THE UNIVERSITY OF CHICAGO

WORDS FROM THE GROUND:

SOCIAL INTERACTION AND COMMUNAL SOLIDARITY IN COMMUNITY GARDENS

A DISSERTATION SUBMITTED TO

THE FACULTY OF THE DIVISION OF THE SOCIAL SCIENCES

IN CANDIDACY FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

DEPARTMENT OF SOCIOLOGY

BY

HAITONG XU

CHICAGO, ILLINOIS

AUGUST 2024

Table of Contents

List of Tables

List of Figures

Introduction

In a lush community garden in Philadelphia, an old woman is working alone under the morning sun. With her gaze fixed firmly to the ground, carefully weeding her personal plot while picking her daily harvest of fresh tomatoes, her silhouette is obscured by the tall vegetation around her. She shares her personal plot with two of her friends – who she met and befriended through the garden. Yet both of them seem preoccupied, leaving her the only one working in the plot for the day. The temperature is at a toasty 28 degree Celsius, but with an even hotter day ahead, this is the best window for one to attend their crops. Yet, despite the preferable weather and a large garden membership, the community garden seems empty, with only the sound of birds and windchimes echoing between the neighboring buildings. As she rises up to wipe her sweat and apply another layer of mosquito repellant, she notices another gardener emerges from the greenery. A young man in his early thirties, he has just finished his regular chores and is navigating his way to the garden's gate through the sprawling herbs and vines, clutching a large overripe zucchini in his hand. As the two pass by one another, the young gardener acknowledges the old woman with a subtle nod. The two know each other well. They have met quite a few times during garden meetings, and the young man has approached her before for advice on plants. Yet, the old woman replies with a simple wave without speaking a word. As the young gardener unlocks and closes the cranky garden gate with an unpleasant shriek, the garden returns to its usual silence, enveloped by the sound of nature.

Such a scenario is a common sight in many established community gardens across Philadelphia. Contrary to what one might assume, the community gardening experience as an actual activity (at least in many American cities) is often characterized by isolated gardeners working independently in their own personal plots, with little opportunity to actually meet and

have conversations with one another. This means that, outside of the regular garden meetings and clean-ups (which will also be discussed in this dissertation), community gardeners often have very limited opportunity to meet and have face-to-face social interactions with their fellow gardeners. As a result, the community gardening experience often bears an uncanny resemblance to the solitary urban life of our modern society, and unfortunately may fractally replicate the social isolation which these initiatives strive to address.

Yet, despite this seeming lack of temporal overlap where windows for face-to-face interactions are few and far between, there is a strong presence of social networks among garden members, and in some gardens, a strong sense of communal solidarity. Many garden members report sharing a deep bond of trust, friendship and camaraderie with many of their fellow gardeners, most of whom they knew through the garden itself. Within the community gardens, gardeners work with each other closely through sharing and collaboration. Many are often eager to share their harvest with other gardeners they have befriended, and exchange seeds with their peers for exciting future projects. It is even more common for gardeners to share labor and horticultural expertise with their peers, offering a hand in weeding and pest control, or helping to water others personal plots while the owners are away. In addition these garden friendships often extend beyond the gardening setting. It is not uncommon for garden members to socialize with their fellow gardeners both inside and outside the garden, and more importantly many often seek help from their fellow gardeners during times of need – from home refurbishment to divorce counseling. Thus, in the contemporary urban landscape dominated by solitude and individualism, community gardens have become a viable channel for their members to find company. This is especially important for retired elderly living by themselves, and during the covid-19 pandemic where social distancing policies have inadvertently created social isolation during a time of significant

economic and psychological hardship. It is also worth noting that community gardening is a collective affair, where many of its essential amenities (such as its water supply and many of its common areas) require team effort to maintain. As a result, building a sense of community is essential for the sustainable operation of the garden as an organization over a long period of time.

The strong presence of friendship and communal solidarity raises an interesting paradox. How can community garden members build and maintain a sense of communal solidarity despite the apparent lack of face-to-face direct social interactions among garden members? Do gardeners find friendship and build communities through the limited opportunity of direct social interaction they have, or do they have to rely on alternative channels that do not require physical and temporal copresence to communicate with one another. One obvious candidate for such an alternative channel is the actual activity of gardening itself, which constitutes the mainstay of the community gardening experience. Given the vast selection of species and cultivars gardeners may cultivate, as well as the great diversity and rich tradition of gardening as means for self-expression, a community garden plot certainly contains the potential to carry a lot of meaningful information about its caretakers, while giving its spectator many elements to ponder upon. Because of this communicative dimension of gardening, it is thus important to explore its characteristics as a non-verbal channel for social interaction, as well as the role gardening may play in shaping the sense of communal solidarity in these often highly individualistic environments. To what extent do community gardeners actually recognize the garden itself as a viable and socially important form of communication? How do these gardeners interpret and respond to these non-verbal messages? How do different types of garden plots (including personal plots and different types of communal plots) influence the social dynamics in these communities, and how do they differ in their communal impacts?

In addition, many community gardens organize regular garden meetings, group clean-ups and other community events. These organized events, especially the garden meetings, offer community garden members rare opportunities where they may have face-to-face social interactions with their garden peers outside their own personal circles, albeit under a more structured setting. What roles do these structured, verbal-based social interactions play in shaping the sense of communal solidarity in community gardens, and how do they compare to their nonverbal counterparts? Building robust social connections among garden members and bridging the communities across race, age and other socioeconomic divisions are the cornerstone of many community gardens' organizational missions. Thus, unraveling these questions would help community garden practitioners to be more effective in achieving their social goals, while also aiding community gardens to be more organizationally sustainable and resilient in the long run. And given the parallel between the often solitary community gardening experience and the physical isolation of modern urban life, by using community gardens as a case study, we can try to understand how people may find friendship and build solidarity in an environment of seeming solitude.

Based on my research, I argue the gardens themselves are indeed used by gardeners as a channel for social interaction. As a form of non-verbal, slow paced, indirect social interaction, gardens play a key role in shaping the sense of solidarity in community gardens, arguably more so than the more structured verbal-based social interactions found in garden meetings. Personal plots, in particular, often play a pivotal role in building and maintaining communal solidarity among garden members. As a channel for indirect social interactions, personal plots can help gardeners overcome the lack of physical or temporal copresence in the community garden setting, as the interaction participants are not required to be present in the same place at the same time. The temporal insensitivity of the gardenscapes also allows gardeners to have the time and freedom to

ruminate on the information they pick up, selecting and interpreting whatever elements that they find meaningful and relevant. In addition, personal plots do not have a designated function. The conventional association for the interpretation of personal plot is relatively loose, making these plots a conglomerate of potentially meaningful information. This allows gardeners to suspend the myriad of differences in their ideals for their community garden, and use their common passion for gardening and horticulture as a shared context to sustain the social interaction. Thus, by evoking the near-universal passion for gardening among community garden members while remaining relatively open for interpretation, personal plots also represent an interaction platform that is relatively accessible.

Personal plots contribute to the communal solidarity of community gardens in two main ways. On one hand, garden innovations, such as growing unusual plants and adopting novel gardening methods, represent a form of self-recommendation. Through these outstanding displays of their horticultural enthusiasm and expertise, gardeners may advertise (whether intentionally or unintentionally) their interests on a specific matter, and fetch the attention of people who share their passion. This can help to foster new friendships among small groups of like-minded gardeners. On the other hand, good personal plot upkeep in the form of weeding and pest control as well as having a well-planted plot stocked with plants that require more than just minimal care, represents a form of self-certification that maintains harmony across the whole membership. Personal plot upkeep is often interpreted as an approximation for the personal commitment of the plot owner, though the state of personal plot may not be the most accurate indicator for commitment. Having a well-planted and well-weeded plot validates a gardener as a non-disruptive member within the greater community through display of conformity, the gardeners can certify themselves as dedicated, neighborly members of the garden.

This dissertation also shows that, perhaps counterintuitively, communal plots and garden meetings can often have a negative effect on the sense of community among garden members. Despite having "communal" in their name, communal plots often have a rather polarized reception among garden members. Some communal plots, most notably ones that grow vegetables dedicated for food donation programs, are well received and have a unifying effect among members. In contrast, communal plots with rare and difficult ornamental plants overseen by designated caretakers are often treated with indifference and avoidance. I argue that the reason for this polarized reception is due to the low accessibility of some communal plots, both in terms of their form and their content. As a channel for social interaction, communal plots vary significantly in their technical difficulty and their ease for utilization. Compared to vegetable plots, communal plots that grow difficult plants can be a daunting project to take on. This technical barrier makes these communal plots rather exclusive spaces. On the content level, unlike personal plots, communal plots often have a clearly coded set of meanings. Each communal plot is designed to serve a specific function, and embodies a particular aspect of the community garden's overall mission. These missions may or may not align with the personal ideology of individual gardeners. Thus, while personal plots can appeal to all gardeners thanks to their shared passion for gardening, the specialized function of communal plots as well as the specific values they entail can make them less generally accessible for many gardeners. The misalignment between the value of a communal plot and the personal ideal of a gardener can also be a leading cause of division and conflict among the garden membership.

The garden meetings, with their verbal face-to-face format, can rather unfortunately be even more divisive. In particular, when discussing non-gardening social issues, garden meetings can often become quite sectorial and confrontational. There are many reasons that contribute to the

general ineffectiveness of garden meetings in building communal solidarity among gardeners, including the ritualistic nature of most garden meeting agendas, the garden coordinators' lack of experience in tackling social issues, and even the spatial arrangement of meeting venues. But perhaps most importantly, these conflicts stem from the meeting's verbal face-to-face format, which limits the room for open interpretation that could accommodate the different interests, ideologies and personalities of different gardeners. Relying on direct face-to-face social interaction as their platform, garden meetings have a clearly defined agenda which frames the interaction. And due to the social nature of some agendas, most notably issues around race, class, gender and generational divisions, during discussions, the shared identity of community gardeners can often become obscure, superseded by the personal demographic and ideological identities of individual gardeners. This often creates a "us versus them" mentality where gardeners become defensive and belligerent, making divisive clashes more likely to erupt.

