good. Under communism all children and individuals are entitled to receive a standard level of education and from there be taught a special set of skills to be used in a specific trade of labor production for the greater collective. Anarchists feel this leaves workers unhappy in the mundane sense and not using their full individual potential. While all workers are generally considered equal in communism, education and knowledge (e.g. profession or trade) would be rewarded differently thus sustaining inequality through wage labor (Proudhon 1969a; Kropotkin 1972).

By cross teaching skills to all members of society, all members will have the ability to be creative and identify what their individual skill is. This ensures a greater sense of pride and thus the individual is

likely to contribute more labor, produce more or better quality goods. Individuals given education in all labor processes could perform labor through a combination of agricultural production and fabrication of goods, adding variety to how a person may provide labor. Therefore, unlimited and un-standardized education with individual creativity promotes freedom of choice in labor production. Individuals must not be forced to provide aid or labor to the collective as this does not promote equality.

Requiring an individual to provide any form of labor for either a wage or ration, promotes class systems and inequality, which are imposed through the hierarchal system in place (Kropotkin 1972, Lee 1983). Another way to promote equality, within anarchism, is by terminating the wage labor system. According to Kropotkin (1972) any person who contributes to the collective by means of their labor would share in the total sum of that which is collectively produced and suppress fear of their basic human needs not being met. Additionally, education and sharing of knowledge would stamp out competition while leading to more freedom of choice. Members of a society or collective would find satisfaction in the labor production of their own choice, thus being an aid to the division of labor and production (Kropotkin, 1972). Fear of not meeting a standard set by The state or private owner promotes competition through force rather than cooperation through voluntary mutual aid. Thus, community gardens need to have a labor that is voluntary and not paid based on wage to be considered communal.

So far I have discussed methods of equality, democracy, capitalism, and volunteerism, I now move on to mutualism which is an important part of anarchist philosophy. Mutual aid combines both types of equality mentioned earlier in this section. Mutualism, equality, autocracy, free-agreement of anarchism all seek to fend off forms of alienation (Kropotkin 1972, Graeber 2004). In a communist collective, distributive equality addresses society's needs and abilities based on standards.

Mutualism does not use standardization as a means to promote status or a reason to take away needs when the standards are not met. What matters is that one's individual contribution is of benefit to all of society. In this way mutualism has the highest form of social and distributive equality. Furthermore, the needs of the individual are met despite the fact that not everyone in society is physically or mentally equal. So long as we think of society as:

"a giant with a thousand arms, who carries all industries and simultaneously produces all forms of wealth. Society is animated by a single consciousness, a single mind and a single will, and the unity of oneness of its person is revealed in the coordination of its

spheres of activity"... "In all circumstances this prodigious being remains true to itself, one may say that each moment of its life is equally productive." (Proudhon 1969a, 65)

Mutual aid is accomplished by participating in shared labor to the best of one's ability as a part of individual responsibility. There are no requirements, standards, or restrictions an individual must meet in society. The collective understands that because individuals do not have the same faculties or physical dexterity, their individual needs and rights must be met so that all members are of consensus.

Mutual aid takes place of ownership, value, wages, and authority and incorporates volunteerism, social and distributive equality, shared labor and responsibilities (Proudhon 1969a; Bakunin 1972; Kropotkin 1972). Mutual aid not only takes place between individuals, but also between collectives and communal societies through free agreement and consensus. Trade agreements take place between each other or help one another in large projects without an authoritative government to oversee and manage them (Bakunin 1972; Proudhon 1969a, b).

While there is an overlap in the communist and anarchist idea of equality based on the grounds that people have the right to be represented equally and that no one person is exploited by another, one can also see a difference in the processes used to accomplish this task. In this section I have discussed the elements of communalism that is used in this study to evaluate community gardens' communality. Elements come from two ideologies which overlap, but have different solutions to the same issues.

It's not within the scope or range of this research to establish which theory is better or has historically been more or less successful. Rather these ideas are used to constitute communality as a spectrum whereby capitalism is on one end, communism in between and anarchy the polar opposite. To help give context into how these ideologies applied some of these theories I provide a brief background of communal societies in the next section.

Contemporary Communes

Although motivations for the development of intentional communities and utopias vary over time and space, the intent remains the same: to voluntarily live within a space of like-minded people, who use common practices, share communal resources and goals, and are each to some

extent self-sufficient. Communal living, used interchangeably with the terms intentional living community or utopia (Meltzer 2001; Jansen 2001; Miller 2001) are different from mainstream society, as intentional communities live based on a particular social conviction such as religious beliefs or ecological practices (Poldervaart 2001; Rosner2001; Meijering, Huigen and Van Hoven 2006). Additionally, because they are so circumscribed, intentional living communities are understood as alternative or different compared to mainstream society, by both communal members and the general public (Meijering, Huigen and Van Hoven 2006). Intentional living is not a new concept according to Poldervaart (2001). Within western historical literature, communal living spaces among Christians are noted during Roman Empire rule (Zablocki 1980; Poldervaart 2001). During times of religious movements, like the Protestant Reformation in the 12th and 13th centuries, utopian living is visible. Another example of religious movement is the development of Quaker and Shaker communities during the 17th and 18th centuries, when freedom to practice religious beliefs were strong motives and rules to live by in shared communal spaces (Zablocki 1980; Poldervaart 2001).

Historically, social movements (e.g. Marxist, Anarchist, Zionist and Feminist) spur the development and evolution of communal ideologies and practices, many of which appear in contemporary intentional communities (Poldervaart 2001). The extents to which each of these ideologies are put into practice vary (Visser 2001). According to Meijering, Huigen and Van Hoven (2006) there are four main types of intentional communities: religious, ecological, communal, and practical. While each type of intentional community shares in the basic premise of what it means to be communal, each are organized differently (Visser 2001; Meijering, Huigen and Van Hoven 2006). Religious groups center communal activities on religious ideologies and can be exemplified in Kibbutz communities. According to Zablocki (1980), these communal groups were formed by young people of Jewish faith and sought to resist the issues of prejudice they faced in the larger communities in which they resided (i.e. Eastern European cities).

Communal intentional communities focus on personal interconnectedness with members within the community. Examples of this type are often secular and share a particular ideology, used as a guide in their social structure and activities. For instance, Zablocki (1980) points to

communities based on ideas of matriarchy, southern comfort, and group marriage. Fairness, equality, shared duties and responsibilities are framed according to their unique ideology and interact with some of the themes of communality differently. The ecological communities are centered in environmental and self-sustainable ideologies (Meijering, Huigen and Van Hoven 2006) and are a seemingly common discourse found in community garden literature within this study (i.e. green technology, organic, homegrown). Practical communities focus on sharing resources within a common living space, and are the least constitutive of communality, while being the most common type of intentional community (Meijering, Huigen and Van Hoven 2006). One reason may be they employ a specific political ideology.

Political communes often have notions of revolution in mind in terms of their foundation. According to Zablocki (1980), these types of communes often have notions of anarchism in terms of anti-government or anti-rule. However, "not all political communes are engaged in the eventual overthrow of the state" (Zablocki 1980, 234). Household duties and living quarters are shared equally with the aim that "sexist, ageist, and elitist practices will be avoided" (Zablocki 1980, 234) even when individual living space or quarters change which is depends on situations that may arise. The only difference is how they view individuality (Mansbridge 1979; Zablocki 1980). In a social democratic commune, the goal was to resist government through activism. Living quarters were shared by member across several buildings. Identification and loyalty to independent living quarter was discouraged along with any satisfaction of work or interaction being on the living spaces, not individual works (Zablocki 1980). On the other hand, Anarchist communes shared in all household tasks and planned social interactions or functions outside of their dwellings. However, activities were not too structured to disqualify individuality (Zablocki 1980). According to Meijering, Huigen and Van Hoven (2006) these circumscribed ideologies and practices place intentional communities outside the social norm by both mainstream society and intentional community members themselves.

In this chapter, a background about the origins of communism and anarchism was provided for context about the themes taken from these ideologies and used in the term communality. The overlapping elements of both ideologies are issues of inequality whereby class

struggles are created through capitalism by means of private ownership of property. In order to resist these issues, each ideology employs a certain set of principles to achieve its goals, which are ultimately equality and freedom for all. The thematic components used to evaluate the communality of community gardens are: equality, democracy, capitalism, volunteerism, and mutualism. This project uses these elements to determine the degrees of communality in Louisville community gardens. In the next chapter I discuss the methods and methodology used to create this rubric and obtain the data needed for their application

CHAPTER 3 METHODS

Introduction

As discussed in the first chapter, although research about community gardens is a growing field, little is known about their communal practices. Depending on the research question, many studies often explore their role in sociopolitical or environmental issues using a variety of methods to gather and report the information collected. One valuable approach often used in social science research is qualitative analysis. Qualitative methodologies are useful in that they allow researchers to uncover characteristics and a deeper meaning of social practices of individuals or groups (Herbert 2000). In the first section of this chapter I describe the qualitative approaches used to gather and analyze the data collected during the course of this research project. Data collection in the form of field work took place through semi-structured interviews and observation. The second section describes the series of actions carried out during field work to gather data. In the third section, I lay out the design of a scale that is used to reflect the degree of communality within community gardens that are a part of this project. By employing qualitative modes of enquiry, I attempt to illuminate the relationship between communal ideologies and social practices used in Louisville community gardens.

Methodology

According to current geographic literature, observation and interviews are common and effective methods used in qualitative research (Dowler 2001). Observation is a straightforward exercise and useful because it enables the researcher to better understand the nature of tasks and functions being performed by subjects within a particular area of research (Laurier 2010). Furthermore, interacting with subjects during a period of observation helps a researcher build trust with participants. This is beneficial as it promotes a sense of ease on the part of the subject of research to carry out activities while simultaneously allowing the investigator to identify behaviors exhibited in a natural setting (Dowler 2001). Laurier (2010) states this experience allows a researcher to be well informed when providing commentary about the collected and

analyzed data. Similarly, a semi-structured interview creates conversation and dialogue to help with uncovering deeper issues that may have been otherwise missed during observations of social activities (Baxter and Eyles 1999).

There are criticisms of these methods, which I address here. According to Baxter and Eyles (1999), one criticism of field observation and interviews includes over generalizing a group due to a small sample size and "intense contact" (Dowler 2001, 157). To put it another way, these methods are too limited or subjective to uncover social meanings through daily tasks (Herbert 2000). However, according to Herbert (2000) and Dowler (2001), it is precisely a subjective understanding that gives credo to these methods. By observing the social practices taking place within a particular or closed setting, a deeper meaning about the structures are more closely understood by the researcher (Herbert 2000; Dowler 2001). Furthermore, a skillful assemblage of research literature, in addition to interviews with multiple subjects, helps guard against over generalization. Therefore, this type of methodology can actually bring "a greater depth of understanding" about the project being researched, thus adding to a field of knowledge (Dowler 2001).

In order to assess the connection between communal ideologies and practices of a community garden I engaged in traditional qualitative analysis, which examines the frequency of words, phrases and expressions. In addition to content analysis and frequency of use, I connected the data to wider assemblages of use-- what Foucault called "discursive regimes" (Hall 2001, 80). I reviewed the conversations and experiences that took place during field work and recorded interviews. I also included field notes and images in my data analysis. Once the interviews and other textual and visual materials were gathered I put this data into conversation with the communal ideologies expressed through the literary works of social philosophers. This process was used in developing the scale of communality which I discuss later in this chapter.

The connections between the lived experiences of community gardens and their subjects, and communal ideologies are further explored in the next chapter, where a series of three community gardens is contextualized and assessed using this process. Having discussed the methodology used to collect data I now move on to explain the steps taken to conduct this investigation.

Data and Methods

Data collection and analysis took place through a series of three phases, which lasted approximately six months; this is outlined in Figure 1. The first phase consisted of two actions. First was the creation of a semi-structured interview which was based on knowledge gathered through the literature review about community gardens and communal ideologies. Questions were often open ended and listed according to the communal themes identified in this project.

I organized the interview questions into five groups (general, democracy and leadership, mutualism and equality, volunteerism, property ownership and capitalism) each with a specific goal in mind. I designed the general questions as ice-breakers to make the interviewee comfortable and to establish a rapport. I used simple questions that invited them to provide information about the community garden while simultaneously gathering information about the purpose of the garden, who was involved, and what kind of activities took place. The democracy and leadership group of questions inquired about the aims that motivate participants. What philosophies, practical or intellectual, did they draw from? What decisions were made and by whom? Questions about mutualism and equality focused on the interactions of a community garden with other gardens and the nature of this interaction. Namely, were these interactions for gardening purposes or non-gardening activities as well? Questions geared toward volunteerism investigated the willingness of garden participants and the existence of coercion, if any. Finally, there are questions that probe issues of property ownership and capitalism, concerned with details of property ownership, fees, capital sources, requirements of the produce. For a complete list of the interview questions refer to Appendix A.

The second action was a preliminary search of community gardens in Louisville. I bounded the study area to the Louisville Jefferson County area. Community gardens were identified and selected according to personal knowledge and the use of internet sources. The following information was recorded for each community garden listed (where available): contact name, mailing address, garden location, email address, and business affiliation. Approval of research was then obtained from the Human Subjects Protection Program Office at the University of Louisville on March 4, 2015 (IRB Number 15.0070). In the final action of the first phase, a general letter was sent to community garden coordinators via U.S. mail (or email where available) to make initial contact asking whether community garden participants would be

available to participate in this project. The total number of contacts is based on the preliminary research performed in addition to obtaining references from subjects who participated in interviews. This process also entailed discarding potential participants that were not interested in participating in the study or were outside the parameters of this project. For instance, one garden was considered a community garden serving the Louisville area but the physical location was outside of the study area. Other gardens inside of the study area were at locations such as elementary schools and primarily used for children under eighteen years old. It was decided not to include gardens or subjects within this age group due to the complexity it would have added and time constraints.

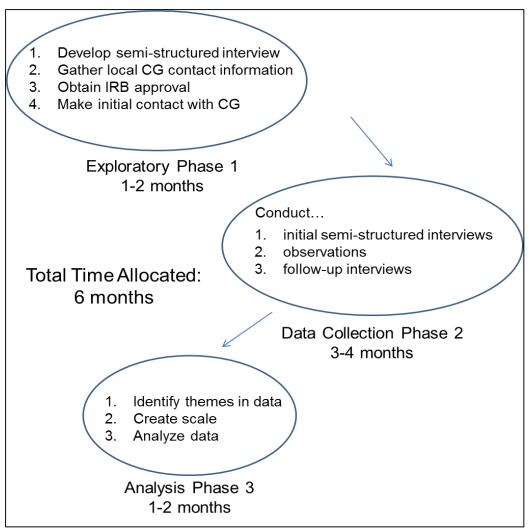


Figure 1. Data collection and analysis methods used through a series of three phases.

In the second phase, an initial interview of community garden coordinators was performed to gather general information about the community garden and daily practices. Each participant was provided with an explanation about the study and the interview procedures verbally and in written form. The participant was also asked for consent to audio record the interview. In cases where consent to record was not given, notes were taken instead. Additional interviews included individuals who participate in garden activities but do not hold leadership positions. Contact was often made through the garden coordinator or while at a community garden following an interview of a coordinator. Thereafter, an appraisal of community gardens size, type, and level of participation was performed to decide where observation would take place. Observation, and the occasional participation, took place over the course of approximately six

weeks in the form of volunteer hours. Furthermore, the amount of time spent performing this activity was dependent upon the allowed time of both the researcher and chosen locations. Data gathered during interviews and observation was through a collection of field notes and digital records (e.g. pictures or audio recording).

According to Laurier (2010), keeping a detailed written and digital record of experiences is an important task as it helps recall information when analyzing the data. The observation experience is essential to this study as this involves developing dialogue and conversation in community gardens; occasionally it also led to additional subject interviews. These methods play an important role in understanding how community gardens operate and are structured while also uncovering deeper meanings to the social practices not easily noticed, which are elemental in identifying community garden communality. Additionally, during the second phase, at least two additional interviews of community garden coordinators were performed at five chosen community gardens. These selections were based on time spent observing subjects and interviews with participants from within the selected community garden. The data collected was compared and categorized according to communal themes identified from the literature review to analyze each respective group's use of communality.

As part of the third and final phase, an analysis of data included grouping and identification of functions and themes across the different community gardens. To understand the methodologies employed in each of the community gardens, a communal framework was developed. Ideologies and mechanisms used in the framework are mutualism, role of capitalism, equality, volunteerism, and democracy. To compliment this framework, a scale was designed using the information provided during observations and interviews performed in community gardens. The scale comes in the form of a rubric of components derived through content analysis.

This chapter has described the methodologies used in this investigation. First it described how qualitative methods, observations and interviews used in this study are relevant and useful in social research projects like this one. It went on to suggest these methods provide a means to gathering data which often uncovers deeper meanings to social practices and structures that are not easily obtained using other methods. Second, it provided a guide to how the data was gathered through preliminary research and collected through interviews and observations. I conducted the work for this thesis in three phases. The

first phase, or exploratory phase, involved finding gardens to participate in this study and to develop interview questions. The second, or data collection, phase consisted of the interviews and observation of participants. The third, or analysis, phase discussed the origins of the rubric and the qualitative analysis. This rubric aids the evaluation of community garden communality and the detailed results and findings of which are found in Chapter Four.

CHAPTER 4 RESULTS

Introduction

As explained in the previous chapter, my methods use a qualitative approach through observations, interviews, and content analysis to gather study participants and evaluate community gardens. They are evaluated according to communal practices to determine their degree of communality. In this chapter I review the findings and results of this evaluation. This chapter has four objectives: to distill and understand the categories of community gardens that operate in Louisville; to elucidate the role of networking within and across these associations; to expound upon the assessment tool devised for this study and used to evaluate the communality of community gardens; interpret the results of using the tool.

To meet these objectives, in the first section I describe the different mechanisms through which community gardens come to operate and how they fit into different assigned categorizations which are: municipal, neighborhood based, charitable, and hybrid. For example, municipal gardens are generally established and managed under the umbrella of a governmental organization versus a neighborhood based garden which is organized by a group of individuals who reside in a neighborhood in which the garden is based. Alternatively, a charitable garden is organized and managed by a non-profit group such as a church where food is grown with the intent that it will all be donated to individual families or charitable organizations. Community gardens that do not neatly entail a specific operation are described as hybrid, and discussed in greater detail later in this chapter. In the second section, I describe how community gardens network between themselves and with other types of organizations in Louisville in addition to its level of importance. For instance, charitable community gardens often reach out to garden coordinators who are knowledgeable about the types of produce grown by immigrants or culturally desired produce high in demand. Communicating with organizations about the needs of the community is often a key element to planning and successfulness of their garden. The third objective is met in the third section by identifying community garden activities that operationalize characteristics of communality described in the previous

chapter. Furthermore I describe how these connections are used in the creation of an assessment tool, which is used to identify a community garden's degree of communality. In the last section, the varying degrees of communality in community gardens are elaborated upon to understand that each community garden is complex in its organizational system.

Garden Categorization

This section discusses the structure and mechanisms used in the different assigned categories by which community gardens fit into. Respectively, I describe the different types of community gardens in the following ways: role of individuals involved; the processes used to organize them; and means used to foster garden development. The order in which these categories are discussed does not imply importance of one over another. Rather they are presented in such a way that the concepts introduced connect between each of the descriptions, while still allowing each of the described categories and the meaning within them to be recognized. This task is designed to provide context and promote a better understanding about the social processes that take place in community gardens.

Municipal Community Gardens

As previously mentioned in this chapter, municipal gardens are established and managed under the umbrella of a governmental organization. In Louisville, these types of gardens are complex because of the administrative procedures carried out by political actors and public sector employees involved in their operation. The following is an outline of the governmental processes that took place and eventually led to the formation of municipal gardens in Louisville: a statute of the Commonwealth of Kentucky permits each county the creation of an Extension District through its fiscal court (Kentucky Cooperative Extension Service 2016). Once granted, an Extension District consists of a board (hereinafter "the district board") whose responsibility it is to establish a county extension office of the Kentucky Cooperative Extension Service (hereinafter 'the Kentucky Co-op"). Educational programs, such as community gardens, established by the Kentucky Co-op are then offered through the Jefferson County Extension office. During the district board's inception, the Jefferson County Extension Council (hereinafter "the extension council") was also created and is comprised of appointed representatives from each county program and all members from the Extension District Board. The purpose of the extension council is to address the needs of Louisville communities, and coordinate the educational programs and services offered through the

extension office accordingly. The district board, advised by the extension council, is primarily tasked with managing all program budgets offered through the extension office. These budgets, which come in the form of public taxes, grants, and private donations, are maintained with transparency and routinely audited in accordance with the state (Kentucky Cooperative Extension Service 2016; Jefferson County Cooperative Extension Service 2016).

The Jefferson County Extension Service agent (hereinafter "the extension agent"), a public employee of the University of Kentucky, is stationed near downtown Louisville, Kentucky. The extension agent, through daily administrative practices, facilitates the programs offered through the Jefferson County Extension office in accordance with standards set by the University of Kentucky, district board, and extension council. Responsibilities include communicating with Extension officials, coordination of education programs, and "day to day operations" according to the agent during an interview. In terms of community gardens, the agent usually plays an administrative role. During an interview the agent said:

"My role, and I have been very careful to not expand it too much because I am overwhelmed in some sense. I take care of a lot of just the administrative part, any conflicts. If there are items that need to be purchased for the garden, big-ticket items like a Rototiller or something like that, any repairs to roads or water lines. I am usually involved at that level." (The Extension Agent, interview, March 12, 2015.)

The context of these comments is an admission that a lot of people deserve more credit for the work of the garden itself than the agent, namely the participants and the garden manager. During the time of this interview there wasn't an agricultural educator in place, thus the extension agent was tasked with filling both positions until a replacement educator was found.

The extension agent is important to municipal community gardens as they often play an informal role as liaison between the garden sites and the extension office administration. Although municipal gardens operate through the extension office, the activities that take place within the actual garden sites are different than the administrative procedures of the extension office. The extension office administrative responsibilities include: procuring a garden space through agreements with other public institutions or private property owners, managing garden agreements and fees with garden participants, and providing some of the resources needed to maintain a garden such as tools and water. According to extension agent "As long as the Extension Service is involved in the Community Garden Project, the water is free." The responsibilities of municipal community garden participants include: working within the boundaries

established and their assigned space (i.e. site and plot); sharing tools and resources provided by the extension office; and maintaining their plot according to the guidelines of the garden agreement.

The agent is authorized to acquire supplies like tools or the occasional pesticide, however, most purchases for the municipal garden must be approved by the district board. Furthermore, because these gardens operate through the extension office, the extension agent must occasionally mediate conflicts between community gardeners, to ensure the guidelines of the agreement are followed equally.

"My role as it is right now is to make sure things are running smoothly in the garden, and when you are dealing with that many people, there is constant conflict at some level; you know, whether it is somebody stole my garden hose, or it could be anything. So I am working with the garden manager ... to try to put out some of those fires before, and some of them have been quite heated where we have had to call the police. I can't fathom why you would want to argue over whose tomato is whose, I mean, but it happens. So we have to have things in place to address those issues, and that is clearly stated in our garden agreement that all the gardeners sign, that there are certain expectations for all gardeners, and whether it is behavior, how much space you have, you know you pay for a 30 x 30 plot; that's all you get. You don't get to migrate into your neighbor's, so those things are spelled out in the garden agreement. That helps us you know, with managing the gardens. We have got some legal documentation to say, okay, you signed this document, you read it, you know, you need to behave like this."

(The Extension Agent, interview, March 12, 2015)

The extension agent's comment elucidates the importance of his use of the garden guidelines as a mediator between many parties, in this case between participants in conflict. The agent's role is not authoritative in design, rather as a liaison that works in tandem with the garden manager.

Another important position is the garden manager. Her or his role is to see to the day to day operations of the garden site itself. The responsibilities of garden managers vary from garden to garden but generally include the following. They maintain the guidelines, manage materials supplied by the extension office, serve as an informal educator to garden participants, report needs and issues to the extension agent, and serve as the first line of conflict resolution between garden participants. Most of the garden managers are also garden participants as they have plots of their own. Although most garden managers serve on a voluntary part time basis there are a few who are paid a stipend from the extension office, adding another layer of complexity to municipal gardens. Together the garden manager and the extension agent serve as a bridge between the municipal garden and extension office. The garden manager is to the garden participants as the extension agent is to the extension office.

Another element of how municipal gardens function is through the guidelines established by the extension office. The guidelines come in the form of a contract between the extension office and the garden participant. The agreement stipulates the rights and responsibilities of both the extension office and municipal garden participants, some of which have already been mentioned. The extension office made many of the decisions about how municipal gardens function such as: hours of operation, plots sizes, assignments, fees, and reasons a participant may lose their plot altogether. The extension office also reserves the rights to change these guidelines as they see fit. Due to the bureaucratic complexity involved in municipal gardens, changing the guidelines would be difficult at best. Although social processes that take place in municipal garden sites and the extension office are different, they both operate under the same governmental structure. Furthermore, although they benefit from being such a large organization by having access to many resources, they are also bound by the complex processes involved, which affects the social interactions between garden participants.

Charitable Gardens

A charitable garden is organized and managed by a non-profit group whereby food is grown with the intent that it will be donated to low income families or non-profit food distribution agencies.

Information about how these types of gardens operate was gathered through subject interviews which include the Garden Coordinator at Beuchel Park Baptist Church in Louisville, Kentucky. Specific details about charitable gardens, such as administrative activities or formal contracts, are limited, as many of the garden participants from other charitable garden organizations did not respond to recruitment letters sent out. However, using the Beuchel Baptist Church charitable garden as a model, together with information gathered through subject interviews, I describe the general structure and operations used by charitable gardens.

Considered a tax exempt public charity (Internal Revenue Service 2015), charitable gardens function as an independent organization or as part of a larger nonprofit institution, such as a church. The purpose of charitable gardens is to donate all of the food grown to low income families or charitable food banks. Their operating budget is comprised of personal donations in the form of money or agricultural implements. Some charitable gardens also receive occasional grants. Their resources are limited compared

to municipal gardens and an impetus to networking with other community gardens, discussed later in this chapter.

In each of the charitable gardens there is a core group of people who carry out specific tasks to help the garden operate efficiently, such as: managing budgets and paperwork, providing access to facilities and resources, and coordinating cultivation activities in the garden. At the Beuchel Park Baptist Church (hereinafter "BPBC") charitable garden the core group consists of: the pastor, administrative assistant, facilities manager, and garden coordinator (hereinafter "GC"). Additionally, there are two other individuals who are a part of the core group as they have extensive agricultural knowledge and are held in high esteem by church members. Primarily, the GC is the key person who makes sure tasks are carried out. Responsibilities of the GC include recruiting garden participants, securing a space to plant food, planning garden activities during scheduled work days, and organizing food distribution.

Previously established relationships and informal arrangements are typical in these types of gardens. This often quells the need to impose a formal set of rules upon garden participants. The organization and social interactions that take place in charitable gardens are guided by a set of shared values and principles. Although specific tasks and activities are arranged by a core group, volunteer participants may easily approach them to offer advice or address garden related issues. Through mutual interests and collaborative work, charitable gardens' significant food donations promote social connectivity and wellbeing in communities across the Louisville area.

Neighborhood-Based Community Gardens

Another type of community garden is neighborhood-based gardens (hereinafter "NBG"). These are centrally located within a neighborhood, which provides easy access and frequent opportunities for residents to maintain their individual garden plots. Neighborhoods are not all the same. Their size, demographics, and histories vary across Louisville. One reason why neighborhood gardens grow in popularity is that residents in urbanized areas have limited space to grow fresh food. In what follows, I describe the two different NBG structures and the role of those involved in their operation. Information about NBGs came from subject interviews at Billy Goat Hill and Old Louisville community gardens.

Aside from providing garden space for local neighborhood residents, NBGs promote community awareness, sustainability, and provide occasional gardening workshops. The primary difference between

NBGs and other community gardens is that they are established by residents, as opposed to being created by a government entity or charitable organization. NBGs have a hierarchal structure by which they operate and are of two types, independent and overarching. In order to explain how these categories are different I use an NBG as an example. Through this explanation, the idea of how neighborhood-based community gardens are organized becomes clearer.

In Louisville, the Clifton Neighborhood Association first established a community garden known as Billy Goat Hill. As a non-profit organization its board members were responsible for all of the garden's business related tasks and decisions, such as budget oversight, IRS reports, and contracts. A sub-committee of the neighborhood association was responsible for all other elements of the community garden such as garden improvement, educational development, and networking. Depending on its size, one or two members of the subcommittee carried out additional tasks such as serving as a point of contact, facilitating the maintenance of common spaces, and acquiring a limited amount of resources or implements for garden participant use. Other NBGs that have this overarching structure include the Phoenix Hill Community Garden and Old Louisville Community Garden.

With growing interest and increased support from neighborhood residents, the Billy Goat Hill community garden became an independent nonprofit organization. This changed the hierarchical structure in that the board of directors is responsible for all elements and decisions related to the garden. As a smaller group, board members share responsibilities and are directly involved with the processes that take place within the community garden. Additionally, the board serves as the point of contact for facilitating the maintenance of common spaces, and acquiring a limited amount of resources or implements for garden participant use. They manage and report all financial matters to the IRS and schedule educational workshops/speakers. In accordance with an agreement with participant gardeners and property owners, the board provides the garden resources. Networking is as key to NBGs as it is for other gardens, thus the board is also responsible for the line of communication with gardeners and the public via phone, email, and social media. Therefore, interactions between board members and garden participants are more frequent and face to face compared to municipal gardens, allowing garden decisions to be made efficiently.

NBGs are similar to other gardens in that they have formal agreements between garden participants, property owners, and the board of directors. Between them, rules and obligations are created

and must be followed or completed by the garden participants and organization, respectively. For example, one rule is that garden participants cannot sell garden produce on the community garden property. One obligation is the need to keep their plot maintained and weeded. These agreements need not be as stringent as the guidelines of a municipal garden, for the participants of a NBG can directly communicate with those who are in charge of garden operations and overall decision making. Both independent and overarching NBG structures allow for easier communication between boards and participants. Garden participants of an independent NBG have direct contact with the board of directors, which increases their influence in addressing garden issues. Similar to charitable community gardens, agreements between property owners and NBGs do not include compensation. However, the agreements made between them can be quite formal. For instance the agreement between the Billy Goat Hill community garden and property owner is quite extensive. According to the garden's President their agreement with the facility requires that the garden maintain aesthetic pleasantness, may not hold fundraising activities without expressed permission, and even carry liability insurance. This does not suggest their relationship is difficult in any way. Rather, the relationship between the garden and facility is one of formality compared to many of the charitable gardens, which allow more flexibility. The relationship between the Phoenix Hill Community Garden and residential property owner is slightly different in that, while there is a formal agreement in place, it does not appear the owner is as stringent. To better understand the difference between these relationships a visual representation is shown in Figure 2.

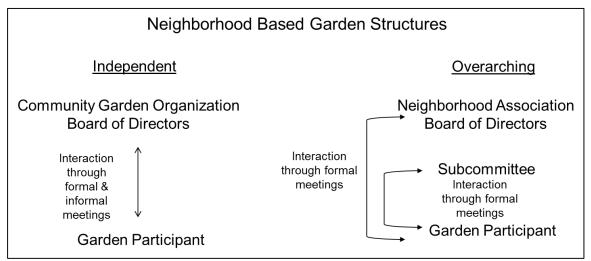


Figure 2. Hierarchical relationships identified in neighborhood-based community gardens and the differences between them.

The location of an NBG is special because it provides easy access to a participant, which makes them more likely to maintain garden plots. Neighbors usually have previously established social relationships which makes working in a garden together more comfortable, similar to the charitable garden. Ideally, NBGs should be in a central location in the neighborhood. Its central location, however, is dependent upon the availability of space. In urban areas space is often limited, thus agreements with private property owners are common. For example in the Clifton neighborhood of Louisville, the Billy Goat Hill community garden is located on a small section of land owned by a housing facility. The Phoenix Hill Community Garden, however, is located in the side yard of a residential home. The participant pool is unique in NBGs because people usually come from the neighborhood itself. Any participant is welcome, but someone local is preferred.

NBGs are limited because of their capital base. For charitable gardens, their nonprofit organization or church have a large donation base. Municipal gardens get their funding from taxes collected and given out on a regular basis. For the NBG, the budget is dependent on garden participants' fees and occasional grants. Through networking, occasional donations of money, implements, and labor supplement the budget when available. This is similar to the use of networking by charitable gardens; however NBGs rely on this more heavily.

Municipal gardens are established in different neighborhoods by a governmental agency and used mainly by people who live nearby. Charitable gardens are established by members of a particular organization who work collaboratively in one crop-style garden and are guided by philanthropy.

Neighborhood based community gardens are created by the neighborhood members themselves. Gardens that do not fit one of these niches or are a combination are considered hybrid gardens.

Hybrid Gardens

Generally community gardens have many of the same goals, but they operate by different structures. Hybrid gardens are, categorically speaking, gardens that do not fit neatly into municipal, neighborhood based, or charitable, or are a combination of these. These hybrid gardens come in many forms and the combination of characteristics are best illustrated through a few examples.

Catholic Charities operates as charitable garden in purpose but a municipal garden in structure. It is a large organization with a complex hierarchy, which includes a board of directors, program directors and coordinators. One of those coordinators oversees Catholic Charities community gardens. Furthermore, many of their activities are geared toward a specific group, the refugee population in Louisville. For several years their funding has come from a public source: the Office of Refugee Resettlement. Other funding sources include Norton Healthcare and the University of Kentucky Agricultural department. Fundraising is also part of their operating budget. Networking is instrumental to their operations. For example, Catholic Charities works with local churches and the Jefferson County Extension Office to share garden space.