By comparing the indirect social interactions facilitated by personal plots and communal plots, as well as the direct social interaction through garden meetings, I argue that the inclusivity and general accessibility of an interaction is not only determined by the content of an interaction, but is also dictated by its form. It is not surprising that messages with a vague, encompassing agenda and a wide appeal would be able to accommodate a more diverse set of priorities and ideals, while those with a narrow, clearly defined agenda can sometimes be seen as controversial and divisive. But the form of the interaction itself can also change the accessibility of the message, thereby influencing its impact on the community. Like the famous phrase by Marshall McLuhan, the medium, at least sometimes, is the message (1967).

This dissertation adopts a mixed method approach of ethnography, semi-formal interviews, and surveys. I focused on seven community gardens across Philadelphia over the course of five

years during the growing season, mainly in the warmer months from June to August. These seven community gardens are located in different parts of the city, each with a slightly different assortment of demographic composition, operational scale, and organizational structure. Two of these gardens are based in predominantly Black working-class neighborhoods, three are located in predominantly White middle class neighborhoods, while the remaining two are operating in mixed-race communities experiencing gentrification, both having mixed-raced memberships. Three of the larger gardens have formal organizational structure, hosting regular garden meetings and garden clean-ups while also having a team of coordinators overseeing the operation. The largest of the three has a rotating leadership committee, and holds regular elections. The remaining four gardens also vary in their operational scale and their level of organizational formality, often led by passionate individuals who are also the founder of the initiative. All these gardens are supported by the Pennsylvania Horticultural Society (PHS) and the Neighborhood Gardens Trust (NGT), two of the leading umbrella organizations for the community gardening movement in Philadelphia. Thanks to their support, all seven gardens have, for the most part, secure land ownership, and practice organic gardening. Choosing these seven gardens allows me to have a broad coverage, while giving the opportunity to compare and control some of the important variables, such as the socioeconomic status, cultural and ethnic backgrounds of their members. It also allows me to control important variables on the organizational level, such as variations in their membership size, formality of operation, and the specific leadership dynamics of these initiatives.

Ethnography constitutes the mainstay of my data. I conducted ethnographic research in the selected gardens in the summers of 2018 and 2019 before the covid-19 pandemic, as well as in the summers of 2022 and 2023 when pandemic restrictions were lifted. During my fieldwork, I visited the community gardens on a daily basis, mainly in the mornings as well as between late afternoons

to early evenings, time windows when the weather is cooler, and more gardeners are present at the gardens. As an amateur naturalist and an experienced gardener myself, I contributed my knowledge and labor to garden maintenance. These include helping gardeners with weeding, watering and pest control in their personal plots through manual labor, as well as contributing to the planting, pruning, fruit harvesting and other forms of regular maintenance in various communal plots in different initiatives, from fixing garden appliances to attending beehives. Relying on my own knowledge and experience in gardening, I also assisted gardeners on specific horticultural matters. These include the identification of various insects and wild plants, offering suggestions on environmentally responsible weed and pest control, as well as helping gardeners in building various structures, contraptions and other horticultural arrangements. These experiences helped me build a strong connection with the gardeners. They also represent the mainstay of my ethnography, where I have the opportunities to observe gardening activities and talk to gardeners in informal settings. Through participant observation, I am able to understand how gardeners interpret and react to the plots managed by their peers, as well as the various ways they themselves may express themselves through gardening. It also grants me a front row seat when the occasional verbal social interactions do emerge spontaneously in the garden setting, from the mutual sharing and collaborations between gardeners, to afternoon teas and small dinner parties. In addition, I audited garden meetings and contributed to organized gardening clean-ups, observing these structured interactions first hand and using these occasions to reach out to gardeners of particular interests.

The ethnographic data is supplemented with interviews and surveys. I conducted semi-structured interviews with 51 different gardeners, with multiple follow-up interviews with the same interviewees. In addition, I also interviewed 6 coordinators from the umbrella organizations

of NGT and PHS. The number of interviewees selected from each garden is roughly in proportion with the membership size of each initiative, and I try my best to give gardeners of all demographics some representation in my sampling. These interviews give a more detailed and personal perspective, and they allow me to further investigate topics of particular interest. During the early phase of the research, I distributed surveys in four of the seven community gardens covered in this research, asking questions such as the plant selection, gardening practice and gardening routine of community gardeners, as well as their social experience and their subjective sense of community as a garden member.

Chapter 1 | Theoretical Framework: Indirect Interaction, Solidarity and the Community Garden

The construction and maintenance of solidarity within a community has been a topic of great interest among sociologists. Some have argued that due to the lack of similarities, cooperation and direct social interactions among individuals in modern society, there is a decline in trust and social cohesion between individuals in many communities, especially in the urban setting. However, this theoretical framing might have overemphasized the importance of direct social interactions in building solidarity – a foundational assumption in this argument. Instead, the indirect forms of social interactions may play just as important a role in the fostering and maintenance of solidarity in the modern world.

In this chapter, I will examine the existing literature on the topic of solidarity and social interaction, and propose a new angle of studying communal solidarity in the modern context using community gardens as case studies. I will also argue for the use of community gardens as a prime case study for understanding the impact of both direct and indirect social interactions on communal solidarity. I argue that while indirect social interaction is often characterized by its non-linguistic medium and the lack of physical copresence of interaction participants, it is best identified by the temporal insensitivity of its messages, where a quick timely response is not socially expected. In addition, compared to its verbal-based direct social interaction counterpart, indirect social interaction is distinguished by three key characteristics: its high dependence on shared context, the highly polysemous nature of its message, and the proactive role of the responder. After reviewing the strength and limitations of the current literature on solidarity, I argue that the existing theoretical frameworks are often limited by their overemphasis on direct social interaction, where face-to-face conversations between interaction participants are required. The importance of

indirect social interaction, social interactions that in the establishment and maintenance of solidarity requires more academic attention. Building on these theoretical foundations, I will give an overview of the existing empirical studies on communal solidarity and indirect social interactions, and identify the strength and limitations of these approaches.

1.1. Community garden, solidarity and indirect social interaction

Community gardens are "plots of urban land on which community members can grow flowers or foodstuffs for personal or collective benefit," while its members "share certain resources, such as space, tools, and water" with their fellow gardeners (Glover 2003). Community garden is part of the solidarity economy movement, which focuses on socioeconomic justice and the shared "spirit of solidarity" within the target communities, highlighting the social elements in economic activities that are often overlooked by the mainstream market economy (Defourny & Develtere 1999; Wright 2010). This social dimension distinguishes community gardens from gardening hobby groups, where the only primary goal of the organizations is to facilitate the fulfillment of horticultural interests. Instead, in addition to producing food and building greenspace, community gardens also serve a wide range of organizational goals that bring benefits to the entire membership as a collective and, in many cases, the greater community it belongs to (Firth et al 2011).

Most notably, community gardens can serve a wide range of social functions through horticultural practices. Community gardens can be a hub for education, connecting people with nature and their agricultural heritage (Saldivar-Tanaka & Krasny 2004; Lawson 2005; King 2008; Draper & Freedman 2010; Cohen & Reynolds 2014). They could also serve as a nursery for community development, providing the physical venue and organizational structure for social connection, community organizing, and resource mobilization (Saldivar-Tanaka & Krasny 2004; Glover et al 2005; Lawson 2005; Kingsley & Townsend 2006; Pudup 2008; Cohen & Reynolds

2014; Shinew et al 2017). And by promoting food accessibility, food sovereignty and economic supplement, community gardens can also be a site for social empowerment (Saldivar-Tanaka & Krasny 2004; Pudup 2008; Carney et al 2012; Cohen & Reynolds 2014; Hoover 2017). These social dimensions of community gardens are not only the central missions of many garden initiatives, but also integral to their long-term survival due to their very cooperative nature (Glover et al 2005).

However, like many social movements with a heterogeneous membership, the success of community gardens in achieving these goals is by no means guaranteed. In addition to many external restraints such as funding and landownership, community gardens may also face challenges building a sense of solidarity and community among their often diverse and highly opinionated memberships. First, their wide range of goals can make uniting all gardeners rather challenging. Community gardens may serve a wide range of organizational goals (Cohen & Reynolds 2014; Ernwein 2014; McClintock & Simpson 2017), and these goals may compete with one another. Individuals may also choose to join community gardens for different reasons (Scheromm 2015; Silva et al 2016; Rosan & Pearsall 2017), and may have different visions of what a community garden should be (Aptekar 2015). Those whose personal goals deviate from the gardens' organizational ideologies might feel marginalized. This alienation of garden members can be further exacerbated by the "power struggles and backbiting" at the leadership level (Schmelzkopf 1995). Second, community gardens do not exist in a vacuum, and are often themselves subjected to the socioeconomic inequalities which they aim to address. Marginalized individuals with low socioeconomic status might remain disadvantaged even in the community garden setting (Guthman 2008; Firth 2011; Reynolds 2014; Aptekar 2015; Christensen 2018; Andreas & Schützenberger 2018). Study has also shown that the organizational capacity of a

community garden needs to attain a certain critical mass before it could have a positive social impact to the greater community it is located in (Kingsley & Townsend 2006).

Given these challenges, it is important to explore how community gardens can realize their social commitments while building a sense of solidarity among garden members. To make it perhaps even more challenging, the community gardening experience as an actual activity (at least in many American cities) is often characterized by isolated gardeners working independently in their own personal plots, with little opportunity to actually meet and have conversations with one another. This means that, outside of the regular garden meetings and clean-ups (which we will also explore in this dissertation), gardeners have very limited opportunity to meet and have face-to-face verbal interaction with their fellow gardeners. As a result, the community gardening experience often bears an uncanny resemblance to the solitary urban life of our modern society, and unfortunately may fractally replicate the social isolation these initiatives strive to address.

1.2. The characteristics of indirect social interaction

The apparent lack of direct interaction among garden members makes community gardens an interesting case to study the influence of non-verbal social interactions on solidarity. Given this limitation, indirect social interactions that employ non-verbal media have to play a key role in building the social impact and long-term survival of these gardens. To better understand the mechanism of how indirect social interaction may influence solidarity, we must first identify its key characteristics. Though this dissertation has so far presented indirect social interaction as a contrasting alternative to the face-to-face (or direct) social interaction that relies on verbal dialogue as its primary medium, the distinction between the two requires further elaboration. Due to technological advancements, the lack of physical copresence of interaction participants, though often a relevant factor, can no longer be treated as a defining feature of indirect social interaction.

The covid-19 pandemic in particular has ushered in a new norm where video calls have become a routine practice. Should a zoom meeting, therefore, be deemed more indirect and hence treated differently as a face-to-face conversation? The answer is probably no. The importance of physical copresence in many scenarios, when a timely response or the real-time transmission of paralinguistic information is impossible, however, does lead us to something important in the classification. Similarly, the material medium of the message, in itself, should not be taken as the defining characteristic of indirect social interactions. Face-to-face social interactions often employ a large volume of non-verbal cues – including the use of objects in a performative manner.

In this dissertation, I argue that indirect social interactions are best characterized by the low **temporal sensitivity** of the message, and hence often do not require the temporal copresence of interaction participants. An utterance, and thereby the social interaction it is situated in, is more temporally sensitive when a timely response is more socially expected from the initiating party. In a temporally sensitive form of social interaction, the pause before a reply could quickly become a meaningful message in itself if the response was delayed beyond the socially expected timeframe. This temporal understanding of indirect social interaction puts the directness of an interaction on a gradual scale, rather than a binary distinction between zero and one. The more temporally sensitive an interaction is, the more direct the social interaction becomes. A face-to-face conversation, for instance, is usually temporally sensitive. The speaker expects a timely response from the listener, and the content of the interaction is often only relevant and valid at the very moment. In fact, face-to-face conversation is so temporally sensitive, a slow response is a message in itself, sometimes signally hesitation, deep thinking, distractedness, dishonesty, and a myriad of other meanings to the first speaker. Similar conventional expectation can be observed in other similar media of social interactions, such as phone calls and video calls.

In more temporally insensitive interactions, the social expectation for a timely reply becomes less pressing. This is not only determined by the medium which the social interaction assumes, but also the social convention that is expected of it. Email interactions, for instance, are usually less temporally sensitive than face-to-face verbal conversations despite also adopting a predominantly verbal medium. While a slow email response on the time scale of a week usually warrants a follow-up email, an immediate reply is usually not socially expected in most occupations. Similarly, while online social media often assume a conversation-like presentation, these exchanges are fundamentally a lot less temporally sensitive, and responding to a thread in days, weeks or even years after its initial posting may be deemed as socially appropriate depending on the specific context. In forms of social interactions that are extremely temporally insensitive, such as publications, arts, and architecture, the expectation for a timely response can be so low, that these mediums are often seen as non-interactive in nature. Scholars may often engage in vigorous academic debates with publications decades, or centuries before. And while the statement that art can be timeless may not necessarily be true, how soon the viewer was able to see the artwork after its initial conception is rarely a major concern. The viewers are also rarely compelled to respond to the artists, as they may have lived hundreds of years before the interaction even took place.

Time is not completely irrelevant in a temporally insensitive interaction, however. Rather, the low social expectation for a speedy response in these social interactions invites the "uptakers" to ruminate on the message they perceive, while also giving them the opportunity to craft their responses with more care and deliberation. Noted that in sociolinguistics, the uptake is defined as the response to a message that is delivered through broadcasting communication, and in this dissertation the individual who receives these messages will be referred to as an uptaker. In some cases (such as the community garden), this process may unfold over the span of weeks, sometimes

even an entire season. In addition, because temporally insensitive interactions operate at a pace that is drastically different from that of direct interaction, they create a sense of transcendence that allows these voices to rise above the mundane – after all, action speaks louder than words. This can be observed in other temporally insensitive interactions too. People may spend days working on the exact wording of an important email; months and even years may pass for a scholar to publish an academic response to a previous study; while literary critics and art historians may spend decades studying the meaning and artistic brilliance of an enigmatic masterpiece created by a classical master centuries before.

Because indirect social interactions often (but not always) rely on non-verbal based communication as the primary carrier of meanings, to understand its characteristics we need to first identify their main characteristics and compare it with verbal based social interactions. Non-verbal communication can be highly indexical. Many social linguists, drawing parallel between linguistic and non-linguistic cues, have detailed the mechanisms that produce these indexical associations (Goffman 1981; Keane 2004; Gal & Irvine 2019; Silverstein 2023). In his quintessential book on face-to-face interaction and verbal exchange *Forms of Talk*, Goffman suggests that verbal conversation is a "ritual interchange" that follows a set of norms in its structure, and these ritual constraints ensure the exchange is both directional and intentional (Goffman 1981). Goffman identifies several "system requirements and system constraints" for a viable conversation, namely "a two-way capability" for the involved parties to readily transmit, receive and interpret the message, "back-channel feedback capabilities" that reassure the message is properly received, various signals that facilitate the ritualized practice of initiation, turn-taking and the disruption of them during a conversation, "framing capabilities" that channels the interpretation of the message, obliging to conversational norms, and the screening of "eavesdropping" and competing noises

(1981). According to Goffman, these internalized protocols help to ensure that the utterance does not carry "something unintended and untoward", and these social devices help to make words "great device for fetching speaker and hearer into the same focus of attention and into the same interpretation schema" that is relevant for the situation (1981).

These premises, however, are not as apparent in an indirect social interaction. This presents unique difficulties regarding the transmission and interpretation of the message for both the initiating "speaker" and the responding "hearer". First, from the perspective of the initiator, attracting the right attention without the many conveniences in a face-to-face verbal conversation means that indirect social interactions rely heavily on sharing social context between the two involved parties. Due to the temporal insensitivity of the message, the interaction participants are often separated in time and space, where the initiating message is often broadcasting and non-directional in nature. For many indirect social interactions, as the case studies of many social movements have clearly demonstrated, it can be difficult for the responders to weed out competing noise as Goffman has proposed for verbal-based face-to-face social interaction. Eavesdropping of nonparticipants would also be irrelevant for the very same reason. Therefore, in order to reach their intended audience, indirect social interactions have to rely on certain mechanisms that would help to attract the right attention from the right persons. Thus, as with an opening statement in verbal conversations which "open up a channel of communication which stays open beyond the hope-for reply that ratifies the opening", the initiator needs some form of carrier that invites and thereby initiates an exchange, but perhaps in a more dramatic manner (Goffman 1981). The cover of a book or the poster of a movie, for instance, serve this very purpose.

But being noticed is only half the story. In order to make the information carrier recognizable to the potential responder, the initiator in an indirect social interaction needs to draw from a library

of non-verbal semantics accessible for both parties. This “domain of the signifieds”, according to Roland Barthes, has to be shared among the community of a specific culture and ideology and is what grants meaning to images as a means of communication (Barthes 1977b). This desperate need for a shared cultural context is especially evident in the art world, where the artistic message often relies on a rich tradition of symbolism and aesthetic expression. The lack of cultural context about non-Western arts among the Western audience and critics alike means that even after active efforts have been made to introduce these works to Western galleries, the audience is only able to respond to these non-Western works with their raw emotions while “remaining essentially ignorant about them” (Hart 1992). And for museum visitors to truly appreciate an artwork, scholars have argued that an unforgettable aesthetic experience requires adequate contextual cultural capital relevant to the cultural background and aesthetic tradition of the artwork (López Sinatas, García Álvarez & Pérez Rubiales 2012). In these scenarios, indirect social interaction shares great similarity with face-to-face conversation, where the framing of the interaction can remain relatively constant through the course of interaction if both parties “speak the same language”, while being almost completely illegible if such premise is absent.

However, for those information carriers without a definitive code of reference (such as photography according to Barthes), this shared library of context and meanings may not be as apparent. In these scenarios, individuals have to construct their own scheme of reference. Schutz argues this is achieved “on the basis of previous direct experience with others”, where an accumulation of direct social interactions is abstracted and internalized into “personal ideal types” – our personal expectations of the often-anonymous others (Schutz 1970c). Therefore, unlike a face-to-face conversation where both parties are “sensitively aware of the nuances of each other's subjective experiences” and making adjustments accordingly, these indirect interactions, at least

in their initial phases, have to be based on personal presumptions and previous experiences. This not only highlights the importance of overlaps in the "personal ideal types" in indirect social interactions, where they are used by interaction participants as a shared code of references when a coded ideology is absent. It also once again highlights the vulnerability of indirect social interaction towards stereotyping, where the interpretation of these messages can be easily skewed by social norms and other macroscopic social forces. This sometimes can lead to the reproducing of a repressive status quo in the most unfortunate ways (Sampson & Raudenbush 2004).