The E. Main St. Garden, another example of hybrid gardens, is considered private or "closed" to the public. They are different in that they are not considered a public charity and are quite selective in whom they allow to be garden participant members. Their hierarchy consists of one or just a few people who make all decisions about the garden outside of the individual plots. Rules and guidelines can be as elastic or as strict as those who manage it. For instance, one garden manager interviewed at the E. Main St. Garden indicated that participants go through an interview process before membership is awarded. Furthermore, participants who do not meet their required work hours may be asked to leave the garden at the behest of the garden manager. These types of gardens may be neighborhood based, but are not always as inclusive. Their goal is to provide a garden space to those who need it, but the management is selective in who they allow to share space with. These factors affect where they are located and the resources they have access to.

A third example, Louisville Grows is a combination of a neighborhood based and charitable garden. Louisville Grows is an independent public charity with the goal of helping neighborhood residents. Louisville Grows has board members, garden coordinators and garden managers. The board members handle the administrative and financial tasks. The coordinator networks and acts like the liaison between the board and garden mangers. They interact primarily with managers, but with garden participants as well. Managers interact with participants and inform them of the future plans or the direction of coordination. Managers make sure that the coordinator knows what the participants or garden need, and give gardening advice, and help with plots according to their ability. Occasionally, garden managers resolve issues or

conflicts between garden participants. Their budget is dependent on fundraising activities, fees, donations, and the sparse grant.

Another type of hybrid garden is one that is owned and operated by a private property owner. Some examples of this type of hybrid garden include the Garden of Goodness and the Portland Orchard. Privately owned hybrid gardens are a combination of neighborhood based and charitable gardens. The property owner established the garden in order to use their vacant property for the purpose of helping any person of the Louisville community. The property owner organizes activities, but allows anyone to volunteer their help. The food grown is composed of fruit from low maintenance bushes and trees.

Moreover, any passer-by is allowed to harvest from the garden without the permission of the property owner. These plants are cultivated at the owner's expense and with the donations and implements.

Rain Gardens are a type of community garden run by the Metropolitan Sewer District of Louisville (MSD). It is not a food garden, but instead a garden of plants to help with storm water runoff from impervious surfaces. There is little to no maintenance on these types of gardens, which is provided by MSD. The Rain Gardens are considered a community garden because they were created to benefit the community.

Louisville community gardens' structure and organization correspond to a specific category type or a combination of their characteristics to form a hybrid. Generally a community garden's purpose is to help residents of Louisville in several ways. They provide garden space to those who have limited access, educate residents about gardening techniques/agriculture and promote sustainability measures. Those who coordinate or manage community gardens do so either independently or under the guidance of a governing body. The extent that the governing body plays a role varies among community gardens. Having defined the different categories of community garden in Louisville and providing examples, I now move on to discuss the role of networking that plays a vital role in their operations.

Networking

Networking is a vital component in the operationalization of many community gardens in Louisville. Networking is the communication and cooperative efforts between community gardens, organizations (public and private), and supporters. Networking between these groups allows for the cooperative trade of implements, capital, and labor. It enables community gardens to work together in

things like soil tilling or fundraising. Through this network, community garden organizations and their coordinators can become aware of available resources such as: property owners with vacant land for potential garden sites or grants are available to help supplement their budgets or needs. Networking entails the communication of community gardens with each directly or indirectly through non-garden organizations. In this section I describe some of the networking activities carried out by community gardens that are a part of this study.

Charity gardens, like Buechel Park Baptist Church, work with Southeast Associated Ministries (SEAM) in planning what to grow in their garden. SEAM, a public charity, provides various resources (food, utility and clothing assistance) to Louisville residents. The garden coordinator at BCBP informs SEAM about the crops they intend to grow. SEAM plans their distribution efforts accordingly and notify the BPBC coordinator of any additional needs. BPBC is one of many Louisville charitable organizations that SEAM coordinates with simultaneously.

Another example is the large networking web of Catholic Charities. The garden coordinator communicates with many other garden coordinators in Louisville, such as: the Jefferson County Extension Office, Louisville Grows, and Americana Community Center. Through this network Catholic Charities shares garden space with the Extension Office. Other churches in the Louisville area accommodate Catholic Charities with additional gardening space to help refugees and economically challenged Louisvillians. Through the relationship that Catholic Charities has with the Extension Office the Catholic Charities garden coordinator helped a satellite church of the Arch-dioceses establish a new garden at the Saint Francis Center by arranging the soil to be tilled. This network is based upon the previously established relationship within the workings of Catholic Charities. However, there is relevant value to finding networks outside of the Catholic Charities organization. One of these outside networks is the Food in Neighborhoods Coalition.

Food in Neighborhoods Coalition (FIN) of Louisville, a blog used by community activists, gardeners (current and potential), and community garden organizers, acts as a unifying force for community gardens (Louisville Food Blog 2016). Through FIN, garden coordinators can find information regarding other community garden locations, garden programs, farmers' markets, fresh food cooperatives, etc. For instance, Louisville Grows has a Seeds and Starts (e.g. seedlings) fundraising project, announced

through FIN, that other community garden coordinators advise garden participants to go to for affordable starter plants. This benefits the participants of both gardens and their respective garden organization.

Although I was not able to get in touch with the "person in charge" or core group at FIN I met a lot of people who were familiar or affiliated with FIN in some way. I found that almost every subject I interviewed is familiar with FIN or communicates with someone in the FIN network.

Without networking many community gardens would be left without the necessary means to be successful. Networking is important to gathering resources like labor, information, and capital.

Networking and careful coordination is needed to achieve large tasks. Community gardens have to work with non-garden organizations (Boy Scouts of America, SEAM, compost supplier) and government entities on a regular basis. The category that a community garden fits into and the role of networking in tandem affect the social processes and interactions between garden participants within a community garden. To further elaborate upon Louisville community gardens, which are a part of this study, I describe the communality index developed to evaluate their degree of communality.

Communality Index

Thus far this chapter has defined the different categorizations that community gardens in Louisville correspond to and described how the gardens use networking to be successful. In this final section I now turn to describing the tool created, as an aid, to evaluate communality in community gardens and the results obtained from it. There are essential features common to all community gardens such as having a defined gardening space and the means necessary to carry out garden activities. To better understand the characteristics of communality in relation to community gardens I created an assessment tool based on readings, interviews, and participant observation. This tool, comprised of a rubric of qualitative inquiries and their relative values, was formed by linking the essential features recognized in community gardens and the communal themes and ideologies presented earlier in this composition.

Component values were obtained from the data gathered through field research, which examines the social interactions and processes used to carry out garden activities by community garden organizations and the participants within them. I totaled the values to access a degree of communality for each garden in this study once all of the gardens were analyzed using this rubric. Chapter Two discussed themes that embody communal ideologies; the components of this rubric are organized in a similar fashion.

Mutualism

One theme is mutualism, a form of exchange between people in relation to a group's needs. Mutualism promotes social interaction and cooperation so that people no longer have to be competitive for resources (Oved 1992). Moreover, labor and commodities should be exchanged so that the group's individual needs are sustained equally. The relationship of this dynamic may be between individuals, between individuals and a group, or group to group. A qualitative assessment of mutualism in community gardens examines how participants help each other. It also examines how participants share the space and the resources needed to sustain group and individual needs in the garden. To further assess mutualism I analyze a collaborative or individual moment through the sharing of resources. In component four there are identical scores for two different methods of collaborative sharing and managing of resources. The reasoning behind this is that different collaborative methods are still a means to achieve mutualism.

Democracy

Democracy is defined as political system of governance whereby equal voting power is held by all members of a community and used to elect leaders to represent their interests and implement the will of the collective through the governing system (Lipset 1959). However, communal societies often refer to democracy as a social system that works best when equal voting power is held by all members of a community and used to make direct decisions about community issues by consensus (Proudhon 1969a; Kanter 1979). The rubric used to evaluate democracy in community gardens assessed how and by whom decisions were made about the garden. Additionally, a component addresses what kind of issues are voted on and implemented.

Volunteerism

Volunteerism is a theme of communality recognized by Bakunin (1971) and Kropotkin (1972) as a social process whereby individuals use their time, labor and skill in order to meet the needs of a group or individual through tasks performed willingly and without coercion. Anarchist ideologies further compare wage systems as a form of coercion because it is a means used to meet individual needs, and can be threatened when a demand is not met (Bakunin 1971; Kropotkin 1972). Should an individual be compelled by another to carry out these tasks it would no longer be considered voluntary.

In community gardens participants are not coerced rather some are persuaded by receiving a wage for part or full time work. Furthermore, participation in the form of community service hours is not always voluntary as it is used to meet a program's requirements or receive benefits. The component used to gauge volunteerism in community gardens garden evaluates the willingness of a participants by assessing whether a participant receives a wage or other means in exchange for their help in the community garden. In question seven, identical scores are assigned for the two different types of persuasion techniques used in community gardens.

Equality

Equality is a theme in communalism that is important because it is prominent across other themes and is easily identifiable within them. Equality ensures that all backgrounds, interests, and responsibilities of individuals are of the same level of importance. This prevents a power dynamic from developing. (Proudhon 1969a, b; Mansbridge 1979). In terms of gardening responsibilities such as planting, weeding, or seed distribution each job or person should be no more important than the other. The components of the assessment tool that deal with this theme focus on how participants are treated, the participant's role, and whether or not that role carries status within the garden.

Capitalism

Capitalism is an economic system by which property owners control and profit from the exchange of commodities and labor processes (Marx 1946). Evaluating capitalist practices used by the community garden is an integral part of this study. The difficulty with evaluating capitalist practices within community gardens is that Louisville (and thus its gardens) exist within a capitalist economic system and therefore cannot completely operate separately. Thus the motives and modes used to obtain profit are the subjects of analysis when observing the role of capitalism in community gardens. Socialist ideologies view capitalism as a social and economic system of power and inequality which is not conducive to communal organizations. To account for capitalist tensions surrounding the garden, focus is placed on community gardens' purpose and distribution of the funds they collect. This includes standards and requirements imposed on gardeners with regards to production. Other components address power dynamics that exists between property owners and community gardens (Marx 1946). It is of particular importance to note identical scores are assigned for the two different types of property ownership, which are: public or private

ownership by garden organizations. Respectively, one is a form of communism while the other is a form of anarchism.

I created the communality index as an aid to evaluate how community gardens reflect communal ideologies. It takes into account the organization and social processes seen across all community gardens in this study and how they fit within each theme of communality. Through this rubric values were assigned to each community garden to access their degree of communality. In the last part of this section I reveal and discuss the results of the communality index.

Results and Findings

The results obtained from the communality index are shown in Appendix B and are discussed hereinafter. There are sixteen community gardens included in this study which fit into each of the categories described earlier in this chapter. They are presented in a bar graph presented in Figure 3 where each bar is a color that represents the category they fit into. The number of gardens in each category and their assigned colors are as follows: one municipal (green); one charitable (blue); three neighborhood-based (red); and eleven that are hybrids (yellow). Gray bars represent the three largest overarching organizations that operate community gardens in Louisville. Their index scores are based solely on the answers given during interviews by the garden coordinators who oversee the logistics of all community gardens part of their organization. This was done to evaluate whether or not the communality would be different than the score of their individual garden. The results show indeed there is a difference between each large organization and their respective gardens. Reasons for this are further explained later in this chapter. The communality index is comprised of fifteen components each with a range of values that vary. The maximum index score a community garden can earn is thirty five and represents each community garden's degree of communality.

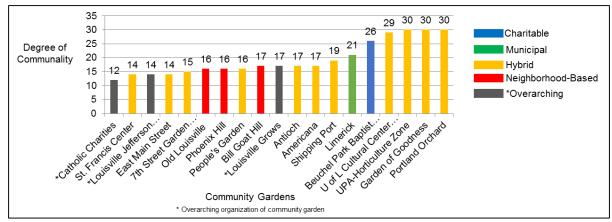


Figure 3. Bar graph represents degree of communality and categorization of community gardens part of study.

The lowest index score of fourteen is earned by both the St. Francis Center and East Main Street community gardens. Both community gardens fit into the hybrid category however they are organized by different types of groups thus earning their score for different reasons. The St. Francis Center is a church group that started a community garden for low income families and refugees living nearby. The East Main Street Garden is a private community garden. It was started by a small group of people in a neighborhood who are selective about those allowed to join and have a garden plot.

Out of all the community gardens in this study, there were none that earned a perfect score using the communality index. There were three gardens that came close earning a score of thirty. Although they fit into the hybrid category and have the same high score there are still some differences between them and how they operate. For instance the UPA Horticulture Zone is a hybrid because it is a combination of categories being municipal and charitable. The Garden of Goodness on the other hand is both neighborhood-based and charitable.

By placing the gardens into a category and obtaining their respective index scores Louisville community gardens' communality can be seen, although this is on a limited basis. The index is a tool used as an aid to highlight elements of communal themes in community gardens. However, it does not fully disclose the social processes used to mobilize them. To understand how and why communality is a complex notion in each garden, there are examples throughout this section that explain these differences between those in a similar group, hierarchal structure, or the funding used in their operations.

Neighborhood-Based Comparison

Using the neighborhood-based category as an example there are some groups that operate as an individual organization versus those that operate under overarching organizations. Billy Goat Hill is a community garden that operates independently, which differs from its counterpart community gardens, Phoenix Hill and Old Louisville, which operate under an overarching organization. Although their scores are similar, there are quite a few differences and these are illustrated across multiple themes. For example, for mutualism Billy Goat Hill received a lower score than its counterparts in terms of having a shared garden space (component 2). Old Louisville and Phoenix Hill community gardens both have a shared space where herbs and flowering plants are grown which, is why they received a higher score. Furthermore, during an interview with the Billy Goat Hill garden president it was made known in fact they actively reject the making of "communal garden plots." Their viewpoint is that garden responsibilities and produce would not be shared evenly, as this concept may not fully align between gardeners and would be further complicated with the addition of new gardeners. Thus their opinion of communal gardening is that it promotes feelings of animosity and "ownership" between gardeners. However, in a different component of mutualism Billy Goat Hill community garden received a better score than the others because of its willingness and history of helping other garden groups (component 3). Another component the NBG's scored differently on deals with the theme of democracy, although this difference may be by default. Phoenix Hill Garden scored higher on a component (6) that dealt with how issues are voted on in the garden because its participants have a higher degree of access to decision making than do their counterparts. The explanation for the gain in this access is two-fold. Firstly, the group is diminishing in numbers. Secondly, a conscious decision to be more democratic is easier since the departure of a long tenured garden coordinator.

In regard to the theme of equality, a higher score by Billy Goat garden in a component (10) dealing with participant requirements and membership regulations is of interest to how NBG's interact with communality differently. Billy Goat garden is an NBG that prefers to have participants that are from the local neighborhood, but simultaneously boast about the "several zip codes" that participants call home. Other NBGs recommend non-neighborhood residents participate in a community garden that is closer to them.

In a final comparison, NBGs differ in regards to components (15 and 16) that address the theme of capitalism. Billy Goat garden is on private property, but the landowner does not exert its control over daily garden activities, thus non-garden activities (educational workshops, beekeeping, School of the Blind programs, etc.) take place in the garden at the behest of the community garden organization, giving it a higher score than its counterparts in this component. Billy Goat acts as a steward to its private land owner in contrast to Old Louisville in which the land is owned privately by the neighborhood association itself. The difference in these gardens is analogous to the difference between Anarchism and Communism in regard to communality, respectively. Some NBGs have a relationship to their overarching organization in which they operate as a satellite to their respective organization. This is a relationship that is not limited to the NBG category. In fact, many organizations in other categories have a similar relationship to their satellite gardens that is worth exploring.

Overarching Organization and Satellite Gardens

There are some gardens that operate as independent organizations (i.e. Billy Goat) versus those that operate under overarching organizations (i.e. Limerick under the Extension Office). In this section, overarching organizations' (i.e. the Extension Office, Catholic Charities, and Louisville Grows) scores are compared to the satellite gardens that operate under them. Answers given by overarching coordinators, during interviews, are general or just summaries of their organization's structural guidelines. Their answers do not reflect the actual practices and interactions that take place between participants. This explains the difference in scores between the overarching organization and its satellite garden(s). Further investigation supported by score and examples shows this.

In one example, the overarching organization Louisville-Jefferson County Extension Office received a score of fourteen whereas one of its community gardens known as Limerick received a score of twenty-one. The Jefferson County Extension Office operates as a structured and bureaucratic organization, the Limerick garden and the people within it do so on slightly different terms. Although the extension office coordinator indicated there were no shared garden spaces, the Limerick Garden indeed has shared common spaces. It consists of a common sitting area, under a gazebo, that participants share in the care of. It is in this space that formal and informal events occur such as BBQs or meetings about specific garden activities. Additionally, a shared space, on the outskirts of the garden, consists of herbs and ornamental

plants available for any of the gardeners to partake in and care for. The gardeners themselves decided to create and maintain these shared garden spaces with formal permission neither requested nor given.