Second, in an indirect social interaction, the responding uptaker assumes a far more proactive role than in its verbal conversation counterpart. In an indirect social interaction, due to the temporal insensitivity of the message, the initiator and the uptaker are often separated by time and space. As a result, the interaction does not enjoy the multitude of ritual apparatus that allow the initiating party to gauge the response from the uptaker and to make a timely response to any misinterpretation in the exchange. In these situations, the uptaker thereby assumes a more proactive role in guiding and framing the conversation. In some cases, the initiators do not plan the content of their messages for social reasons in the first place, and as a result do not even expect a response. This means that the potential "two-way capability" of the interaction has to be fulfilled at the hand of responding uptaker. They have to recognize the package of potentially meaningful information as an invitation for response, and make the active decision to participate in the interaction. This undermined role of the initiators often reduces their ability to maintain the "back-channel feedback capabilities" that may help them funnel the conversation into the frame of which they desire. This not only adds a layer of ambiguity to the exchange, but also puts great power and freedom into the hands of the responder in framing and interpreting the meaning of the social interaction.

As a type of indirect social interaction that assumes a verbal form – far less ambiguous than those that rely on image, gestures and non-verbal sounds, the interpretation of literature perfectly illustrates this scenario. In his famous essay *The Death of the Author*, Roland Barthes suggests that once a piece of literature is published, the author itself loses the control over the interpretation of the meaning of the work. The author may only influence the interpretation of the message (in this case, the text) "intransitively" through the message carrier itself. Once the writing process is finished, the writer is disconnected from the text and "the voice loses its origin" and "the author enters into his own death". Thus, according to Barthes, the author is "simply that someone who holds together in a single field all the traces by which the written text is constituted". The construction of its meaning is now at the hand of the readers, and hence its "unity lies not in its origin but in its destination" (Barthes 1977b). A similar scenario is likely to be true for other indirect social interaction, meaning that the responder has a more proactive role in defining the meaning of the message than the initiator, or its counterpart in a direct social interaction.

This does not mean that the initiator in an indirect social interaction has absolutely no power to deliver a message according to its intention, or the interpretation of the non-verbal message is a purely individual affair of the responder. Just as the interpretation of speech is guided by the combination of personal understanding, interactional context, and social convention, the interpretation of non-spoken messages in an indirect social interaction is also the product of personal, interactional and societal forces. And by arranging the message in a certain way, the initiator may anticipate the response from a potential responder, thereby framing the interaction to its intention (Schutz 1970a). It is also worth noting that given the difference in the assumed medium and social context, the room for open interpretation for the uptaker may vary significantly. Some imagery and music sequences, for instance, can be highly codified in certain cultures, and

can often evoke a rather predictable response from the beholders. But in a direct social interaction, because the participants are in the same temporal environment and can validate "what is going on in other people's minds," the "we relationship" is relatively easy to attain. In contrast, for indirect social interactions, the common space among participants has to be a psychological one, where the participants try to "tune in" with one another. This creates a black box, where "we relationship" often rests on anticipation, recreation and "flux of sensation" (Schutz 1970a). This not only once again highlights the importance of contextual information in indirect social interactions, but also the ambiguity of the message carrier.

This leads us to the third characteristics of indirect social interaction: the often **polysemous** nature of the message. The meanings of the message carriers in indirect communication are not necessarily their innate quality. In many cases, the reason why certain gestures, symbols and objects can be interpreted as viable and meaningful carriers of information in an indirect social interaction is defined by the context by their respective community – just as in language and other systems of communication. As Webb Keane points out, for us humans, the understanding of an abstract quality "must be embodied in something in particular" for it to be conceptually tangible. The objects in a non-linguistic indirect social interaction perform this very role. Yet, while these objects carry the potential to be recognized as meaningful icons, and their status as exemplars of abstract concepts are often the result of "social process" (Keane 2005). Thus, the interpretation of material signs as icons requires a system of "semiotic ideology" – the system of "background assumptions about what signs are" and how they should be used and interpreted under relevant social contexts (2005). The symbolism of the carriers is therefore a culturally specific social construct and may not necessarily be linked to the quality of the conceptual object (2005).

Language is also the product of history and social processes, and its background may also

have a profound impact over the forms of social interaction they facilitate (Ng 2009). However, as Barthes points out, while a linguistic message has a high level of certainty that "holds the connoted message from proliferating" and provides anchorage against misinterpretation, images (and by extension other non-linguistic carriers of indirect social interaction) are far more "polysemous" in their meanings (Barthes 1977b). Instead, the meaning of images (and by extension other carriers of indirect social interaction that are less artistically refined) are "constituted by architecture of signs drawn from a variable depth of lexicons," where the interpretation relies on drawing references from an open library of sources and cultural precedents (1977b). Thus depending on the context, the interpretation of non-linguistic signs can be a truly open process, where the different uptaker may focus on different aspects of the sign and have vastly different readings of the same message. It is worth noting, however, that this is not always the case. In highly coded iconic messages, such as paintings that utilize well-recognized iconographic and established motifs within a given culture, the intended audience is trained to differentiate "between significant and insignificant" according to this set of norms. Similarly, gestures of profanity can be just as unequivocally insulting as foul language for those who understand them. These coded icons give the initiators a lot of control in framing the message they try to convey. For these non-verbal communications that utilize a highly codified message, the interpretation of the message might be a lot more singular.

To make the interpretation of these non-verbal messages even more fluid, while the symbolic meaning of material objects is socially installed, these objects are not just simple vessels of socially assigned meanings. Instead, objects in an interaction can also influence the human participants with their own scripted qualities, and in turn shape the social interaction based on these mediums. The phenomenological perspective of social interaction highlights this interactive and

performative aspect of objects. This is especially evident in arts, where the social norms of signification are constantly challenged. Thing theory, often used in art and literary analysis, highlights how an object can transform into a "thing" as it "demands people confront it on its own terms", where both person and the object mutually accommodate each other in a "dancing" duet (Bernstein 2009). For instance, in the eyes of an artist, materials like paper, wood and stone often talk back, guiding the artistic creation process with their own unique qualities and textures. Likewise, in the hands of a masterful chef, a kitchen knife is not just a sharp object at the command of the hand, but rather a tool with its own spirit, where the sharpness, balance and gravity of the blade give the chef confidence and finesse when processing the ingredients. Thus, the quality and texture of the object, in addition to the contextual knowledge and affection of its human partner, are both important. This extends beyond material objects, and can be applied to other types of nonverbal medium in an indirect social interaction. The phenomenological perspective on music also describes the musical experience as a trio between the composer, the performer, and the audience, a process of "mutual tuning in" where the participants could transcend the temporal barrier and make the music together (Schutz 1951).

In summary, I argue that the defining feature of an indirect social interaction is the temporal insensitivity of its message, where a quick timely response from the uptaker is not socially expected. By comparing indirect social interaction with direct social interaction, we can identify three important characteristics that set it apart from face-to-face conversation: its high dependence on context, the proactive role of the responder, and the polysemous nature of its message. These differences are important to our understanding of indirect social interaction and its impact on communal solidarity. They also often present different challenges and limitations to studying this social phenomenon through the lens of different empirical studies. These empirical challenges and

limitations will be the focus of the next section.

1.3. Studying and theorizing solidarity in the modern age

Community gardens do not exist in a social vacuum. The condition of physical isolation seen in many community gardens mirrors the urban communities which these gardens are rooted in. Some sociologists have argued that due to the lack of similarities, cooperation and direct social interactions among individuals in modern society, there is a decline in trust and social cohesion between individuals in many communities – especially in the urban setting. In these frameworks, due to the complexity, diversity, vastness and indifference of modern society, the organic solidarity achieved through cooperation and interdependence proposed by Durkheim is impossible. Instead, people today find solidarity by intentionally seeking direct social interactions from those they share commonality over certain facets of their lives, facilitated by conventional social institutions such as workplace and civil associations. And when the scale of the community exceeds this restricted scenario, one would find it difficult to foster solidarity with those outside their immediate social circle. Under this framework, direct social interaction is a central element for solidarity, and the need for direct social interaction in a restricted social circle is responsible for the presumably fragmentation in solidarity in modern societies as a whole.

Traditional wisdom also puts great faith into social networks and traditional civic organizations like local clubs and religious groups in building solidarity within urban communities, and they both play a key role in the success of urban collective actions. At their roots, both of these platforms rely on face-to-face social interaction to be viable. However, in addition to the recent dispersal of personal networks and the decline of traditional civic organizations in cities, the positive impact of these conventional institutions on communal solidarity is also questionable. It is also worth noticing that “proximity and homogeneity” are arguably foundational conditions for

a successful organization (Davis 1991). This creates a classic causality dilemma, where a strong local organization might well be the product of a highly homogeneous neighborhood.

Such a pessimistic view on modern life is fundamentally based on the assumption that solidarity has to be established based on face-to-face social interactions. However, this bleak characterization of social cohesion in the modern world contradicts the empirical observations. While these changes in the mode of social association are indeed evident, the image of the "solitary urbanites" who have only "fleeting and superficial social contacts" is not necessarily a faithful depiction. As Fischer points out, the difference between the mode of social association and personal network found in town and city dwellers is not a difference in life quality, but rather a difference in lifestyle. In fact, urban residents can be equally, if not more socially connected than their non-urban counterparts (Fischer 1982).