In another example, the Catholic Charities overarching organization received a score of twelve whereas one of its satellite gardens received a score of seventeen. The Catholic Charities coordinator indicated that anyone might join their community gardens; however, they cater to a specific group, mainly refugees in Louisville. At Catholic Charities' Antioch Garden the majority of gardeners are refugees, many of whom have "strong agrarian backgrounds". Although some refugees don't share an ethnic or cultural background, they share a mutual interest in gardening. Close knit groups tied together by their country of origin, language, or family work together for a common goal. Catholic Charities guidelines restrict access to individual plots to only people that sign or are listed on the contract. However, gardeners coordinate amongst themselves to share work and produce despite the overarching guidelines. For example, one gardener waters another's plot while they are at work or people aid in the harvest of a plot for an ill participant to keep their produce from rotting.

Another example of this dichotomy is the fine line between the organization and the satellite garden in terms of volunteerism and equality. For instance, Catholic Charities employs an agricultural educator at Antioch who serves as translator/liaison and communicates the guidelines to participants. This educator is the membrane that binds the garden with the organization. His role is vital to the operation of Antioch considering the multitude of cultures represented there. The agricultural educator is a paid part time employee, but not by the Antioch Garden itself nor is he a garden participant. The educator holds a role of more importance than the roles of the gardeners themselves. However, the burden on the communality score falls upon Catholic Charities and not its satellite garden. In both Component 7 and 9 Antioch scores two points compared to one point apiece for Catholic Charities. The overarching organization, in this case, allows for its satellite garden to operate under a higher degree of communality.

Role of Capitalism

Funding is a major part of how community gardens operate, thus understanding the role of capitalism is important in determining their degree of communality. Availability and scope of funding can differ from garden to garden. These factors directly affect communality scores according to the assessment tool.

Although limited, the Jefferson County Extension Office and Catholic Charities budgets are quite extensive compared to the other community gardens organizations and independent gardens. In size and funding the Jefferson County Extension Office is larger than Catholic Charities, and by the same margin, Catholic Charities is larger than Louisville Grows. The Jefferson County Extension Office gets its source of capital through public lands, taxes, and grants. Catholic Charities is similar in terms of being a well-known organization with a large private donation base to supply a regular source of capital. The third organization used in this comparison is Louisville Grows, which is a smaller organization compared to those previously mentioned. Louisville Grows has a limited budget because it is dependent upon occasional grants, private donations, and fundraising from a smaller and more localized base. To put it another way, Catholic Charities operates as part of a large organization while Louisville Grows is a smaller, independent, and localized organization. Both organizations have a budget that is dependent upon on a private donation base. This type of donation often fluctuates, thus hindering their budget and makes planning garden activities difficult. Another source of capital for Louisville Grows and Catholic Charities is a use of public land through agreements with government entities.

In accordance with capitalist practices, Catholic Charities and Louisville Grows make use of fundraisers to supplement their budgets. The rubric addresses this element under component twelve of the capitalist theme. To be clear, neither organization requires gardeners to meet a produce requirement; however, garden participants help voluntarily meet a goal set by the organization or individual garden. Non-profit fundraising is the practice gardens employ to gather the means needed to support the organization and thus the garden itself. They are using a form of capitalism by selling their food for a profit, but their profits are not for individual gain. Rather, garden organizations redistribute capital into the community garden to continue their operations.

For instance, community garden organizations are responsible for supplying their participants with a source of water, which is one of the most expensive resources garden organizations incur. Other items or resources that garden organizations incur or supply to their participants include soil, fertilizer, gardening equipment, a limited supply of lumber and educational materials. Furthermore, some of the capital raised must be set aside for their future fundraising endeavors. Catholic Charities and Louisville Grows have limited funding and do not have the connections compared to the Extension Office, which is

why they supplement their budget with fundraisers. However, this is just one element identified in each of these three organizations. Analysis shows that although there are similarities they each interact with the communal themes differently, as illustrated by their individual organization's score and further supported by the score that each their satellite gardens received.

One final example of how community gardens interact with this theme differently is illustrated through the Garden of Goodness. This garden was established and is currently organized by its landowner who also supplied many of the implements still presently used by garden participants. Produce grown through existing crops, flowering trees and bushes were also supplied by the owner when it was first established. Although garden space and most resources have been supplied by the owner participants may bring their own supplies to use or share in the garden.

The significance of these facts is that although the community garden operates on private property there are no requirements that must be met by garden participants in terms of labor, supplies, and food production. Furthermore, the landowner does not receive fees from garden participants nor is the garden eligible for grants. Rather all that is requested of garden participants by the landowner is that those who harvest food from the garden also help in maintaining it. The capitalist components for this garden reflect these practices through its high values. Furthermore, it is noteworthy that its overall communality score is thirty which is one of the highest scores achieved using this index.

The findings and results for this chapter are informed by a qualitative analysis of the interviews and observation notes gathered from field work. The information gathered through this analysis is laid out into three sections, each having met an objective, as follows: 1) to distill and understand the categories of community gardens that operate in Louisville 2) to elucidate the role of networking within and across these associations and 3) apply the rubric of communality in terms of community gardening practices. Together these findings indicate community gardens operate differently in relation to the idea of communality, depending on participants, leadership, stakeholders, etc., thus the results from these sections confirm the hypothesis.

The results of the first section discuss the category that a community garden or its overarching organization fit into. Their category is reflective of their general purpose, with the exception of hybrids, which have mixed purposes. However, their general purpose serves as the foundation of the garden upon

which their degree of communality is built through the social processes that take place within them and specific to the gardens themselves, thus reflected in their degree of communality. The second section describes the role of networking in community gardens. There is compelling evidence to show that the breadth of a network impacts the welfare and the social processes of a community garden. Moreover, networking is vital to the successfulness of organization, community garden, and the individual gardener. There are components of the rubric that assess how community gardens operate and take into account networking; however this section discusses networking in the form of examples using information gathered during interviews.

The last section of this chapter describes the rubric and its components used to obtain a degree of communality for each garden included in this study. The results from the rubric show there are sixteen gardens and three organizations in this study and over the entire group there are ten different communality scores. The variations of scores indicate that community gardens operate differently in relation to the idea of communality.

Using the results from the rubric as an aid, findings about the communality of community gardens are given through examples. For instance, the Neighborhood-Based Garden comparison illustrated that although three gardens of the same category have a similar communality score they interact with communality differently. Another example discusses the differences in communality amongst an overarching organization and its satellite gardens. Moreover, satellite gardens don't always match overarching organization because the guidelines handed down by the organization are not representative of the social processes that actually take place within the garden site itself. In a final observation, the role of capitalism in community gardens is the topic discussed. Property ownership, access to capital, and use of funds are capitalist practices that impact social process within community gardens and how the garden is used.

Overall the results provide important insights into the relationship between community gardens and communal ideologies. The communality index gives a value to represent each individual garden, but it is only an aid. The index is not adequate by itself for in depth analysis of community gardens as it does not illustrate in detail different ways gardens interacts with the rubric components. In other words, understanding the differences of communality between community gardens is best accomplished through a

narrative whereby the index results, rubric, and a qualitative analysis of data gathered through field work are used in tandem. In the chapter that follows an in depth narrative of two community gardens is given to provide examples of social practices exhibited during this research, how it correlates to communal ideologies, and attests to a degree of communality.

CHAPTER 5 NARRATIVE

Introduction

In chapter four, I provided findings and results of a communality rubric and a qualitative analysis that evaluates the communality of community gardens. However, this rubric is only an aid and does not fully encompass what it means to be communal. In this chapter, I elaborate upon the communality of two community gardens in Louisville through a narrative of each. A difference between the gardens in this chapter is that they are on opposite sides of a spectrum in terms of their degree of communality and overarching hierarchy. The narratives provide insight into how two gardens of the same category (hybrid) have some similarities, but that the mechanisms used to operate them and their degrees of communality differ. University of Louisville and Catholic Charities are both large organizations with means at their disposal, but there are some key differences.

The UPA overarching organization (University of Louisville) oversees very little of the garden activities. They are the owners of the public land the department uses. However, this overarching structure is barely involved with meetings or decisions. Its main function is to deal with funding. The UPA overarching organization did not receive a communality score, as I was not able to contact a person within the University hierarchy equivalent to the others. Catholic Charities and Jefferson County Extension office, as overarching organizations, received some of the lowest communality scores in the study. However, their satellite garden, Antioch scored in the mid-range. In chapter four, I addressed some of the differences in communality score between overarching organizations and their satellite gardens. Through a narrative of the practices and interactions that take place within a garden that fits this characterization and one that received a high degree of communality, I uncover some of the ways that community gardens operationalize communal themes differently.

This chapter is organized into two narratives of hybrid gardens: UPA Horticulture Zone and Antioch, a satellite garden for Catholic Charities. Each narrative covers a variety of topics. Both narratives

include how the community garden was established and details concerning the organization that are unique or related to component themes. Each narrative provides contexts for the social process and practices that lead to their respective communality scores. The narrative address issues that are linked to the components' themes used to construct the rubric along with other matters of contention covered in this thesis (i.e. networking, overarching vs. satellite garden, funding, etc.).

Catholic Charities works in tandem with Jefferson County Extension office to operate the 7th street garden. Specifically concerning the Antioch narrative, Antioch community garden is the focus, but examples from 7th Street Garden are used for comparison purposes because they are both satellite gardens of the same overarching organization.

Urban and Public Affairs Horticulture Zone

The Horticulture Zone was created in 2013 by the Student Advisor for the School of Urban and Public Affairs at University of Louisville (garden coordinator); and an Assistant to the Provost for Sustainability Initiatives; and a former graduate student (garden facilitator). The University of Louisville Urban Studies Horticultural Zone community garden (hereinafter "UPA garden") exhibits a higher degree of communality than most of the other gardens studied in this project. The purpose of this garden, according to the garden coordinator, is to show how gardens can be sustainable using low maintenance plants and organic practices while providing a variety of fresh food. The University of Louisville owns the land used by the UPA garden; however, there is little involvement by the University on how the community garden is organized.

According to the garden coordinator, the University is supportive of the community garden as the Physical Plant department provided tools and equipment needed to create and maintain the garden. During an interview, the UPA coordinator commented the garden was an added benefit to the Physical Plant, as it would be one less space they would have to maintain (i.e. mow and weed eat grass). Aside from being a mutual benefit in terms of education and aesthetics to both departments, the coordinator hopes the gardens will also have a therapeutic effect through stress relief, which is a goal common to some contemporary community gardens. "When you plant a seed you are looking to the future...you're kind of creating peace, you're planting a seed of hope because you're hoping that it will grow. So for me that's peace." (UPA Garden Coordinator, interview, March 13, 2015) It remains to be seen whether participants find "peace" in

the garden, as none of the participants reported this same notion. However, participants of the UPA garden did express that their experiences were enjoyable. Gardeners involved consist of students, faculty and staff from the University of Louisville. The core group consists of the garden leader, the department chair and staff members and students "who provide help consistently." They discuss and make many of the decisions about the garden collaboratively and center on topics such as: which foods to grow, where they should be grown, which supplies they need and when to plant. Further discussion with interviewees would reveal that although there is a core group; suggestions and opinions made by others (outside of the core group) are taken into consideration equally.

Occasionally needs of the garden may be decided on in an impromptu basis within the garden. For instance, according to the coordinator, on occasion students stop by his office and inquire about planting season. The coordinator offers the students seeds that they may plant at that time, weather permitting. If planting has already taken place the coordinator will offer other ways the student may help maintain the garden as well. In either case, garden activities can, and often do, according to the coordinator, take place randomly. Furthermore, the core group does not take issue with spontaneous actions like these, as they do not feel it is their garden to command. In other words, decisions are sometimes made collaboratively with whoever is in the garden at the time. Although most interviews did not reflect that any one job was more important than another, the coordinator indicated that the core group is more important because they are the ones who keep the garden going. However, no one person delegates outside garden tasks according to participants, rather core group members volunteer and negotiate how tasks are completed.

Context given by the UPA facilitator would show there are more to the meetings, however, than planning its logistics. The garden facilitator at UPA said that community gardening: "is more sustainable and resilient and functions better sharing both the burdens and the rewards." (UPA garden facilitator, interview, March 17, 2015) The garden facilitator added that the "real value is relationship built in the garden" and that combining "different skills, knowledge, or resources to share whether it be tools or seeds or money and whatever and when we pool those together we are stronger and more likely to be successful." (UPA garden facilitator, interview, March 17, 2015)

While there is a core group consisting of select faculty and students, making decisions about the garden seemingly indicative of a hierarchal system, investigation into the garden illustrates something different. The overall focus of the garden is not the logistics, but the rewards the garden brings through relationship building.

After investigating the practices of community gardening in the Horticultural Zone it became clear that there are 'inside' and 'outside' activities. This is not meant to suggest a binary but merely serves as a heuristic for the differences encompassed within the organization. Outside garden activity refers to actions or organizational practices, which may or may not directly affect the daily organization or activities of gardeners or community garden site. This includes administrative responsibilities such as being a point of contact; collecting fees; writing grants; purchasing supplies; contract management; or making executive decisions, all of which affect the garden site in one form or another but take place outside of the community garden space. A community garden leader, coordinator, or both normally perform these types of activities. Inside garden activity describes the daily interactions and organizational practices taking place within a community garden site.

These types of daily practices are completing garden tasks (e.g. weeding, planting, watering, harvesting) and other social exchanges (e.g. helping with tasks, sharing knowledge or produce, making decisions about immediate gardening needs). While outside garden activities usually affect the garden site or gardeners, inside garden activities typically do not affect outside activities.

Other activities outside of the garden vary such as buying supplies, interacting with University administration, and initiating volunteer work days, just to name a few. Within this outside space of the garden, there are also positions of authority. For instance, the University of Louisville is the land owner of the garden and may discontinue use of the garden space by the UPA garden group should it decide to.

Other administration such as the department chair is also in a position of authority as he authorizes the funds (when needed) used to buy supplies. These positions of authority are unavoidable, however, as these organizations exist within a capitalist society where positions of power were already in place before the start of the garden.

It is unlikely that the garden will be discontinued or funding frozen, as the garden coordinator indicated the University administration "fully supports" the UPA garden and its goals to promote education

in sustainability methods. University administration role in the garden thus far is to provide support for the garden financially and assist with garden needs (such as heavy equipment and large amounts of mulch or soil) outside of the department's ability. Both the UPA coordinator and facilitator state that the department chair approves the budget and attends meetings sporadically, but did not participate in gardening activities. It is not fully known what the department chair's role is within core group activities, outside of approving funding. A possible explanation for the department chair's role is the position at the University restraining time availability, departmental transparency, and a duty to follow the academic pursuit of sustainability practices. It is more than likely that the department chair sanctions the efforts of the student advisor, provides the budget, and attend meetings for these purposes.

While the UPA garden operates under a private organization, which functions as a capitalist organization (e.g. profit motivated), activities in the garden itself do not. The garden indirectly benefits from capitalist practices by receiving minimal funds for its creation, maintenance and equipment. Influence to organize the garden as a profit driven garden is nonexistent within the garden. Additionally, sustainability efforts (e.g. rainwater catchment system, low maintenance plants, seed saving, on-site composting) alleviate the need for funding by the department. The garden coordinator stated that during the previous garden season enough water was collected that no city water was used, which otherwise would have been paid for by the University. Thus, this alleviates the need or motivation to sell produce for profit. It is unknown if any gardeners harvest and sell any of the produce grown as there are no restrictions in place from doing so. It is unlikely that any of the gardeners would sell produce grown as the garden coordinator indicated there typically is not enough produce to do so. None of the participants interviewed expressed an interest in the production of food with a goal to sell for profit, nor are garden fees collected. Food produced primarily goes to students, non-student volunteers, and passersby who are allowed to simply pluck when it is ripe. Occasionally, they donate food to a private childcare center across the street from the garden or just announce, via social media, email, and UPA newsletter that harvested produce is available at no charge.

Gardeners neither owned nor were responsible for individual plots, "it's not mine" as one participant noted during an interview. The garden coordinator felt that this was one of the main differences between the UPA garden and other community gardens in Louisville. UPA garden does not have

individual plots, charge a fee to garden participants nor does it require a signed agreement to abide by guidelines. Rather, produce is grown collectively as crops and the level of responsibility of participants is voluntary, they "just do what they can, when they can" according to the UPA subjects interviews. This is antithetical to the way that most community gardens operate. Only the Garden of Goodness is similar in style and operation to UPA garden with only one individual plot that the property owner allows a neighbor to grow a small batch of tomatoes at no charge.

These interactions suggest that although there is a hierarchy in place to impose guidelines or rules, these actions do not take place nor do members feel this action is a need. This garden is also different from other community gardens in Louisville in that it is not fenced and there are no individual plots. There are separate spaces for different kinds of plants. For instance, there is a large apple tree in the middle of the garden, four raised beds and sections for "experiment plant" sections. Experiment sections are used to evaluate which plants are in low maintenance but can provide high yields. All areas of the garden are considered common and available for anyone to use or harvest from. This includes volunteer gardeners and (again) passersby alike. One garden participant suspected a homeless person might have stayed in the garden for a night or two. When asked if that bothered her she indicated that it was fine with her since there was no harm done to the garden.

Core group member and participants often sign up to complete tasks at their leisure on available workdays. They are not required to sign up, however, and may instead perform the task during a time that suits their own schedule. The garden coordinator encourages those who are not part of the core group or regular gardeners to volunteer anytime and especially during workdays. Workdays are designated times during a particular day to maintain common garden areas and are usually self-directed within the UPA garden community. The garden coordinator is responsible for a department newsletter, which includes information about garden workdays, departmental awards, and upcoming events. This newsletter is sent to UPA students and staff but may also be sent to others who ask to receive it. The garden facilitator also invites volunteers to help in the garden using social media such as the University of Louisville Garden Commons (a separate garden located on campus) Facebook page.

According to the UPA participants interviewed, volunteers who help in the garden receive little direction as to what needs to be accomplished. The garden coordinator said there is an often unspoken

level of mutual respect exemplified in the activities and interactions taking place both inside and outside of the garden space and I experienced this as well during my observations. Sharing and inclusiveness is a key element in the organizational practices of the garden and promotes volunteerism, even if the majority of the volunteers are from the department of Urban and Public Affairs. During times when the garden coordinator is not available and a volunteer needs assistance in the garden, staff members and students who participate in the garden are usually available to help.

Access to the garden, tools and supplies are readily available for anyone to use as the garden is an open space and the tool storage is on site. This type of sharing is indicative of mutualism as gardeners who work in the garden do so to help others with the expectation, rather than promise, that others will do the same and benefit correspondingly. This form of reciprocity is essential to the success of communal groups according to Proudhon (1969a). Reciprocity is a key to mutualism, and Proudhon (1969a) promotes that small groups work best for this because they are dependent upon one another for survival. As a UPA Ph.D. graduate student put it "The return of my invested time is that people get it for free." (interview, April 6, 2015) The UPA garden participants are dependent on each other for the continuation of the garden. The UPA garden operates with no money exchanged and no competition in mind. Reciprocity is boosted when outsiders of a group are included in the activities. The UPA garden involves outsiders by giving food away to children, and allowing secondary students to appreciate the garden through field trips and education experiences that UPA promotes. A University of Louisville security guard helps in the garden activities as well and in return is given parts of the harvest. Thus, participants in the UPA Garden do not wish to own the property in order to have power or control over labor, production, and profit (i.e. capitalist concepts) Furthermore, ownership, according to the subjects interviewed would be an inconvenience. Using the words of one subject interviewed "it (the garden) would be too much of a hassle" (interview, April 6, 2015).

According to the UPA participants interviewed, their busy lives do not always allow them to be in the garden at the same time. While all of the participants had both similar and different reasons for participating in the garden, such as sustainability and education, convenient access to fresh produce, or relaxation, none of the participants had considered owning a part of the UPA garden in any way (e.g. produce, individual plot, investing as co-owner). Participants expressed that they never considered owning

the plot because they did not think it was possible especially given the nature of the landowner (being a large University) nor did they consider the food grown their own to sell. Rather the food grown in the UPA garden is for everyone to enjoy and take part of regardless of the amount of help provided.

While the UPA garden does not work with other community gardens (in or outside the city of Louisville), individuals from the UPA community garden sometimes do. For instance, the garden facilitator assists with leadership and communication at the UPA Garden in addition to the Garden Commons. The garden facilitator, and their spouse, tends to their personal garden at home and two different garden plots within the Louisville area. A graduate student at the University of Louisville helps in the UPA garden intermittently even though she maintains and spends most of her gardening time at a separate community garden location which is closer to her residence. The garden coordinator also participates in a different garden though it is located outside the city of Louisville. These types of interactions, participation within multiple gardens and helping those who would need it, reflect many of the practices suggested by anarchist philosophers through their sense of helping one another and features different levels of relationship at work between some members in this garden to other garden groups.

When asked how disagreements are handled in the garden, the UPA coordinator's response noted there weren't any guidelines put into place but that creating guidelines had been discussed by the core group. In any case, should there be a disagreement between volunteers or member of the garden the garden coordinator said his approach would be "to listen to everyone's opinions and meet in the middle". Furthermore, the garden coordinator said,

"I could make all the decisions and I could set every rule that I thought was appropriate but I don't want to do that because that assumes a lot of things and also...I don't know what's best for everybody. I think everyone should participate and everyone should have agreement on rules and methods for doing this. I'm trying to keep it (the garden) very... communal. Very... kind of cooperative. So I'm not trying to kind of 'this is what I want to do so let's do it'. I really want to make it inclusive and flexible so that (when) people have ideas, let's try it. I'm open to that, let's do it. So that's what I kind of want to maintain, that atmosphere." (UPA Garden Coordinator, interview, March 13, 2015)

In cases where individuals are not able to come to an agreement, with the help of the coordinator, other University staff members (who are not garden participants) would be asked to help mediate the situation. This situation, according to the UPA coordinator has not occurred thus far and he does not anticipate it would in the near future either.

The social processes and interactions that take place within the UPA reflect the communal themes identified in this project the most and it is reflected in their high degree of communality (according to the index). The theme most operationalized in the garden is mutualism, as participants depend and help each other within and outside of the garden. For instance according to subject interviews, when the coordinator needs to gather supplies for the garden, other members offer to help by going to get them, or offer to meet at the garden to help unload the supplies.

This garden, I am confident is communal for two reasons: First, the garden coordinator specifically uses what his idea of communalism is when describing the overall aim of the garden. The practices and interactions that take place as described by the subject and observed during my time in the garden support this. Second, ideas of: sharing, inclusiveness, helping each other, sharing garden methods (through the experiment area) were expressed by subjects interviewed as being a part of the garden's purpose. Thus the high degree of communality they received accurately portrays the communal processes in the garden.

RAPP and the extension office

The Refugee Agricultural Partnership Program (RAPP), a department of Catholic Charities

Louisville and partner of the Kentucky Office of Refugees (KOR), offers garden space and agricultural education to refugees within the Louisville Kentucky area (Catholic Charities of Louisville 2015a, b). The garden coordinator of Louisville RAPP gardens oversees three community and two market gardens.

During our initial meeting there were another three gardens in the process of being planned and developed. Through this private non-profit program, partnerships with different local organizations are made for the purpose of using land and providing agricultural assistance for refugees. This makes small differences in how people interact, resource availability and administrative duties, thus changing how each garden is organized. RAPP's partnerships include local churches such as Antioch, Saint Francis of Assisi, and Saint Ignatius. Not all of them are for "strictly" community gardens as two of the five RAPP gardens are considered market gardens, which are used by gardeners to grow produce for the purpose of selling through a food cooperative or at a farmers market.

Another RAPP partnership is with the Jefferson County Cooperative Extension (commonly referred to as the extension office), a part of the University of Kentucky College of Agriculture, Food and

Environment. Their office, which is fully funded, manages several gardens in Louisville and has its own partnership with the Louisville Jefferson County Sewer District (MSD) and Parks Department. A public garden operated by the extension office and located on Seventh Street within the southwest part of Louisville is a garden utilized by both local residents and refugees affiliated with RAPP. The Agriculture & Resources Agent who is also Jefferson County Community Garden Coordinator informed me there are well over six hundred gardeners who utilize extension gardens alone and a few hundred more, not including family members of participants. The one hundred refugee plots are only a small portion of the Seventh Street community garden as the garden is approximately eight acres. This particular property is owned by MSD and leased free of charge to the Jefferson County Extension Office. RAPP's agreement however is with the extension office in which one hundred plots are set aside for refugees to rent. Fees and other administrative elements for this garden are handled by the extension office while RAPP organizes the training and education of refugee gardeners.

Responsibilities within RAPP vary and are dependent on whether it is inside or outside of the community garden. The RAPP garden coordinator's primary duties vary and take place in both inside and outside garden spaces. Outside of the garden, the garden coordinator works on identifying funding opportunities to help with the needs of gardens operating under RAPP. While the RAPP garden coordinator does report to the Director of Programs at Catholic Charities, they are responsible for making overall RAPP garden decisions and the direction of two agricultural educators who double as translators.

One of the most important and expensive needs of most community gardens is water. While RAPP does not have to pay for the water bill at all locations, it is still their biggest expense. Catholic Charities provides a budget for the RAPP gardens and is used in tandem with plot fees to cover the water bill. One of the goals for Catholic Charities however is for RAPP to become self-sustaining. According to the RAPP coordinator, being "creative" is important in finding ways to "generate revenue" as opportunities should meet RAPP's financial needs while keeping core values of assistance and agricultural education. RAPP's new opportunities used to generate income are an incubator farm where gardeners learn business and agricultural techniques needed to operate a farm in which produce grown in the farm are sold at farmers markets or through the Urban Food Cooperative managed by Louisville Grows; and community supported agriculture (CSA) in which Catholic Charities employees are able to pay a subscription in

exchange for fresh local produce grown by community gardeners who wish to sell the food they have grown. Due to being a publicly funded organization the extension garden does not need to participate in market gardens or other activities for the purpose of generating funds. Furthermore, the extension agent stated that because of public land use ordinance they are not allowed to sell their produce for profit on the public property. Gardeners, however, are allowed to grow and sell their food as long as it is not on community garden property.

Catholic Charities utilizes grants they're eligible for to purchase large equipment or stipends for agricultural educators who play a vital role in the RAPP gardens. The agricultural educators, under the direction of the RAPP garden coordinator, contact and meet with refugees within the gardens. Their role is to translate and communicate important information about the community garden or other Catholic Charity services, and communicate refugee needs or ask questions of the garden coordinator.

The extension agent's responsibilities are similar to the RAPP coordinator's as they both perform administrative duties regarding budgets, contract management, and directing educators. While both are very involved and "frugal" with the budgets they receive, the extension agent's budget is larger and fully funded through grants, taxpayer and non-tax payer funds. The RAPP coordinator doesn't have that advantage. While the extension agent is authorized to purchase items needed by community gardens, purchases over \$2,500.00 must be approved by the district board. Another benefit and responsibility of the extension agent is to oversee extension office garden managers, some of whom are paid part time, whereas the RAPP coordinator fulfills both jobs as manager and coordinator. Within garden spaces the RAPP garden coordinator, with the help of their agricultural educators, works with refugee gardeners in a variety of ways. While my initial visit consisted of sitting with the RAPP garden coordinator for an interview about the organization of the community gardens, my subsequent visits were in the garden spaces themselves, specifically at Antioch Church and Seventh Street community gardens, which is described here.

The first annual garden meeting for the Antioch Church community gardeners was held by the RAPP garden coordinator, the RAPP Agricultural Educator and Translator, and the Antioch Church Pastor. In attendance at this meeting were ten different families from different cultural backgrounds. The RAPP garden coordinator informed me this particular garden usually included individuals from four different countries and five different cultural backgrounds such as Somali, Nepali and Bhutanese. There were some

who understood English during the meeting, meanwhile the agricultural educator interpreted announcements and questions to those that didn't. Announcements included the changing of plot sizes and adjusted costs with the change. The pastor discussed parking issues, driving in the soccer field adjacent to the garden and walking in designated paths. Gardeners asked what the changes meant for them. For instance, many gardeners wanted to know if they would be able to have the same plot as they had the previous year or if they could rent multiple plots. The Pastor and the RAPP garden coordinator didn't make many announcements.

This meeting primarily consisted of gardeners filling out applications for a garden space. The groups aggregated themselves around different tables and cultural groups socialized little while they filled out their applications. There were children in attendance as well who played and interacted with each other despite different backgrounds, many of whom spoke English and occasionally acted as translators for family members when needed. The RAPP garden coordinator informed me later that while there were not many people at this particular meeting, they were confident all sixty four garden plots would be filled by the time planting season started.

During my next visit this was indeed the case. My next visit occurred just after the start of planting season. Many of the plots the RAPP garden coordinator assigned according to availability and on a first come first serve basis. Initially marked off by flags and walkways, gardeners' planting style and creativeness served as additional boundary markers. For instance some gardeners installed wooden stakes and twine to show their plot boundary while others utilized walkways and distinct landscaping techniques. Some gardeners used parallel miniature peak and valley systems while others used wood to create small makeshift raised beds. During this particular visit gardeners who had not signed up earlier in the year paid their fee and received their assigned spot from the RAPP garden coordinator.

While this particular day was supposed to include a meeting in addition to receiving the last of the assigned spots this was not the case. Many of the gardeners who did not already have a spot were trying to negotiate with the RAPP garden coordinator about garden location and availability. Some gardeners wanted plots adjacent to family or friends or did not want to be close to the tree line located behind the garden. While most plots appeared to have lots of sun, premium locations have little shade and are near the water spigot.

RAPP gardeners, according to Antioch participants, obtain garden space in order to grow food they are accustomed to eating and not available in grocery stores or to supplement their income, as fresh produce can be expensive. According to many of the participants, maintaining a plot in community gardens is economical even though there are fees. Plot sizes are based on the space available within a community garden site while taking into account the number of plots needed and divided equally. A fee charged to a gardener depends on the size of the plot rented and is used to recuperate the costs of operating the garden (i.e. water, tools, and supplies). This past year the RAPP garden coordinator proposed, to established gardeners, making the plot sizes slightly smaller at the Antioch garden so that more plots would be available for those in need. According to one of the participants there was a general consensus this would be acceptable but that some were not happy as they wanted the same or more space. One option available to those who want more space is to rent multiple plots.

Interaction between gardeners took place during this visit as those who had already planted and watered their garden that day helped others weed and ready their plot for planting. The RAPP coordinator indicated this kind of interaction usually takes place between family members, as one family may have multiple lots between them. Help and other social interactions typically take place between people within the same cultural group, usually because there is no language barrier. There are other times that people from different backgrounds help each other. One example would be giving advice about garden techniques. Using hand signals or a few new learned words gardeners show each other the different kinds of plants they are growing and how they may be eaten. There are some who work and socialize outside of the community garden thus enriching their relationships.

Community gardeners sign a contract which generally provides rules about garden spaces.

Gardeners are to use the assigned spaces only; they must maintain their assigned garden areas and they may not harvest food from other garden plots and may not interfere with another person's garden. "We all work. If he is at work (points to a community garden friend) I water my garden and his garden. If I am at work, he waters his garden and my garden." (Garden Participant, interview, April 7, 2015) This comment shows that in spite of the rules and guidelines of a community garden, communalism happens. While there are rules in place and these are followed without major incident, according to the RAPP garden coordinator there are some participants within the garden who bend them. For example, gardeners may not work in a

garden that is not their own without expressed permission or first notifying the coordinator. Through informal arrangements made between many of the Antioch community garden members this is a practice that happens often; notifying the coordinator is carried out but not always done first. Those who do help each other do so with the understanding that no one's garden is to be harmed and that help may be given in return. Although, the community garden has rules and guidelines, participants are not strictly held to them. These practices are typical of anarchy, without rule, and are symbolic of mutualism, as gardeners help and depend on each other as part of their livelihood.

Another refugee participant, during a separate interview, described a similar situation in which someone becomes sick and unable to maintain their plot. Without prior approval from the coordinator or manager they receive help from another participant (neighbor or friend) stepping in. Interactions between these gardeners usually include coordinating use of the water hose or sharing different garden techniques. One participant said he tries to give garden advice to refugees when he thinks they need it and that there are times refugee gardeners bring him a vegetable he has never tried with information about how to prepare it.

There are many similarities between the Antioch and Seventh Street gardens such as maintaining the weeds in their plots, practicing water conservation, and socializing while carrying out garden maintenance. The differences, however, are apparent as the Seventh Street garden operates under the extension office and includes different demographics of people and local residents. One of the biggest differences is seen spatially as the Seventh Street garden is a very large parcel of land encompassed by a fence, meaning that the garden is accessible during hours of operation. Garden plots are the same size but supplies and style of gardening is different between refugees and local residents, quickly recognized upon entering the garden along the driveway.

Refugees typically use natural resources available to them at the garden such as using fallen tree branches to mark plot boundaries or as support for some of their plants, similar to the techniques used in the Antioch garden. Local residents appear to use materials that are more modern such as lumber. Two part-time managers oversee the Seventh Street garden. Their responsibilities are to make sure the garden is opened/closed and that water is used fairly and efficiently. They "keep the peace" between gardeners, only bringing issues to the coordinator when needed, according to one garden manager. Mutual practices used at the Seventh Street garden may be hindered, as there is usually a garden leader on site to make sure

extension guidelines are followed. Likewise groups from either Catholic Charities or the Jefferson County Extension Office do not interact with each other for help or group projects.