Drawing from observations like this, later sociologists argue modern urbanites are simply embracing an alternative mode of association. Most notably, network theory offers alternative explanations to how social cohesion can be viable despite the size and complexity of modern communities. Compared to the earlier models of theorizing social cohesion that emphasize solidarity in the conventional sense, network theory is more fluid and pliable, highlighting the great diversity of interpersonal associations that was largely ignored by earlier scholars. Indeed, friendships and other acquaintances are often multifaceted, with each relation serving a slightly different function in our social lives. However, despite their divergence from the classical way of theorizing social cohesion, these theoretical frameworks merely circumvent the seeming incompatibility between social solidarity and community complexity rather than resolving it. Strong ties with high levels of "emotional intensity and intimacy" remain an important part of social association and cannot be replaced by weak ties (Krackhardt 1992). And since these close

ties are usually not the result of conventional social institutions (such as family and workplace), the exact mechanism of how these close ties can be forged in the vast modern metropolis in the first place remains a question yet to be answered. More importantly, network theory also emphasizes on the importance of face-to-face social interactions in shaping social cohesion, only at a lower degree of intimacy and commitment. Instead of questioning this basic assumption in the classical theoretical frameworks of solidarity, these theories simply expanded the horizon of direct social interactions by considering those aspatial, unbounded forms of direct social interactions facilitated by modern transport and communication technology. Thus, while it is undeniable that the theory of network analysis represents an important supplement to the earlier theory of understanding solidarity, it does not directly address the foundational limitation in the classical theoretical frameworks – namely, the reliance on face-to-face social interactions.

Does this incompatibility between the importance of face-to-face social interactions to solidarity, and the vastness and complexity of modern societies necessarily mean that the solidarity of the urban community as a whole has to be compromised? If not, small circles of face-to-face social interactions cannot be the sole channel of which solidarity can be established. As Stein hinted in his writing about suburbanites, there is an alternative to face-to-face social interactions. In these communities with minimal direct social interaction, social cohesion is maintained by keeping up the appearance that complies with various social expectations, where individuals perform in accordance with social norms. Stein himself is highly critical of this form of human relationships, and argues that it merely reflects the level of alienation in a mass society that only values material comfort and social status (Stein 1970). But if we were to take a step back and adopt a more benign reading of such a phenomenon, we could see that this seemingly "illusional" ideology represents a form of indirect social interaction. This type of social interaction does not

require direct social exposure or face-to-face verbal conversation, and may play a crucial role in establishing solidarity in the modern world. And while the stereotypical façade of many suburbanites is alienating and oppressive, there are indeed other forms of indirect social interaction.

Although studies on solidarity have become less prominent in sociology in general in the recent decades, it remains an important topic for studies on social movements, both in the political realm and as urban collective actions. Afterall, solidarity is a crucial ingredient for the lasting success of a social movement. Thus, by using social movement as a more dramatic analogue, this school of literature can offer us some useful insight into understanding the formation of solidarity in the more mundane circumstances. A collective identity and a sense of solidarity among social movement participants is foundational for all the aforementioned theoretical models, and has therefore attracted a lot of academic attention. Yet, the construction and maintenance of solidarity in social movements face many systematic challenges that mirror the modern society in which they are situated. Far from being monolithic blocks of like-minded individuals, social movement organizations today often have decentralized organizational structure, diverse participant demographics, and an international reach of appeal. Face-to-face interaction between social movement participants is often limited, even impossible. In addition, for transnational social movement organizations, bridging the socioeconomic and cultural gap between participants of different backgrounds could present a real challenge (Smith 2002). Likewise, participants of neighborhood collective actions too can be highly heterogeneous in terms of their demographics, socioeconomic background and reason of participation. Such heterogeneity can present these movements with some unique challenges. Most notably, the rift between socioeconomic classes makes solidarity particularly difficult to achieve in urban collective actions, as many conflicts within a neighborhood arise due to a conflict of class interests (Davis 1991; Schmelzkopf 1995;

Logan & Molotch 2007). Thus, like the contemporary world they are situated in, solidarity in a social movement is by no means guaranteed, and the form it takes as well as the mechanism and strategy that help it establish may have to be very different from that in the conventional sense.

To address these challenges, the literature on social movements offered three main strains of explanation on how a sense of solidarity can be achieved with limited face-to-face social interactions of participants: broadcasting, membership participation, and organizational flexibility. The broadcasting argument suggests while the recruiting of social movement participants is often dependent upon pre-existing networks of friends, acquaintances and social institutions, the recruitment of strangers is both important and possible. This is usually achieved by the use of "moral shock" that highlights the "severity, urgency, efficacy and propriety" of the issue and thus calls for immediate action (Benford 1993; Jasper Poulsen 1995). These outstanding messages help to advertise the main missions and demands of the social movement, and help to mobilize like-minded individuals for a common cause. They can also create a common symbol and help to unite the participants on an ideological level. The membership participation argument proposes that many decentralized social movements today are often united by the shared experience of commitment, and highlights the physical component of movement participation. A sense of solidarity is not achieved top-down from the as social movement organization a collective, but rather through the individual's own experience of acting on behalf of the movement (Hunt & Benford 2004), which creates a "public experience of the self" that is more pliable than solidarity in the conventional sense (McDonald 2002). Through their participation, social movement activists themselves become the personal embodiment of the movement as a whole. But rather than being a purely individual sentiment, such perception of personal involvement is profoundly influenced by the social network which the participants are a part of (Passy & Giugni 2001). The

organizational flexibility argument suggests that while difference in ideology and strategic decision within a broad social movement is unavoidable, the large size and democratic structure of many social movement organizations allow these differences to be suspended and coexist, where "the activist identities are partly independent of the movements" (Vaolocchi 2008). This plurality ingrained in their organizational structure helps to construct an identity middle ground despite the differences, and reduce the risk of infighting between different ideological fractions (King 2008; Vaolocchi 2008).

All these three channels highlight the importance of indirect social interactions (or in some cases, the lack of face-to-face social interaction) for building solidarity and avoiding internal conflicts in social movements, all in slightly different ways. The broadcast element of social movement recruiting and the importance of perceived participation in shaping solidarity accord with two of McMillan and Chavis' main components of membership status: namely a common symbol system and personal investment (McMillan & Chavis 1986). These two components of social movement membership are further explored by later scholars writing in the digital age. With a new generation of social movement participants "cloud protesting" with online hashtags and link shares, the advent in social media amplifies the reach and visibility of ideas to both the interaction participants and by-standers (Milan 2015; Treré 2018). This allows online social movements to recruit new members and raise awareness in the general public very effectively, well outside the personal social networks of existing participants. These studies on social movements in the digital age draw our attention to the role a medium itself might play in shaping the subjective perception of solidarity, while the emphasis on the performance and participation aspects of online protesting surely questions the foundational assumption that social solidarity requires direct face-to-face interaction to flourish by many earlier scholars.

Given the limitation of traditional social institutions that rely on direct social interaction, it is important for us again to consider if there are any channels for solidarity shaped by indirect social interactions in urban collective action. Existing literature points to a few possibilities, resonating with some of the theoretical models proposed by students of social movement. First, while urban social networks are becoming increasingly aspatial, the physical space may still have an important role in shaping the collective identity in an urban collective movement. And like the membership participation argument in the political social movement literature, urban collective actions often mobilize around the commitment of place-making. Many movement groups engage in place making as a form of resistance towards their unfavorable living environments, both as a beacon of hope that ties people together through responsibility and dedication, and as a communal project that allows healing and connection (Anguelovski 2014). And for long-term projects, the responsibility that individuals take in maintaining the space is a key component in shaping their membership status (Neo & Chua 2017). Second, and perhaps unfortunately, the boundaries of collective identity in a neighborhood can be profoundly shaped by macroscopic social forces beyond the neighborhood. Ideologies such as political identities and traditional values may drive collective action against the interest of individual participants (Jerolmack & Walker 2018), while stereotypes along racial and socioeconomic lines can have a strong influence over the subjective perception of disorder (Sampson & Raudenbush 2004). These findings once again highlight that the interpretation of indirect social interaction is highly dependent on the context.

In addition to studies on social movements, there are some other empirical studies that have discussed certain forms of indirect social interaction and their impact over a community, namely indirect social and economic exchange, through everyday objects such as food and fashion, and through physical space. The first main group of literature on indirect social interaction and

solidarity focuses on social and economic exchange. Coming from multiple disciplines, these studies highlight how indirect social exchange can help to build a sense of solidarity among exchange participants, often playing a more important role than direct negotiated exchange and personal ties. For instance, study by Plickert, Cote and Wellman highlights the importance of direct reciprocity, and argues that individuals are more likely to feel solidarity with those who they have had previous exchange of favors (Plickert, Cote & Wellman 2007). Other studies took a step further away from direct social interaction, and suggest that generalized exchange, where the provider does not expect an immediate return from the receiver, is an even stronger predictor of solidarity (Bearman 1997; Molm, Collett and Schaefer 2007). These studies on solidarity through economic exchange also highlight the iways innate characteristics of the message carrier may shape solidarity in these communities, either in the shape of the platform where exchanges are facilitated, or in the form the commodities themselves at the center of the exchange activities (Knorr Cetina & Brueggar 2002; Talhelm & Oishi 2014).

The main limitation of these studies is that they often focus on a highly homogeneous population who most likely share a common cultural context, where the alternative interpretations of the message are often unlikely. Given the importance of context in indirect social interactions, this means that applying the findings and theoretical explanations from these studies to other scenarios can be difficult. Both the small traditional communities studied by Bearman and the global financial market studied by Knorr Cetina and Brueggar consist of members with a similar occupational background despite their cultural and locational diversity, while the experiment conducted by Molm, Collett and Schaefer represents an experimental situation that limits the interference of social and cultural context. However, such contextual homogeneity cannot be taken for granted in other scenarios. And while the research by Bearman as well as by Talhelm and Oishi

covered large and diverse populations, they did not fully address how other social and cultural factors may influence their results. As we have pointed out earlier, one of the most important characteristics of indirect social interaction is its high dependency on context. Thus, while these studies have offered us important insights on the detailed mechanism of how solidarity can be established through indirect social interaction through economic exchange, they fall short in accounting for the situations where a cultural context is not universally shared among interaction members, and solidarity among its members are often more difficult to achieve.