One last note about the different gardens is their leadership styles. During my time at the Antioch garden, the feeling of the garden was that it belonged to the refugees. Although they had experienced different hardships, refugees come together as a community of people with shared goals. This kind of kinship is promoted at the Antioch community garden and is reflected upon by the Catholic Charities coordinator:

"One of the things that we really focus on is like the refugee participants have, you know, been through a lot of trauma and abuse. A lot of them are coming from living in a refugee camp from ten to twenty years sometimes and so really focusing on the benefits that they find in having access to grow food. You know, we have had participants report mental benefits, like one guy was talking about how having a community garden has helped cure his loneliness and so, kind of like I think just focusing on the community building aspect of it is really important for us." (Catholic Charities Garden Coordinator, interview, March, 2015)

There is camaraderie within the Seventh Street garden; however, as the extension agent indicated there are local residents who have known each other for many years. The experience there gave me a sense of assurance that no one's garden would be intruded upon and that everyone is treated fairly and thoughtfully in accordance with the community garden guidelines. When asked about the different garden manager's leadership styles, the extension agent described them as being good stewards of the community gardens. "It is interesting how they take ownership, especially those who are not getting paid, they are volunteering to do that." (Extension Agent Garden Coordinator, interview, April 7, 2015) The garden coordinator's statement was his reflection of how the leaders are enthusiastic about ensuring the garden operates efficiently. Through their enthusiasm, they ensure the garden operates efficiently and equally according to the guidelines established by the extensions office. This is a reflection of how the guidelines are enforced at the Seventh Street Gardens by the leaders. They see it as part of their self-imposed responsibility to ensure everyone's equality and use the guidelines to do it. Similarly this comment symbolizes communism whereby standards are established by the state or imposed by the leaders, in this case the overarching organization, and followed by all. This enforcement and self-imposed

responsibility are not to take away or imply any negative connotation about how Antioch participants treat each other or participate.

Catholic Charities and the extension office are similar in terms of size and how they interact with certain characteristics of communality. At both the Antioch and Seventh Street gardens volunteers usually consist of community gardeners, unpaid garden leaders and the occasional intern. In the case of both organizations no one forces or coerces unpaid community garden members at all levels to work in the garden, as mandatory volunteer hours are not required. Community garden members use their time and skill freely within the gardens as evidenced by the plot fee they pay and time spent in the garden at their own convenience.

Due to the size of both gardens, access to water is occasionally an issue. The most common issue is there are more plots than hoses requiring people to wait their turn for water. This is a problem for some gardeners as garden care is usually carried out between work and home obligations. Competition for water is more common in the Seventh Street garden as there are fewer opportunities for informal mutual assistance given the adherence to the extension office guidelines. Mutualism however is a common practice at the Antioch garden and helps prevent competition and promotes success.

Continued practices of mutualism in either garden could be complicated as there is no rule or common principle preventing a gardener from selling their produce within a market system. There are gardeners at the Seventh Street garden known for growing food, according to both the extension agent and Catholic Charities garden coordinators, for the purpose of selling it at another market garden for profit (even if only a small amount). This is obviously a practice that is capitalist in nature and neither conducive or exemplary of the idea of being communal.

While the Catholic Charities organization also participates in market garden activities to generate income, funds are redistributed back into the community gardens to recover their startup costs and reduce their overhead. Likewise community gardeners at the Antioch garden grow primarily for food subsistence. While there are small differences in how each garden utilizes capitalist activities, the idea of owning all or part of the property for gardening was the same within both gardens. Participants did not want to own property nor did they feel it was necessary. When I asked participants why there was no interest in owning or investing to become part owner of the garden many stated it was just never something they considered

being an option, even if they had the money to do so. Furthermore owning a part of the community garden was considered too much of a hassle due to the responsibilities of ownership like overall care and maintenance, taxes, paperwork, etc. Most participants said that the current system works for them, thus they neither cared nor considered this an option. Both organizations practice two types of democratic processes correlative to inside and outside community garden activities. For example, when garden locations operated by the extension office need "big ticket items" the issue is brought before the board to decide if the purchase should be made.

The board considers community gardeners' opinions; however, these opinions are only considered and not counted as equal votes during board meetings. Issues regarding supplies or organic practices are decided within garden spaces but could be overruled by the board. Outside garden decisions affect inside garden activities but this does not happen in reverse. Each coordinator stated separately that while they are in a position to make final decisions, it is important to include input from the gardeners themselves and make autonomous decisions as often as possible. Garden participants are equal and practice democracy through votes but only within the limits deemed by the board. They only vote on certain small garden elements (i.e. organic practices, plot placement) and only inside, or rather within the confines of the actual garden site itself. Decisions made outside of the garden that affect participants are made by representation and employed by those in charge. While board members are public servants, they are in fact in positions of authority. Being in positions of authority brings levels of inequality between inside and outside gardens activities which affect each other in different way.

CHAPTER 6 CONCLUSION

Today we are faced with many environmental issues including global warming, urban heat islands and issues around food security. Community gardens are an important part of sustainability efforts that deal directly with these issues. They have also become a more prominent part of the urban landscape, growing in popularity. They serve as an example of a type of sustainability measure useful for the future, yet their roots are from our past. Historically, community gardens were popular, but for different reasons than they are today. Community gardens of the past are tied in with war efforts and political activism.

During WWI and WWII community gardens were a large part of local communities. During WWI their purpose originated in the need to gain access to food by low income families. Nationalism during WWII spurred gardeners into action in rationing efforts. Gardeners took measures like canning and saving metal for the military. This was for country and community alike, an almost communal practice. Sharing food is a communal practice, but that does not necessarily mean that these gardens were communal. Historical literature describes gardens in the 1960s-70s as a communal site whereby political movements take place; however, specific details about the social practices and processes used to operationalize their communal ideologies are not provided. Thus, determining whether gardeners practiced communalism in the past is difficult and limited. Detailed practices of community gardens and their participants is sparse in historical literature. Historical accounts of community gardens do not provide enough information about the specific practices within them to understand their degree of communality. Gardening is a means to deal with food shortages, especially when the population changes. In the past, Louisville saw its share of immigration and refugees from other parts of the world. Some of these populations have culturally specific foods that can't be found at a local grocer. Community gardens were a means of accommodating that need and still are today.

Social philosophers, both communist and anarchist, provide a framework of ideologies that incorporate communal practices in an attempt to solve the problems caused by capitalism. Through a

literature review of these social ideologies I have identified five overlapping themes that best represent communalism and provide the parameters for communality. Generally, these themes deal with equality, ownership, issues of control, and volunteerism. Ideologically speaking, the further away a garden is from using the power that capitalism reinforces the more communal it is considered to be. Specifically for this thesis, communality is the state of being or quality derived from the following set of social ideologies: capitalism, democracy, equality, volunteerism, and mutualism. These social ideologies provide the framework to identify and explore community gardens' relationship to communalism.

I used qualitative methods to gather and analyze data in order to make the connection between community gardens and communalism. To accomplish this I performed background research to identify community gardens in the Louisville area and invited representatives of communal gardening in Louisville to participate in this study. Data was gathered through field research performed through semi-structured interviews and participant-observations. Through the literature review and data gathered through field research I formed a rubric made of components that represented each of the five themes of communality. These methods yielded significant and detailed information about community gardens, which was useful to my project.

Through a qualitative analysis of the data gathered, I found that community gardens fit into particular categories depending on their purpose and practices. Networking between gardeners and garden organizations is vital to the success of a community garden and the welfare of those involved with them. As hypothesized, community gardens interact with the idea of communality differently. This conclusion is made possible with the help of an index I created to evaluate community gardens' degree of communality. The index is comprised of sixteen components, each with its own point system. The maximum degree a garden can receive, when components scores are totaled, is thirty-five.

Findings of this study show gardens of the same category can have similar scores but interact with the communal themes differently. Additionally, satellite gardens can differ in their relationship to communality from their overarching organization dependent upon the interpretation and reinforcement of the guidelines provided to satellite gardens. Community gardens' relationships with the theme of capitalism vary dependent upon its purpose and different levels of access to capital.

These examples are illustrated by the rubric, which is useful for identifying the gardens' connections to the communal themes. The rubric is an aid and used in tandem with other methodologies to evaluate how community garden animate communal themes through the social processes that take place within them. For this study, two narratives of different community gardens in Louisville provide a better understanding of how community gardens interact with the themes of communality.

Through this study I found community gardens fit into different categories: municipal, charitable, neighborhood-based and hybrid. My initial thought about these categories is that many of them would have higher degrees of communality than they actually did. This is especially the case for neighborhood-based gardens in which I thought their previously established relationships would ensure high component scores in mutualism. The three NBGs included in this study received very similar scores even though some of their component scores were different. For instance, one garden gave preference to those potential garden participants who live in the neighborhood it is located in while another received gardeners from other parts of Louisville.

The narrative about UPA reveals that one reason behind the high communal score is that the garden coordinator framed this particular garden and its activities as communal. In other words, this was an explicit ideology that was part of the mission and enacted in practice from organizational structure to daily practice. The narrative about Antioch community garden uncovers that the cultural backgrounds of garden participants influences communality. Kinship ties were a large part of the garden, were a part of the conversation during interviews and field research. Observations and interviews with Antioch subjects reflect themes identified as being the most communal such as mutualism, volunteerism, and equality. Antioch is a satellite garden of Catholic Charities that benefits from capitalist practices used by such an organization. The results from the rubric show that Antioch is more communal than its overarching organization, Catholic Charities. Their large network and access to capital protect Antioch from using capitalist practices itself, thus affecting its interaction with capitalism by alleviating some of the participants' financial pressures

In this investigation, there were limitations that I address here. First is the sample size of subjects interviewed from each garden. The number of participants within each garden was dependent upon the size of the garden. As with any qualitative research, time was also an issue. Availability of both the researcher

and potential subjects did not always align. However, small sample sizes allowed in-depth discussions to take place with subjects. I gathered detailed information about the function, operation, and social processes of the garden. Second, subjects in positions that organized community gardens' activities did not always correlate. For example, the garden coordinator at Jefferson County Extension Office had different responsibilities than the garden coordinator at Beuchel Park despite the same position.

This thesis set out with the goal to answer the question: to what degree do community gardens manifest communal principles? The underlying concern is whether an incoherent or incorrect use of the term communal diminishes the value of the term more generally. The answer to the research question is complicated. As seen in this study's results there are some communal gardens that do indeed manifest communal principles. Although all gardens have a degree of communality, some have more than others do. Through the study I found elements that help distinguish a communal garden from a community garden such as access to funding, category, and hierarchal organization. In Chapter Two, definitions were provided for the terms community and communal.

Gardens are considered communal when they share in the maintenance of all garden spaces and produce, share common ideas, and are inclusive of all participants in a collaborative decision making process. Alternatively, gardens are considered community when a space and common goal is all that is shared between gardeners in addition to the multiple hierarchal levels that impose guidelines and make most garden decisions. Simply put, community gardens in this study that earned low scores are just that, community gardens. Whereas high scores indicate there are some community gardens that are indeed considered communal. Whether or not the term is used generally, thus diminishing the term communal remains to be answered. The reason for this is there is no standard reference to go by when characterizing a garden as communal or community. To even determine whether or not a garden is communal, for this study, I had to create a rubric to establish a standard of communality to measure community gardens by. Thus, it stands to reason that the term communal, used to characterize community gardens, is subjective and depends upon the person's knowledge of communal ideologies. Knowledge about communal practices in community gardens is important and academia has a role to play in future studies.

The tool I created was a helpful start, however the development of a better tool to explain the spectrum of communality would help identify those cases that did not meet either extreme (communal or

community). In-depth case studies would accomplish this through further understanding the connections between community gardens and communal ideologies. Future projects should include: gardens within a category or of a similar size, case studies of garden participants without coordinators/leaders, questionnaires and group discussions. Understanding how communal ideologies are manifested in community gardens can help present and future groups shape the function and operation of a garden to meet the needs of participants and thus bolster the successfulness of the garden.

REFERENCES

- Agyeman, J. 2013. *Introducing just sustainabilities: policy, planning, and practice*. New York, NY: Zed Books.
- Alaimo, K., T. Reischl, and J. O. Allen. 2010. Community gardening, neighborhood meetings, and social capital. *Journal of Community Psychology* 38(4): 497-514.
- Bakunin, M. A. 1972. 1866 Revolutionary catechism. In *Bakunin on anarchy*, ed. and trans. S. Dolgoff, 76-97. New York, NY: Alfred A. Knopf, Inc.
- Baxter, J., J. Eyles. 1999. The utility of in-depth interviews for studying the meaning of environmental risk. *Professional Geographer* 51(2):307-320.
- Bottomore, T. 1985. Theories of modern capitalism. London, UK: George Allen & Unwin.
- Capps, R., K. Fortuny, W. Zimmermann, W. Bullock, and E. Henderson. 2006. A profile of the foreign-born in the Louisville metropolitan area. Research Report. *The Urban Institute*. http://www.urban.org/research/publication/profile-foreign-born-louisville-metropolitan-area (last accessed 1 February 2016).
- Catholic Charities of Louisville. 2016a. Common earth gardens and common table. *Programs and services:* programs. http://grow.cclou.org/ (last accessed 16 March 2016).
- Catholic Charities of Louisville. 2016b. Kentucky office for refugees. *Programs and services*. http://cclou.org/kor/ (last accessed 16 March 2016).
- Center for Health Equity. 2014. Louisville metro health equity report: The social determinants of health in Louisville metro neighborhoods. Louisville, KY: Division of Public Health and Wellness.

 https://louisvilleky.gov/sites/default/files/health and wellness/che/health equity report/her2014

 7 31 14.pdf (last accessed 27 September 2015).
- City of Louisville, Kentucky. 2015a.Mayor's healthy hometown movement: healthy eating. *Government: city initiatives*. https://louisvilleky.gov/government/mayors-healthy-hometown-movement/services/find-resources-healthy-eating (last accessed 27 August 2015).
- City of Louisville, Kentucky. 2015b. Sustainability initiatives: urban heat island project. *Government: all city departments*. https://louisvilleky.gov/government/sustainability/urban-heat-island-project (last accessed 3 March 2015).
- Community Farm Alliance. 2007. Bridging the divide: Growing self-sufficiency in our food supply. *Resources* http://cfaky.org/test/wp-content/uploads/2015/03/BridgingTheDivide.pdf (last accessed 11 July 2015).

- Corrigan, M. P. 2011. Growing what you eat: Developing community gardens in Baltimore, Maryland. *Applied Geography* 31 (2011): 1232-1241.
- Cresswell, T. 2013. *Geographic thought: A critical introduction*. Chichester, West Sussex, UK: Wiley-Blackwell Publishing.
- Cummings, S., M. Price 1990. *Race relations in Louisville: Southern racial traditions and northern class dynamics*. Unpublished report, College of Urban and Public Affairs University of Louisville, Louisville, KY.
- Dowler, L. 2001. Fieldwork in the trenches: participant observation in a conflict area. In *Qualitative Methodologies for Geographers: Issues and Debates*, ed. Limb, M., C. Dwyer 153-164 London, UK: Hodder Arnold Publication.
- Eltzbacher, P. 1960. *Anarchism: Exponents of the anarchist philosophy*. New York, NY: Libertarian Book Club.
- Ferris, J., C. Norman, and J. Sempik. 2001. People, land and sustainability: community gardens and the social dimension of sustainable development. *Social Policy & Administration* 35(5):559-568.
- Gibson-Graham, J.K. 2008. Diverse economies: performative practices for `other worlds'. *Progress in Human Geography*. 32(5): 613-632.
- Glover, T., D. Parry, K. Shinew 2005. Building relationships, accessing resources: Mobilizing social capital in community garden contexts. *Journal of Leisure Research* 37 (4): 450-474
- Gottlieb, R., A. Fisher. 2000. Community food security and environmental justice: Converging paths towards social justice and sustainable communities. *Race, Poverty & the Environment* 7(2):18-20.
- Graeber, D. 2004. Fragments of an anarchist anthropology. Chicago, IL: Prickly Paradigm Press.
- Hall, S. 2001. Foucault: Power, knowledge and discourse. In *Discourse theory and practice: A reader*, ed. Wetherhell, G., S. Taylor, and S. Yates 72-81. London, UK: Sage Publications.
- Hanna, A., and P. Oh. 2000. Rethinking urban poverty: A look at community gardens. *Bulletin of Science, Technology & Society* 20(3):207-216.
- Harvey, D. 1996. Justice, nature and the geography of difference. Cambridge, MA: Blackwell Publishers.
- Hashim, N. 2014. Reversing food desertification: Examining urban farming in Louisville, Chicago and Detroit. *Local Environment*. 2014: 1-26.
- Herbert, S. 2000. For ethnography. Progress in Human Geography 24(4):550-568.
- Holland, L. 2004. Diversity and connections in community gardens: A contribution to local sustainability. *Local Environment* 9(3):285-305.
- Internal Revenue Service. 2015. Life cycle of a public charity/private foundation. *Tax information for charitable organizations*. https://www.irs.gov/Charities-&-Non-Profits/Charitable-Organizations/Life-Cycle-of-a-Public-Charity-Private-Foundation (last accessed 4 March 2016).

- Izyumov, Nahata and Coomes. 2002. Immigration to the Louisville metropolitan area: Recent trends, policy recommendations. *Brandeis Law Journal* 40(4): 909-932.
- Jansen, H. 2001. Communal living in the Netherlands 1968 1998. In Contemporary utopian struggles: Communities between modernism and postmodernism, ed. Poldervaart, S., H. Jansen, B. Kesler 209-218 Netherlands: Askant Academic Publishers.
- Jefferson County Cooperative Extensions Service. 2016. Extension leadership: Extension council orientation materials. *Duties and responsibilities for extension council members*. https://jefferson.ca.uky.edu/CEC (last 29 February 2016).
- Kanter, R.M. 1979. Communes in the cities. In Co-ops, communes & collectives: Experiments in social change in the 1960s and 1970s, ed. Case, J. Taylor, R. C. R., 112-135. New York, NY: Pantheon Books.
- Kentucky Cooperative Extensions Service. 2016. CES manuals: district board guidelines. *General information for county extension district board*. https://ces-manuals.ca.uky.edu/content/general-information-county-extension-district-board (last accessed 2 March 2016).
- Kleber J., ed. 2001. Louisville: A historical overview. In *The encyclopedia of Louisville*, ed. J. Kleber. Lexington, KY: The University Press of Kentucky.
- Kropotkin, P. 1972. Anarchist communism. In *The conquest of bread*, ed. P. Avrich, 61-70.
- Kurtz, H. 2001. Differentiating multiple meanings of garden and community. *Urban Geography* 22(7): 656-670.
- Laurier, E. 2010. Participant observation. In *Key methods in geography*, ed. Clifford, N., S. French, G. Valentine 116-130 Thousand Oaks, CA: Sage Publications.
- Lawson, L. 2005. City bountiful: A century of community gardening in America. Berkley, CA: University of California Press.
- Lee, K. W. 1983. *Equality without regimentation: An introduction to mutualism.* New York, NY: New Tide Mtl Publishers.
- Lipset, S. M. 1959. Some social requisites of democracy: Economic development and political legitimacy. *The American Political Science Review*. 53 (1): 69-105.
- Louisville Food Blog. 2016. Groups: Food in neighborhoods.

 https://louisvillefoodblog.wordpress.com/group/food-in-neighborhoods-fin/ (last accessed 20 March 2016).
- Louisville Grows. 2014. Who we are: *About us*. http://www.louisvillegrows.org/ (last accessed 23 October 2014).
- Mansbridge, J. J. 1979. The agony of inequality. In *Co-ops, communes & collectives: Experiments in social change in the 1960s and 1970s*, ed. Case, J. Taylor, R. C. R. 194-214. New York, NY: Pantheon Books.

- Markowitz, L. 2012. Expanding access and alternatives: Building farmers' markets in low-income communities. In *U.S. food policy: anthropology and advocacy in the public interest*, eds. L. Markowitz and J. Brett, 73-87. London; New York: Routledge.
- Marx, C., F. Engels. 1946. Essentials of Marx: The communist manifesto. New York, NY: Rand School Press.
- Marrus, M. and Collection Mazal Holocaust.1985. *The unwanted: European refugees in the twentieth century*. New York, NY: Oxford University Press.
- Meijering, L., P. Huigen, and B. Van Hoven. 2006. Intentional communities in rural spaces. *Tijdschrift voor economische en sociale geografie* 98(1):42-52.
- Meltzer, G. 2001. Cohousing: Linking community and sustainability. In *Contemporary utopian* struggles: Communities between modernism and postmodernism, ed. Poldervaart, S., H. Jansen, B. Kesler 197-208 Netherlands: Askant Academic Publishers.
- Miller, D. 1997. Equality and justice. Ratio. 10(3): 222-237
- --- . 1998. Equality and justice. In *Ideals of equality*, ed. Andrew Mason, 21–36. Oxford: Blackwell Publishers.
- Miller, M. A. 1976. Kropotkin. Chicago, IL: The University of Chicago Press
- Miller, T. 2001. The historic roots of sustainability in communities. In *Contemporary utopian struggles:*Communities between modernism and postmodernism, ed. Poldervaart, S., H. Jansen, B. Kesler 225-235 Netherlands: Askant Academic Publishers.
- Moore, S. 2006. Forgotten roots of the green city: Subsistence gardening in Columbus, Ohio, 1900–1940. *Urban Geography* 27 (2): 174–192.
- Nisbet, R. 1973. *The social philosophers: Community and conflict in western thought*. New York, NY: Thomas Y. Crowell Company, Inc.
- Oberlin, R. 1943. Demands of v-gardeners exceed supply of sites in Louisville area. *Courier Journal* 14 March. 3:10-10.
- Okvat, H., A. Zautra. 2011. Community gardening: A parsimonious path to individual, community, and environmental resilience. *American Journal of Community Psychology* 47(3-4):3-4.
- Oved, Y. 1992. The future society according to Kropotkin. *Cashiers du Monde russe et sovietique*. 33(2-3):303-320
- Poldervaart, S. 2001. The concepts of utopianism, modernism, postmodernism, community and sustainability. In *Contemporary utopian struggles: Communities between modernism and postmodernism*, ed. Poldervaart, S., H. Jansen, B. Kesler 11-30 Netherlands: Askant Academic Publishers.
- Price, D., and B. Gebauer. 1995. New perspectives on the transition to agriculture. In *Last hunters first* farmers, ed. D. Price and B. Gebauer, 3-19. Santa Fe, NM: School of American Research Press.

- Proudhon, P. J. 1969a. The collective force. In *Selected writing of P.J. Proudhon*, ed. Stewart Edwards, 113-124. Garden City, NY: Anchor Books Double Day and Company.
- ---. 1969b. Mutualism. In *Selected writing of P.J. Proudhon*, ed. S. Edwards, 56-70. Garden City, NY: Anchor Books Double Day and Company.
- Pudup, M. B. 2008. It takes a garden: Cultivating citizen-subjects in organized garden projects. *Geoforum* 39(3): 1228-1240.
- Rosner, M. 2001. Structure and value change in communal societies. In *Contemporary utopian struggles:*Communities between modernism and postmodernism, ed. Poldervaart, S., H. Jansen, B. Kesler
 54-64 Netherlands: Askant Academic Publishers.
- Scott, J. C. 1998. Seeing like a state: How certain schemes to improve the human condition have failed. New Haven, CT: Yale University Press.
- Shrestha, C. 2011. *Power & politics in resettlement: A case study of bhutanese refugees*. Master's Thesis, University of Kentucky.
- Stone, B. 2007. Urban and rural temperature trends in proximity to large US cities: 1951-2000. *International Journal of Climatology*. 27: 1801-1807
- Stone, B., J. Vargo, D. Habeeb. 2012. Managing climate change in cities: Will climate action plans work?. *Landscape and Urban Planning*. 107:263-271.
- United States Department of Agriculture. 2015. *People's garden*.

 http://www.usda.gov/wps/portal/usda/usdahome?navid=GARDEN_RT1&parentnav=PEOPLES_GARDEN&navtype=RT (last accessed 27 September 2015).
- Visser, A. 2001. Scenario-thinking: A contemporary use of utopia. In *Contemporary utopian struggles:*Communities between modernism and postmodernism, ed. Poldervaart, S., H. Jansen, B. Kesler 81-90 Netherlands: Askant Academic Publishers.
- Wright, G. C. 1985. *Life behind a veil: Blacks in Louisville, Kentucky, 1865-1930*. Baton Rouge, LA: Louisiana State University Press.
- Yater, G. 2001. Louisville: A historical overview. In *The encyclopedia of Louisville*, ed. J. Kleber, i-xxxi. Lexington, KY: The University Press of Kentucky.
- Zablocki, B. 1980. Alienation and charisma: A study of contemporary American communes. New York, NY: The Free Press

APPENDIX A

Community Garden Study Semi-Structures

Interview Questions

Appendix A - Community Garden Study Semi-Structured Interview Questions

Opening: Please take a moment and characterize (in general) your community garden and then perhaps we can discuss specific roles of each person working in the community garden.

General Ouestions:

Who are the people involved in your community gardens (CG)?

Participants (aka:?),

Coordinators (number, hierarchy, aka?),

Financial supporters?

Land Owner?

What are their roles?

What is the difference between your CG and an Urban Farm?

Do you know if your CG differs from others?

Who is allowed/encouraged to join your CG? Are there any requirements to join?

What kinds of tasks take place in the CG and by whom?

Bills-(e.g. water, taxes, salary, other)

Paying for equipment- (e.g. seeds, soil, containers, tools)

Open/close-

Gardening-

Leadership and Democracy

What kinds of ideas or philosophies does your organization draw on? (This could be intellectual or more practical). What aims Mold the CG?

How are these ideas reflected in the garden activities?

Examples-

How is your agenda translated and received by CG members, in your opinion?

How do you handle disagreements should they arrive given the communal nature of the garden?

How are decisions made in the CG for the benefit of the CG?

Is there a hierarchal process? Ex. Leader->coordinator->board Or democratic one?

Is there one particular person or multiple persons to makes overall and daily decisions?

Money

Day to day tasks

Other

Mutualism & Equality

Does your CG interact with other CG's?

Are interactions solely for gardening or are their other activities worked on (if so, what kind)?

Does your CG have an exclusive partnership with another community garden(s)?

If so, what is the purpose of the partnership?

With regard to your organization's day to day activities, what are CG participants responsible for?

Based on your opinion, how well do your CG participants communicate?

Appendix A – Continued

What modes of communication are used between participants within and outside of the garden, to your knowledge?

In which part of Louisville do you think the CG is situated in? (East End, Gaslight District, Highlands, etc.) To your knowledge does the property in which your CG resides have a historical significance? (city/district founder's former property, former victory garden, etc.)

If so, does the significance play a role in the creation and/or activities of the CG?

How is space used and divided in the CG?

Is garden space divided equally? Why or Why not?

How is placement of the garden space decided?

Is there preference given? To whom? Why?

Where are the communal tools/equipment placed? Why?

Is there additional storage space for gardeners? Why or Why not?

Are persons with disabilities accommodated? How?

Are gardeners more or less helpful to those with special needs?

Volunteerism

Who are the CG members?

Does everyone who participates in the CG do so willingly/ voluntarily?

If not than why?

Is there anyone who has been coerced to volunteer? (e.g. required community service, family/friend coercion, paid). How often does this occur?

Property ownership/Capital

Who owns the property used for the CG?

If not owned by the gardeners is there a "buy in option" to have equal ownership?

How are fees (if any) collected?

In what ways are the fees used?

Is there a profit requirement the CG must meet according to investment participants?

Does this garden make any profits? How are the profits used?

Who decided how the fees and/or profit will be spent?

Is there advertising for the CG?

Who provides the service? (Outside company, CG personnel, CG volunteers)

What is the purpose for advertising? Are there monetary advantages?

Are there any food requirements that CG volunteers must meet?

Production?

Types of food?

Are there any requirements for excess/unused food? (Where or who does it have to go to)

To your knowledge does the property your CG reside in have a significant historical background?

APPENDIX B

Community Garden Study Communality Index

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Mutualism				
Do community gardeners help each other with gardening tasks/responsibilities?	3	3	3	1
Yes, everyone works together (3)				
Yes, one to one relationship (2)				
Yes, only upon direction given by coordinator (1)				
No (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Mutualism				
Do community gardeners help each other with gardening tasks/responsibilities?	1	1	3	2
Yes, everyone works together (3)				
Yes, one to one relationship (2)				
Yes, only upon direction given by coordinator (1)				
No (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Mutualism				
Do community gardeners help each other with gardening tasks/responsibilities?	1	1	0	2
Yes, everyone works together (3)				
Yes, one to one relationship (2)				
Yes, only upon direction given by coordinator (1)				
No (0)				

Community Gardens	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Thematic Components				
Mutualism				
Do community gardeners help each other with gardening tasks/responsibilities?	2	2	2	2
Yes, everyone works together (3)				
Yes, one to one relationship (2)				
Yes, only upon direction given by coordinator (1)				
No (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Mutualism			
Do community gardeners help each other with gardening tasks/responsibilities?	2	1	3
Yes, everyone works together (3)			
Yes, one to one relationship (2)			
Yes, only upon direction given by coordinator (1)			
No (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Mutualism				
How is space maintained within the garden? To be overseen by all community garden members (3)	3	3	3	2
Plot overseen by an individual/shared garden by all members (2)				
Plot overseen by an individual (1)				
To be managed by a property owner/organization for capital gain (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Mutualism				
2. How is space maintained within the garden?	2	1	3	2
To be overseen by all community garden members (3)				
Plot overseen by an individual/shared garden by all members (2)				
Plot overseen by an individual (1)				
To be managed by a property owner/organization for capital gain (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Mutualism				
2. How is space maintained within the garden?	2	2	1	1
To be overseen by all community garden members (3)				
Plot overseen by an individual/shared garden by all members (2)				
Plot overseen by an individual (1)				
To be managed by a property owner/organization for capital gain (0)				

Community Gardens Thematic Components	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Mutualism				
2. How is space maintained within the garden?	1	1	1	2
To be overseen by all community garden members (3)				
Plot overseen by an individual/shared garden by all members (2)				
Plot overseen by an individual (1)				
To be managed by a property owner/organization for capital gain (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Mutualism			
2. How is space maintained within the garden?	2	2	3
To be overseen by all community garden members (3)			
Plot overseen by an individual/shared garden by all members (2)			
Plot overseen by an individual (1)			
To be managed by a property owner/organization for capital gain (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Mutualism				
3. Does the community garden help other community garden(s)?	1	1	0	0
Yes (2)				
Yes, but only with certain gardens exclusively and/or under the direction of garden coordinator (1) No (0)				
4. In what way are seeds and implements shared/managed?	2	2	2	1
Garden organization provides seeds and implements to be shared by all members(2)	x	x	X	
Member provides implements and seeds, shares with everyone(2)				
Garden organization provides implements shared by all. Seeds provided by garden organization are used in common garden space only (1)				
Member uses individual implements and seeds for individual plot (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Mutualism				
3. Does the community garden help other community garden(s)?	0	1	0	1
Yes (2)				
Yes, but only with certain gardens exclusively and/or under the direction of garden coordinator (1) No (0)				
4. In what way are seeds and implements shared/managed?	1	1	2	1
Garden organization provides seeds and implements to be shared by all members(2)			X	
Member provides implements and seeds, shares with everyone(2)			X	
Garden organization provides implements shared by all. Seeds provided by garden organization are used in common garden space only (1)				
Member uses individual implements and seeds for individual plot (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center (*)	7th Street Garden (CC & JCEO)
Thematic Components				
Mutualism				
3. Does the community garden help other community garden(s)?	1	1	0	0
Ves (2)				
Yes, but only with certain gardens exclusively and/or under the direction of garden coordinator (1)				
No (0)				
4. In what way are seeds and implements shared/managed?	1	1	1	1
Garden organization provides seeds and implements to be shared by all members(2)				
Member provides implements and seeds, shares with everyone(2)				
Garden organization provides implements shared by all. Seeds provided by garden organization are used in common garden space only (1)				
Member uses individual implements and seeds for individual plot (0)				

	Catholic Charities		Louisville Jefferson County	
Community Gardens		Antioch	Extension Office	Limerick
Thematic Components				
Mutualiem				
3. Does the community garden help other community garden(s)?	0	0	0	0
Yes (2)				
Yes, but only with certain gardens exclusively and/or under the direction of garden coordinator (1) No. (0)				
4. In what way are seeds and implements shared/managed?	1	1	1	1
Garden organization provides seeds and implements to be shared by all members(2)				
Member provides implements and seeds, shares with everyone(2)				
Garden organization provides implements shared by all. Seeds provided by garden organization are used in common garden space only (1)				
Member uses individual implements and seeds for individual plot (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Mutualism			
3. Does the community garden help other community garden(s)?	0	0	0
Yes (2)			
Yes, but only with certain gardens exclusively and/or under the direction of garden coordinator (1)			
No (0)			
4. In what way are seeds and implements shared/managed?	1	0	2
Garden organization provides seeds and implements to be shared by all members(2)			
Member provides implements and seeds, shares with everyone(2)			X
Garden organization provides implements shared by all. Seeds provided by garden organization are used in common garden space only (1)			
Member uses individual implements and seeds for individual plot (0)			

Community Gardens Thematic Components	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Democracy				
5. Is there a hierarchical system in place to implement procedures or structure?	1	1	1	0
No, every decision made by consensus of all group members (2)				
Yes, but put in place by community garden members; system is malleable or amenable; input from gardener(s) part of operations (1)				
Yes, select individual/members make decisions w/o input from gardeners; standards and rules are imposed (concrete) (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Democracy				
5. Is there a hierarchical system in place to implement procedures or structure?	0	0	1	1
No, every decision made by consensus of all group members (2)				
Yes, but put in place by community garden members; system is malleable or amenable; input from gardener(s) part of operations (1)				
Yes, select individual/members make decisions w/o input from gardeners; standards and rules are imposed (concrete) (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Democracy				
5. Is there a hierarchical system in place to implement procedures or structure?	0	0	0	0
No, every decision made by consensus of all group members (2)				
Yes, but put in place by community garden members; system is malleable or amenable; input from gardener(s) part of operations (1)				
Yes, select individual/members make decisions w/o input from gardeners; standards and rules are imposed (concrete) (0)				