The second main group of non-social movement literature focuses on indirect social interactions that use objects as their primary carriers of meanings. These objects often play a key part in the construction of personal and group identity, creating both symbols of solidarity and lines of division. Clothes and fashion, for instance, has always been a topic of great interest among sociologists. Early social theorists such as Simmel and Benjamin, for instance, have long recognized fashion as a medium for self and social identification (Simmel 1904) (Benjamin 1999), while Veblen's theory of conspicuous consumption highlights how clothing can be wielded as an identifier of power (Veblen 1934). Although the universally "shared code of significance" in the previous epochs has arguably weakened in the modern era, contemporary research on fashion suggests it still performs its classic function of group identification, hierarchy establishment and personal expression - albeit in a more nuanced manner (Garcia Martinez 2012). This is especially true for the unification and mutual identification among subculture communities and other "minority" groups alike (Hebdige 1979). Similarly, food as a carrier of indirect social interactions has an important role in communal solidarity as it "is used to create social ties as well as social differences" between different culture groups and subgroups as well as between different gender roles (Bourque 2001).

However, objects like food and fashion may not be the best point of entry for us to understand indirect social interaction and solidarity. Critics of the communicative paradigm of studying fashion have pointed out that the interpretation of a certain outfit can be highly subjective. The variation between individual interpretations is so high that the "correct decoding" of clothing can hardly be seen as a singular matter, and the viability of it as a medium of communication is rather questionable (Tseelon 2012). This in itself does not negate the academic value of clothes and fashion as carriers of meaning, but rather highlights the transient slipperiness of fashion as well as many other objects as the entry point for studying indirect social interactions. As pointed out earlier, due to the polysemous nature of its carriers, the viability of an indirect social interaction depends on a shared context between the initiator and the responder. However, due to the high diversity of culture and subculture (and the overlap between them) in our modern society, this common ground cannot be taken for granted even within the one community. As a result, an object often needs a long process of mutual tuning in between both parties before it becomes a legible carrier of meanings, and a supplement of direct social interaction is often required as annotation. For carriers such as clothes and food, however, it is rather rare for the interaction participants to verbally communicate and mutually tune-in their interpretation of the carrier outside experiment settings. Instead, this process is usually achieved non-verbally by providing and seeking at other clues for context, a process so fast it is almost impossible for researchers to follow in everyday scenarios. Therefore unsurprisingly, much of the existing theory and empirical research on social interaction through objects fall short in addressing this tuning-in process of indirect social interaction, making these objects seem like unviable carriers of meanings.

Surprisingly perhaps, research on social interaction through pets represents a unique opportunity where the researcher can follow an indirect social interaction unfold over an extended

period of time, and observe the negotiation of context and interpretation in a more traceable manner. In modern cities, pets can play a key role in fostering a sense of community and togetherness among previous unacquainted individuals (Robins, Sanders & Cahill 1991; Graham & Glover 2014). And while pets are creatures with minds of their own, they are also an important extension of their owners' identity and self-presentation, especially among fellow pet owners (Ramirez 2006). In many scenarios, the pet and its interaction with other pets are the absolute center of attention. They play a key role in the social bonding between owners, while the direct interactions between their owners are sidelined (Robins, Sanders & Cahill 1991; Graham & Glover 2014). In addition, despite all their effort, the owners usually do not have full control over the behavior of their pets, and their rationalization of these behaviors can be viewed as mere annotations that attempt to guide the interpretation of the main message. Like other indirect social interactions, the power of interpretation lies in the beholders.

The temporal dimension of social interaction through pets allows these research to shed light on how the interpretation of the carrier – in this case the pets – is negotiated among interaction participants. For instance, research on dog parks suggests that while the behavior of the dog and social reputation of the breed are fundamental to whether a new dog owner is accepted into the community, the owner's response towards minor "inappropriate" behavior also play a key role (Graham & Glover 2014). The negotiation of carrier interpretation is also reflected by the self-rationalization of the physical and behavioral traits of pets, where the owners may use their dogs to reinforce gender norms and display their gender identity (Ramirez 2006). In both cases, dogs represent an "avatar" of their owners (Graham & Glover 2014), and this image, though often beyond the control of their owners, is still constantly annotated and negotiated through a combination of direct verbal conversation and non-verbal human behavior.

These empirical studies on indirect social interactions offer us a rich and colorful insight on the detailed mechanism of how a polysemeous carrier became concrete through negotiation between the initiator and the responder. Their main limitation as the entry point of understanding indirect social interaction is that because both the participants are all physically present in the same space, it represents a rather special case of indirect social interaction where the negotiations of context and meanings are all achieved verbally. While it is important to understand the interplay between verbal and non-verbal interaction in the everyday scenario, it as a case study denies researchers the opportunity of understanding how interaction participants may achieve the same result through mostly non-verbal messages. Pets, after all, are rather fixed in terms of their appearance and behavior, and it can be difficult for their owners to amend the image of their pets in pace with the interaction. Therefore, to understand the mechanism of how indirect social interaction unfolds over an extended period of time through mostly indirect means, a better entry point might be needed.

The third main group of studies focus on the social interactions that surround a physical space. While many of these studies do not focus solely on the indirect social interaction, nor are they concerned about the sense of solidarity among interaction participants, their findings enrich our understanding of indirect social interactions by adding a spatial layer to self-presentation. Space plays a key role in direct social interactions (Goffman 1959; Cahil et. al 1985), and it is reasonable to assume this spatial element is equally represented in indirect social interaction. Most notably, research on the visitor experience in art museums illustrates how the physical position of an artwork, its position, legibility and orientation, may influence visitors' aesthetic experience by evoking the social memory that is often associated with such locational arrangement (Griswold, Mangione & McDonnell 2013).

This brings us back to the interesting case of community gardens, which offers us a unique window into understanding the impact of indirect social interactions on communal solidarity, its main characteristics and variation, as well as how it might be shaped by various social factors. Compared to other case studies, using community gardens to study indirect social interaction has a few important advantages. The slow pace of gardening, which may take months and even years to take shape, means that the interaction unfolds over an extended period of time. This, along with the fact that memberships of community gardens tend to be relatively small, make them easier to study. In addition, community gardeners, despite their shared passion for gardening, come from all walks of life. Based on their personal ideals and priorities, they may have a very different understanding of what a garden should look like, as well as what organizational mission a garden should focus on. This heterogeneity of the garden membership means that the context which the interactions must build upon can be a precarious one.

Chapter 2 | Community Garden Overview:

The Background, the Case Studies, and the Plants

This dissertation uses seven community gardens in Philadelphia as the primary case studies. I will refer to them as Stanford Bridge Community Garden, Doyle Square Community Garden, Raven Cottage Community Garden, Old Chapel Field Community Garden, Saint Mary's Park Community Garden, Newtown Heath Community Garden, and Entfield Row Community Garden respectively. All seven gardens are well-established gardens with secure land ownership. Saint Mary's Park and Newtown Heath were founded fairly recently with a history of around 10 years, while all the other gardens have been established for decades. All seven gardens are also similar in the layout for their plots, having both personal plots assigned to individual groups of gardeners, and communal plots which in theory are shared by all garden members.

These community gardens differ from each other in terms of their land area, membership size, organizational structure and membership demographics. They are also located in different parts of the city, and therefore vary in the socioeconomic condition and demographic composition of the larger communities which these gardens are located in. This variation allows me to compare and control some of the important variables relevant to this study, such as the variation in cultural and ethnicity background, socioeconomic status, as well as the operational scale, operational history and organizational structure of these community gardens – all of which may have a profound impact on the community dynamics and gardening experience. Scholars have hypothesized that gardeners of high socioeconomic status are more likely to grow ornamental plants "less connected to human need" (Clarke and Jenerette 2015). Study has also shown that community gardens that have been established for a longer period of time have a higher plant diversity, while gardeners

with recent immigration backgrounds are likely to grow plants that are relevant to their cultural roots (Pearsall, etc. 2012).

The selection of case studies also allows me to control some of the important factors that are beyond the scope of this research, yet may have a fundamental impact over the community gardening experience. All of the gardens covered in this study have secure land ownership status, and are protected by the Neighborhood Gardens Trust (NGT). The common struggle to secure land ownership can be a great unifying force that forges a collective identity among founding garden members. Yet just as how strong spices may cover the foul taste of unfresh ingredients, this intense and arduous process can also overshadow many of the underlying problems these fledging gardens may have in its membership communication and community building – two of the main focus of this study. Choosing gardens with secure land status allows me to circumvent the overwhelming influence of the land ownership struggle over community building. The fact that all seven community gardens in this study are organic gardens provide further variable control, as organic farming methods require more time and dedication from the gardeners than conventional farming methods when growing the same species or breeds of plants.

1.1. The community gardening scene in Philadelphia: a brief overview

There are many community gardens across Philadelphia, and this is the result of multiple factors. Philadelphia is a city with a rich horticultural tradition, and umbrella organizations such as the Pennsylvania Horticultural Society (PHS), Neighborhood Gardens Trust (NGT) and Penn State Extension have been strong supporters for the local community garden movement. But perhaps more importantly, Philadelphia is also a city that has experienced significant deindustrialization which led to a major episode of economic, population and real estate decline. In 2010 Philadelphia had about 40,000 vacant lots scattered across the city (Redevelopment

Authority of the City of Philadelphia). As the urban fringe-belt theory demonstrates, during economic decline, "private developments that seek or require large spaces" such as community gardens often emerge along the belt at the fringe of the initial city expansion (Conzen 2014). This perfectly describes the scenario in Philadelphia, where a high number of community gardens are located around the city center along the periphery of the initial urban expansion regardless of income level and ethnic composition (Fig. 2.1 and Fig. 2.2) (Borowiak 2015).

According to the survey conducted by Amy Laura Kahn in 2015, there are more than 250 community gardens scattered across Philadelphia, operating in neighborhoods with different demographic compositions and socioeconomic standings, mainly along the edge of the city center where vacant lots are more available. The membership demographics of these gardens often reflect these differences in interesting ways. Many community gardens represent a response to the key challenges and concerns faced by the community as a whole beyond garden walls, such as food security, health and nutrition, community building, greenspace accessibility, environmental sustainability, as well as the myriad of problems caused by vacant lots, such as sanitation concerns and the increase in crime. The community garden movement in Philadelphia is both flourishing and diverse. This allows me to choose community gardens of different sizes, membership and organizational structures, and control and contrast some of the macroscopic socioeconomic factors that might interfere with the result of this study.

2.2. The gardens

Table 1. List of gardens studied in this dissertation, with they respective pseudonyms and organizational profiles

Name	Year	Operational Scale	Leadership Structure	Membership Demography	Neighborhood
Stanford Bridge	1970 s	~ 60 plots ~ 90 gardeners	Formal	Predominantly White Most middle-aged & elderly	White, mixed race locally High income

Doyle Square	1990s	~ 20 plots ~ 30 gardeners	Semi-formal	Predominantly White Most middle-aged & elderly	Mixed race High income
Raven Cottage	1980s	~ 10 plots ~ 15 gardeners	Informal	Predominantly White Most working young	White High income
Old Chapel Field	1970s	~ 30 plots ~ 20 gardeners	Formal	Predominantly Black Most middle-aged & elderly	Black Low income
Saint Mary's	2010s	~ 30 plots ~ 15 gardeners	Semi-Formal	Predominantly Black Most middle-aged & elderly	Black Low income
Newtown Heath	2010s	~ 20 plots ~ 30 gardeners	Semi-Formal	Mixed race Mixed age	Mixed race Gentrifying
Entfield Row	2010s	~ 40 plots ~	Formal	Mixed race with a bias towards White members Mixed age	Mixed race, predominantly White locally Gentrifying

2.2.1. Stanford Bridge Community Garden

The Stanford Bridge Community Garden is a very large community garden with a formal organizational structure located in a wealthy gentrified neighborhood in South Philadelphia not far away from the city center. Historically a working-class neighborhood with a predominantly Black and new immigrant population, the neighborhood experienced gentrification in the 1970s with an influx of White middle-class professionals. Today, although the neighborhood still has a sizable minority population with the presence of affordable housing in the area, most of its residents are White professionals and wealthy retirees. With these two types of resident households with drastically different socioeconomic conditions located on opposite sides of the street, the reality of racial and socioeconomic divides in Philadelphia is on full display.

Stanford Bridge was founded in the 1970s by the neighbors' association under the initiation of a prominent local Jewish left-wing activist, during a time where the neighborhood experienced the first wave of White middle-class influx. It was founded explicitly as a political project, with food justice, racial equality and community building as its main organizational missions. The land ownership of the garden site now belongs to the federal government, and with the help of NGT

Stanford Bridge has obtained permission to use this land for gardening purposes since the 1990s. With its large size, long history and robust organizational capacity, it has since been one of the flagship projects of NGT and PHS. Today, Stanford Bridge, being one of the largest community gardens in Philadelphia, has more than 60 personal plots managed by more than 90 gardeners. The personal plots are roughly 3m (10ft) by 6m (20ft) in size, and are often divided into two separate raised beds by the gardeners with a narrow path in the middle. Unfortunately, with the departure of its leftist founder and further gentrification of its neighborhood, Stanford Bridge has largely lost its radical edge as a community improvement project. The majority of its current members are middle aged and elderly Whites, many are either retired or semi-retired, although there is an increasing percentage of younger members joining the garden in the past few years. And although many of its founding members were African Americans, and cross-race connection was one of the main organizational missions during its founding days, today racial and ethnic minorities only represent a small percentage of the garden membership, substantially lower than the percentage observed in the neighborhood demographics. Most of the current Blacks gardeners at Stanford Bridge are senior members who joined the garden in its early days, where both its membership and the neighborhood it was located in were far more racially diverse.

Stanford Bridge is a garden with a long history, an overwhelmingly middle-class membership, high organizational capacity, and a wealth of horticultural know-hows accumulated over the years. As a result, not only does it have rows upon rows of well-maintained personal plots, it is also a photobook community garden with many delightful communal plots scattered around the periphery of the garden. The main entrance of the garden is sheltered under the canopy of some impressively sized fruit trees, such as the rare native pawpaw trees, and until it was recently chopped down, an immense cherry tree nearly two stories tall. As you walk down the aisle, you

will be greeted by additional patches of fruit orchards, including a few large fig trees, a grape and kiwi arbor with tables and chairs underneath, and a diverse collection of berry bushes of raspberries, blackberries, currants and gooseberries. The garden is also decorated with many ornamental plants along its main aisles, next to the arbor, near its secondary entrance, and in shaded areas at the periphery of the garden. These patches of flowers, bushes and small trees not only contain common hardy plants like irises and daffodils, but also unique species and rare cultivars that, without labels, can be difficult to identify for all but the most knowledgeable garden enthusiasts. Even the garden fence is intertwined with heirloom cultivars of roses, with stems thicker than a human arm. The flowers are mainly for ornamental purposes, though they can also provide nectar and pollen for pollinators. These ornamental plots do not, however, have much space for gardeners to socialize. Given the rarity of plants and the level of specific knowledge required, these communal plots are maintained mainly by highly devoted gardeners who volunteered as their primary caretakers. Some gardeners, therefore, enjoy the unofficial title of "rose czar", "tree czar", et cetera.

In addition, there is also a communal plot designated for the City Harvest program, a food security project organized by the PHS where community gardens can donate produce to food banks and low-income communities across the city. Other garden facilities include a large brick grill mainly used for annual fundraising events, a gazebo where gardeners may socialize, a series of compost bins, a compost toilet, and a garden shed that stores large gardening tools for communal usage. Most impressive of all, Stanford Bridge also houses 6 bee hives for pollination and honey production. The garden even has the machinery to process raw honey in the shed, reflecting its wealthy membership and high organizational capacity. Many other community gardens with beehives in the area often rent Stanford Bridge's machinery to process their honey harvest, and the revenue from selling honey is an important source of funding for Stanford Bridge.

This garden does not allow the use of hoses, and watering has to be done manually with watering cans. But since each personal plot has a large watering drum located next to it, watering one's plot is still relatively easy. These water drums are connected to the city's public water supply, though the taps are usually inactive to minimize maintenance expenditures. They also have an open-top design, and their water level can thus be replenished with natural precipitation to some extent. Garden members are required to fulfill regular water duties, adding water to these drums through taps and replacing mosquito dunks for these drums. Stanford Bridge is fully gated, and technically only garden members are given the keys to access the garden and the shed, though their family and friends are also welcomed.

Compared to other community gardens in this study and most gardens in Philadelphia, Stanford Bridge has a highly articulated and almost rigidly formal organizational structure. With some room of leniency and neighborly understanding, the garden by-law is still comparatively well enforced, and personal plot maintenance is held at a high standard. During the growing months, nearly all personal plots are planted and well-weeded according to the membership standard expectations, and are regularly inspected by the garden committee. The leadership positions rotate among garden members with a two-year term limit, though some have joked about the idea that some senior gardeners with a long membership history and a high level of horticultural expertise are the "power behind the power". This statement is not without merit. Some gardeners with specific expertise hold positions of great importance, such as overseeing the watering system or the management of certain communal plots. These designated organizational duties may have given them a position of authority even without official leadership titles, and their long tenures as garden members have certainly given them more social influence through their extensive personal networks.

The gardeners have regular garden meetings once a month on the second Monday except during winter (which most community gardens in Philadelphia are largely dormant with minimal gardening activities). They also have garden clean-up sessions on the second Saturday of each month. Garden members are required to attend five of both commitments every season to keep their membership, a rule that is rather unpopular among young gardeners, who often have difficulty fitting the Monday meetings into their working and parenting schedules. Like many other larger established community gardens in Philadelphia, Stanford Bridge participates in the City Harvest program and donates some of its produce to low-income communities across the city, and it has a large common plot three times the size of those personal plots dedicated for the program.

Stanford Bridge has been a case study for this research since the beginning of the project, where I have been conducting ethnographic research for five years. To further capture the social dynamics within its large membership, I also conducted semistructured interviews with 16 gardeners from Stanford Bridge – with multiple follow-up interviews with individuals of particular interests. I have also distributed a survey at Stanford Bridge with the help from the garden coordinators, with a roughly 70% response rate from the garden membership.

2.2.2. Doyle Square Community Garden

Doyle Square Community Garden is a medium-large community garden with a semi-formal organizational structure located in a high-income neighborhood in South Philadelphia, not too far from the neighborhood of the Stanford Bridge Community Garden. The neighborhood itself also has a similar history trajectory and resident demographics. It is historically an ethnic enclave of Irish and Italian immigrants as well as working-class Blacks from the South. Today, this is a predominantly White neighborhood, with a sizable minority population of Asians, Hispanics and African Americans.

The precursor of Doyle Square Community Garden, the Doyle Square Arboretum, was founded in the 1990s. After a factory building in the neighborhood was burnt down, dozens of community members used the vacant lot left by the factory building as a tree nursery. In approximately the same time, many of them founded a small community garden under the permission of a local church. But soon later as a large section of the vacant lot was taken for development, the tree nursery was no longer able to operate. Under the support of the then Neighborhood Gardens Association (now Neighborhood Gardens Trust, NGT), Doyle Square managed to secure the ownership of at least part of its land in the early 2000s. Due to the significant overlap of membership between the two initiatives, the Doyle Square Arboretum merged with the smaller pre-existing community garden, and was repurposed to the community garden it is today.