Community Gardens	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Thematic Components				
Democracy				
5. Is there a hierarchical system in place to implement procedures or structure?	0	0	0	1
No, every decision made by consensus of all group members (2)				
Yes, but put in place by community garden members; system is malleable or amenable; input from gardener(s) part of operations (1)				
Yes, select individual/members make decisions w/o input from gardeners; standards and rules are imposed (concrete) (0)				

Community Gardens Thematic Components	Americana	East Main Street	Portland Orchard
Democracy			
5. Is there a hierarchical system in place to implement procedures or structure?	0	0	1
No, every decision made by consensus of all group members (2)			
Yes, but put in place by community garden members; system is malleable or amenable; input from gardener(s) part of operations (1)			
Yes, select individual/members make decisions w/o input from gardeners; standards and rules are imposed (concrete) (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Democracy				
6. Do the community gardeners vote on issues of the garden	1	1	1	0
Yes on every aspect (2)				
Yes, but on a limited basis and only with regards to internal issues of the garden (i.e. plot size, operation hours, and plot fee) (1)				
No (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Democracy				
6. Do the community gardeners vote on issues of the garden	1	0	1	2
Yes on every aspect (2)				
Yes, but on a limited basis and only with regards to internal issues of the garden (i.e. plot size, operation hours, and plot fee) (1)				
No (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Democracy				
6. Do the community gardeners vote on issues of the garden	1	1	0	1
Yes on every aspect (2)				
Yes, but on a limited basis and only with regards to internal issues of the garden (i.e. plot size, operation hours, and plot fee) (1)				
No (0)				

Community Gardens Thematic Components	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Democracy				
6. Do the community gardeners vote on issues of the garden	0	1	0	1
Yes on every aspect (2)				
Yes, but on a limited basis and only with regards to internal issues of the garden (i.e. plot size, operation hours, and plot fee) (1)				
No (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Democracy			
6. Do the community gardeners vote on issues of the garden	1	1	2
Yes on every aspect (2)			
Yes, but on a limited basis and only with regards to internal issues of the garden (i.e. plot size, operation hours, and plot fee) (1)			
No (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Volunteerism				
7. Does everyone in the garden participate willingly? Yes (2)	2	2	2	2
Yes, but some are paid a minimal amount through a grant (1) Yes, but provide labor through community service (1)				
Participants are paid a wage or provide labor through judicial system (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Volunteerism				
7. Does everyone in the garden participate willingly? Yes (2)	2	2	2	1
Yes, but some are paid a minimal amount through a grant (1)				X
Yes, but provide labor through community service (1) Participants are paid a wage or provide labor through judicial system (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Volunteerism				
7. Does everyone in the garden participate willingly? Yes (2)	1	1	1	1
Yes, but some are paid a minimal amount through a grant (1)	X	X	X	X
Yes, but provide labor through community service (1) Participants are paid a wage or provide labor through judicial system (0)				

Community Gardens	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Thematic Components				
Volunteerism				
7. Does everyone in the garden participate willingly?	1	2	1	2
Yes (2)				
Yes, but some are paid a minimal amount through a grant (1)	x		X	
Yes, but provide labor through community service (1) Participants are paid a wage or provide labor through judicial				

		I	
Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Volunteerism			
7. Does everyone in the garden participate willingly?	1	2	2
Yes (2)			
Yes, but some are paid a minimal amount through a grant (1)			
Yes, but provide labor through community service (1)	X		
Participants are paid a wage or provide labor through judicial system (0)			

Community Gardens Thematic Components	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Equality				
8. Is everyone treated equally by garden regardless of background and ability? Yes(1)	1	1	1	1
No(0)				
9. Are the roles of each community gardener equally important?	1	1	1	2
Yes (2)				
Yes,but there are a some more important than others (core group) (1)				
No (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Equality				
8. Is everyone treated equally by garden regardless of background and ability?	1	1	1	1
Yes(1)				
No(0)				
9. Are the roles of each community gardener equally important?	2	2	2	1
Yes (2)				
Yes,but there are a some more important than others (core group) (1)				
No (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Equality				
8. Is everyone treated equally by garden regardless of background and ability? Yes(1)	1	1	1	1
No(0)				
9. Are the roles of each community gardener equally important?	1	1	2	1
Yes (2)				
Yes,but there are a some more important than others (core group) (1)				
No (0)				

Community Gardens Thematic Components	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Equality				
8. Is everyone treated equally by garden regardless of background and ability? Yes(1)	1	1	1	1
No(0)				
9. Are the roles of each community gardener equally important?	1	2	1	2
Yes (2)				
Yes,but there are a some more important than others (core group) (1)				
No (0)				

Community Gardens Thematic Components	Americana	East Main Street	Portland Orchard
Equality			
8. Is everyone treated equally by garden regardless of background and ability?	1	1	1
Yes(1)			
No(0)			
9. Are the roles of each community gardener equally important?	2	1	2
Yes (2)			
Yes,but there are a some more important than others (core group) (1)			
No (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Equality				
10. Are there requirements that must be fulfilled in order to participate in the community garden?	2	1	1	0
No, anyone can join (2)				
Yes, limited or flexible requirements (plot fee payment or part of special group) (1)				
Yes, interview and/or multiple specific/firm requirements (plot fee, neighborhood resident, knowledge and ability)(0)				
11. How are plot spaces designated to gardener?	2	2	2	0
None, all plot/garden spaces are shared equally (2)				
Dependent on 1-2 variables (fee amount and availability) (1)				
Dependent on 3 or more variables (fee, availability, history, etc.) (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Equality				
10. Are there requirements that must be fulfilled in order to participate in the community garden?	0	1	2	1
No. anyone can join (2) Yes, limited or flexible requirements (plot fee payment or part of special group) (1)				
Yes, interview and/or multiple specific/firm requirements (plot fee, neighborhood resident, knowledge and ability)(0)				
11. How are plot spaces designated to gardener? None, all plot/garden spaces are shared equally (2)	0	0	2	0
Dependent on 1-2 variables (fee amount and availability) (1) Dependent on 3 or more variables (fee, availability, history, etc.) (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				JCEO1
Equality				
10. Are there requirements that must be fulfilled in order to participate in the community garden?	0	1	1	1
No, anyone can join (2)				
Yes, limited or flexible requirements (plot fee payment or part of special group) (1)				
Yes, interview and/or multiple specific/firm requirements (plot fee, neighborhood resident, knowledge and ability)(0)				
11. How are plot spaces designated to gardener?	0	0	1	0
None, all plot/garden spaces are shared equally (2)				
Dependent on 1-2 variables (fee amount and availability) (1) Dependent on 3 or more variables (fee, availability, history, etc.) (0)				

Community Gardens	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Thematic Components				
Equality				
10. Are there requirements that must be fulfilled in order to participate in the community garden?	1	1	1	1
No anyone can join (2)				
Yes, limited or flexible requirements (plot fee payment or part of special group) (1)				
Yes, interview and/or multiple specific/firm requirements (plot fee, neighborhood resident, knowledge and ability)(0)				
11. How are plot spaces designated to gardener?	0	1	0	0
None, all plot/garden spaces are shared equally (2)				
Dependent on 1-2 variables (fee amount and availability) (1) Dependent on 3 or more variables (fee, availability, history, etc.) (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Equality			
10. Are there requirements that must be fulfilled in order			
to participate in the community garden?	0	0	2
No, anyone can join (2)			
Yes, limited or flexible requirements (plot fee payment or part of special group) (1)			
Yes, interview and/or multiple specific/firm requirements (plot fee,			
neighborhood resident, knowledge and ability)(0)			
11. How are plot spaces designated to gardener?	0	0	2
None, all plot/garden spaces are shared equally (2)			
Dependent on 1-2 variables (fee amount and availability) (1)			
Dependent on 3 or more variables (fee, availability, history, etc.) (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Capitalism				
12. Are there any requirements gardeners must meet regarding production? (i.e. grow 20+ lbs. of tomatoes)?	2	2	1	2
No (2)				
Yes, according to community garden goal (1)				
Yes, according to goal set by owner (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Capitalism				
12. Are there any requirements gardeners must meet regarding production? (i.e. grow 20+ lbs. of tomatoes)?	2	2	2	1
No (2)				
Yes, according to community garden goal (1)				
Yes, according to goal set by owner (0)				

Community Gardens Thematic Components	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Capitalism				
12. Are there any requirements gardeners must meet regarding production? (i.e. grow 20+ lbs. of tomatoes)?	1	1	2	2
No (2)				
Yes, according to community garden goal (1)				
Yes, according to goal set by owner (0)				

Community Gardens	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Thematic Components				
Capitalism				
12. Are there any requirements gardeners must meet regarding production? (i.e. grow 20+ lbs. of tomatoes)?	1	2	2	2
No (2)				
Yes, according to community garden goal (1)				
Yes, according to goal set by owner (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Capitalism			
12. Are there any requirements gardeners must meet regarding production? (i.e. grow 20+ lbs. of tomatoes)?	2	2	2
No (2)			
Yes, according to community garden goal (1)			
Yes, according to goal set by owner (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Capitalism				
13. How is produce managed?	3	3	3	1
Shared by all community garden members, may take according to needs. Excess is used as a source for trade or replenishment for the entire community garden (3)				
Using a standard measure, divided and distributed to each member. Excess is used as a source of funding or replenishment for the entire community garden (2)				
Garden composed of individual plots (participant maintains and retains produce) and common garden used by all members(1)				
Individual access to produce and seeds only, which may be used or sold as desired (0)				

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Capitalism				
13. How is produce managed?	1	1	3	1
Shared by all community garden members, may take according to needs. Excess is used as a source for trade or replenishment for the entire community garden (3)				
Using a standard measure, divided and distributed to each member. Excess is used as a source of funding or replenishment for the entire community garden (2)				
Garden composed of individual plots (participant maintains and retains produce) and common garden used by all members(1)				
Individual access to produce and seeds only, which may be used or sold as desired (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Capitalism				
13. How is produce managed?	1	1	0	0
Shared by all community garden members, may take according to needs. Excess is used as a source for trade or replenishment for the entire community garden (3)				
Using a standard measure, divided and distributed to each member. Excess is used as a source of funding or replenishment for the entire community garden (2)				
Garden composed of individual plots (participant maintains and retains produce) and common garden used by all members(1)				
Individual access to produce and seeds only, which may be used or sold as desired (0)				

Community Gardens Thematic Components	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Capitalism				
13. How is produce managed?	0	0	0	1
Shared by all community garden members, may take according to needs. Excess is used as a source for trade or replenishment for the entire community garden (3)				
Using a standard measure, divided and distributed to each member. Excess is used as a source of funding or replenishment for the entire community garden (2)				
Garden composed of individual plots (participant maintains and retains produce) and common garden used by all members(1)				
Individual access to produce and seeds only, which may be used or sold as desired (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Capitalism			
13. How is produce managed?	1	1	3
Shared by all community garden members, may take according to needs. Excess is used as a source for trade or replenishment for the entire community garden (3)			
Using a standard measure, divided and distributed to each member. Excess is used as a source of funding or replenishment for the entire community garden (2)			
Garden composed of individual plots (participant maintains and retains produce) and common garden used by all members(1)			
Individual access to produce and seeds only, which may be used or sold as desired (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Capitalism				
14. How are plot fees used?	2	2	2	1
None collected(2)				
Used to offset/pay for community garden needs (water bill, tools, etc)(1) For profit (0)				

Community Gardens Thematic Components	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Capitalism				
14. How are plot fees used?	1	1	2	1
None collected(2)				
Used to offset/pay for community garden needs (water bill, tools, etc)(1) For profit (0)				

Community Gardens Thematic Components	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Capitalism				
14. How are plot fees used?	1	1	1	1
None collected(2)				
Used to offset/pay for community garden needs (water bill, tools, etc)(1) For profit (0)				

Community Gardens Thematic Components	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Capitalism				
14. How are plot fees used?	1	1	1	1
None collected(2)				
Used to offset/pay for community garden needs (water bill, tools, etc)(1) For profit (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Capitalism			
14. How are plot fees used?	1	1	2
None collected(2)			
Used to offset/pay for community garden needs (water bill, tools, etc)(1)			
For profit (0)			

Community Gardens Thematic Components	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Capitalism				
15. What is the role of the landowner?	2	2	2	2
No ownership or equally owned by all garden participants (3)				
Publicly owned (2)	x	х		
Privately owned by garden organization itself (2)			X	X
Privately owned but with minimal interaction/control of garden activity (1)				
To control production, exchange, and capital (0)				

Community Gardens Thematic Components	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Capitalism				
15. What is the role of the landowner?	1	1	2	1
No ownership or equally owned by all garden participants (3)				
Publicly owned (2)				
Privately owned by garden organization itself (2)			X	
Privately owned but with minimal interaction/control of garden activity (1)				
To control production, exchange, and capital (0)				

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Capitalism				
15. What is the role of the landowner?	2	2	2	2
No ownership or equally owned by all garden participants (3)				
Publicly owned (2)	x			x
Privately owned by garden organization itself (2)		x	х	
Privately owned but with minimal interaction/control of garden activity (1)				
To control production, exchange, and capital (0)				

Community Gardens Thematic Components	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Capitalism				
15. What is the role of the landowner?	1	1	2	2
No ownership or equally owned by all garden participants (3)				
Publicly owned (2)			X	Х
Privately owned by garden organization itself (2)				
Privately owned but with minimal interaction/control of garden activity (1)				
To control production, exchange, and capital (0)				

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Capitalism			
15. What is the role of the landowner?	2	1	2
No ownership or equally owned by all garden participants (3)			
Publicly owned (2)	x		
Privately owned by garden organization itself (2)			
Privately owned but with minimal interaction/control of garden activity (1)			
To control production, exchange, and capital (0)			

Community Gardens	UPA Horticulture	U of L Cultural Center Garden Commons	Beuchel Park Baptist Church (BPBC)	Old Louisville
Thematic Components				
Capitalism				
16. Do non-gardening activities take place in the garden?	2	2	1	1
Yes (2)				
Sometimes, with permission of property owner or organization (1)				
No, not allowed (0)				
Totals Max = 35	30	29	26	16

Community Gardens	Phoenix Hill	Billy Goat Hill	Garden of Goodness	Shipping Port
Thematic Components				
Capitalism				
16. Do non-gardening activities take place in the garden?	1	2	2	2
Yes (2)				
Sometimes, with permission of property owner or organization (1)				
No, not allowed (0)				
Totals Max = 35	16	17	30	19

Community Gardens	People's Garden	Louisville Grows	St. Francis Center	7th Street Garden (CC & JCEO)
Thematic Components				
Capitalism				
16. Do non-gardening activities take place in the garden?	2	2	1	1
Yes (2)				
Sometimes, with permission of property owner or organization (1)				
No, not allowed (0)				
Totals Max = 35	16	17	14	15

Community Gardens	Catholic Charities	Antioch	Louisville Jefferson County Extension Office	Limerick
Thematic Components				
Capitalism				
16. Do non-gardening activities take place in the garden?	1	1	1	2
Yes (2)				
Sometimes, with permission of property owner or organization (1)				
No, not allowed (0)				
Totals Max = 35	12	17	14	21

Community Gardens	Americana	East Main Street	Portland Orchard
Thematic Components			
Capitalism			
16. Do non-gardening activities take place in the garden?	1	1	1
Yes (2)			
Sometimes, with permission of property owner or organization (1)			
No, not allowed (0)			
Totals Max = 35	17	14	30

CURRICULUM VITA

NAME: Victoria A Montgomery

ADDRESS: 7103 Poplar Dr.

Charlestown, IN 47111

DOB: Montebello, California – August 2, 1979

EDUCATION

& TRAINING: B.A., Geosciences

Indiana University Southeast

2008 - 2012

M.S., Applied Geography University of Louisville

2013 - 2016

AWARDS: Graduate Student of the Year

University of Louisville Geography & Geosciences

2015

Applied Geography Scholarship

University of Louisville Applied Geography Scholarship

2014

David Starr Jordan/Ed Quinn Memorial Scholarship

Indiana University Southeast

2012

MEMBERSHIPS: American Association of Geographers

Communal Studies Association

NATIONAL MEETING

PRESENTATIONS: American Association of Geographers

Annual Meeting, Chicago, IL. 2015

An Exploration of Anarchist Geography through Fight Club,

a novel by Chuck Palahnik

Communal Studies Association

Annual Meeting, Harrodsburg, KY. 2015

An Exploration of Anarchist Geography through Fight Club,

a novel by Chuck Palahnik