Today, Doyle Square has more than 20 personal plots cultivated by more than 30 members. However, compared to other gardens in this study, the personal plots of Doyle Square are relatively small, with a dimension of roughly 1.5m (5ft) by 2m (7ft). Nearly all its members are middle class Whites despite the relatively diverse demographics in the neighborhood – which has a sizeable Hispanic population, and nearly half of its current members are the founding members of the garden in their late fifties and early sixties (though only a few of the active members are retired). As some older members began to leave, the garden has seen a small influx of new young gardeners last year.

Providing an urban green space for garden members to socialize and appreciate nature is one the main organizational priorities of Doyle Square, and this philosophy is reflected in its design. And thanks to its historic root as an urban tree nursery, Doyle Square has a huge public area which takes up more than half of the garden, including multiple large trees rescued from the tree nursery as well as a big native wildflower meadow at the center of the garden – both rare among community

gardens in Philadelphia. The trees are huge, some more than three stories high. These trees are mainly for ornamental purposes, though there are also a few fruit trees such as apples and peaches. Scattered around the periphery of the garden, their expansive canopy provides a lot of shade for gardeners to socialize during the hot summer months, though they may limit the amount of light exposure certain plots receive, compromising their harvest. Managing these large trees is truly a team effort, and pruning can be an important venue for gardeners with different skills to socialize.

The wildflower meadow is the centerpiece of Doyle Square. Located at the very center of the garden and surrounded by personal plot patches, its wild verdancy buzzing with pollinator action also provides an interesting visual contrast to the domesticated plants and orderly rows as gardeners work in their own plots. Tall, lush, and indubitably hardy, these native plants bring an air of rustic authenticity to an urban community garden, while maintaining them takes little to no effort. During the warmer months, the meadow can be a riot of kaleidoscopic colors. The wildflowers also have other functions beyond just aesthetics. These native plants provide food and habitat for many insects, including the much beloved monarch butterfly which thrives on the milkweeds grown in the meadow. This, along with other features, highlight the garden's commitment to urban biodiversity and ecological sustainability. Other communal plots with ornamental plants featured in the garden include a few large bushes of roses, a few grape vines, and a uniquely designed honeysuckle trellis located along the wall of the neighboring church. Other common ornamental plants such as irises and composites are also planted in small, completing the aesthetics.

Under the shade of tall trees, Doyle Square has three separate patios for social gatherings and multiple benches scattered across the garden. It also has a gazebo under the grape trellis, a few small grills, a small fully enclosed compost can, and a shed which stores large gardening

equipment for communal use. Doyle Square has a beehive for pollination purposes, though it does not have the machinery to process the honey. As another testament to Doyle Square's commitment to environmental conservation, it also has a few insect hotels under the garden benches – bundles of reeds, wood chips and ceramic pieces placed in sheltered areas that attract solitary bees and other beneficial insects, as well as a bat house hanging on the wall of a neighboring building. The gardeners use hoses for irrigation. Doyle Square is fully gated, and only garden members are given the keys to access the garden, though their family and friends are also welcomed.

Doyle Square has a well-defined, but semi-formal leadership structure. Due to its relatively short history, many of its founding members were still active, and some of them still carry leadership roles, which does not rotate among garden members. These founding garden members are very knowledgeable and dedicated, and some of them are also deeply involved in the community gardening movement across the city. This creates a level of consistency, though some concern about organizational continuity as these garden coordinators grow old. The garden organizes meetings on a flexible schedule during the growing season and will give its members a notice two weeks prior to the meetings. It has three garden cleanups evenly distributed across the growing season, but the participation is entirely voluntary. Due to its expansive communal areas, all garden members are required to manage a section of the communal areas. The implementation of such a rule, however, is mostly driven by voluntarism. The irrigation and the beehive are managed by individuals of expertise. Doyle Square is a member of the City Harvest program and donates some of its produce to low-income communities, though its output is not as big as that of Stanford Bridge, and it has a plot slightly larger than its personal plots dedicated for the program.

I have been conducting ethnographic research at Doyle Square for five years. I conducted multiple semistructured interviews with 8 gardeners from Doyle Square. And because one of the

coordinators at Doyle Square was also a collaborator for NGT, I also worked with her closely on other aspects of the research. A survey was conducted with a roughly 60% response rate from the garden membership.

2.2.3. Raven Cottage Community Garden

The Raven Cottage Community Garden is a small community garden with an informal organizational structure in the same neighborhood as Stanford Bridge. Raven Cottage was founded in the 1980s by a few community members living right next to the vacant lot where the garden currently stands. In the early 2000s, its landownership was seriously contested as the land was put on the market and was bought by a developer, while the associated demolition next to the garden destroyed nearly half of the garden's plots. Garden members stepped up, and through various means helped the garden attain the status of protected greenspace in mid 2000s with the help from NGT. They also received damage compensation from the constructor through legal means, which helped the garden to renew some of its facilities.

Today, Raven Cottage has about 10 personal plots managed by around 20 gardeners. The dimensions of the personal plots are roughly 2m (7ft) by 3m (10ft). Unlike the other community gardens in this study and rare among community gardens in Philadelphia, an overwhelming majority of the gardeners at Raven Cottage are about 30 to 40 years old working full-time. At the beginning of my dissertation research, the garden had only two retired members in their seventies, and one of them left the garden during the course of the research. The demographics is predominantly White, and there is a significant bias towards women and a strong presence of LGBT families. This small, young membership is a defining characteristic of the garden, and is perhaps one of the reasons why the garden adopted an informal organizational structure – for young working parents, having regular structured garden meetings can prove to be a major

challenge. They are also more responsive towards emails and other means of digital contact, making regular formal meetings less necessary. There is not a significant level of variation in the level of gardening experience and expertise among the members. None of the gardeners at Raven Cottage are exceptionally knowledgeable with plants and horticulture, nor were they grossly inexperienced or uninformed, though some of the members seem to struggle with the identification of weeds and pests.

Due to its small size both in terms of membership and land area, Raven Cottage has very limited communal areas. Nonetheless, it still features a few small flower patches and berry bushes along the entrance, as well as a patio and a large gas grill. In late spring and early summer, the garden is greeted with the bloom of irises, while popular native composites like black-eyed Susan and coneflowers attract pollinators at the height of summer. Together with the wooden doors, tight neighboring walls, and small mosaic art by the famous local artist Isaiah Zagar, this small garden has an intimate family-like atmosphere. It also has a small selection of tools for communal use stored in its shed. Under the initiative of mainly one gardener, Raven Cottage has an automatic irrigation system that covers half of its personal plots, feeding water directly to the roots of the crops. This helps to save water and makes gardening a lot less physically demanding. This fancy installation, however, is not embraced by all gardeners, with some young gardeners questioning whether it is truly necessary in a community garden setting.

Raven Cottage, though fenced, is not fully gated. The garden's main entrance does not have a lock, and the garden is often visited by neighborhood members – especially Black children from the affordable housing projects across the street. While most of the youngsters have been respectful, the youthful recklessness of some individuals created some friction between gardeners and the local community at large. Vandalism was especially problematic during the Covid-19 pandemic

lockdown, when many school-aged children were forced to stay at home and had nothing to do. This, however, also gave the garden a unique opportunity to connect with the local residents, bridging across racial and class divisions. The location of the garden is also of some significance to certain online subcultural groups, and their members pay pilgrimage to the garden for various reasons from time to time. In addition, the communal facilities in the garden are often used by its neighbors and neighborhood NGOs as a venue for social events, and the grills can be particularly busy during the summer.

The organizational structure of Raven Cottage is highly informal. It does not have a formal garden committee, though one active member in her early 40s assumes the role of the coordinator and volunteers for the communication of garden members and the management of the waitlist. There are no garden meetings or regular communal cleanups, and most of the decision-making processes are conducted through emails among members, though the garden does meet from time to time when confronted with a pressing issue that requires in-depth discussions. While like all gardens sponsored by NGT Raven Cottage has a written garden by-law, these rules are rarely actually enforced. Even considering the small membership size, during the course of the research, there has only been one case where a member was expelled from the garden due to repeated violation of the garden by-law. Raven Cottage is not a member of the City Harvest program.

I worked with Raven Cottage throughout my dissertation research. Because of its small size, the amount of ethnography I have done at Raven Cottage is relatively limited compared to the other gardens covered in this study, often visiting the garden only once a week during the growing season. I have conducted semi-structured interviews with 4 garden members, and have conducted follow-up interviews with all of them.

2.2.4. Old Chapel Field Community Garden

The Old Chapel Field Community Garden is a community garden with a formal organizational structure and an exceptionally large land area, but a moderately sized membership located in an African American neighborhood in West Philadelphia not too far away from the university city. The neighborhood has a predominantly working class African American population, which constitutes about 90% of the neighborhood residents. While in recent years some young white professionals are starting to move into the area, the neighborhood is not subjected to much gentrification.

Old Chapel Field was founded in the 1970s by local community members who took over a large vacant lot in the neighborhood. The garden was redesigned in the 1980s with the support from University of Pennsylvania and the West Philadelphia Plan and Greening Project, and it secured its land ownership in the early 2000s with the support of NGT. Today, Old Chapel Field has about 30 personal plots, and the size of their plots are much larger than the personal plots found in other community gardens in this study with a dimension of roughly 4.5m (15ft) by 9m (30ft) – easily three times the size of an average Philadelphia allotment. In addition, many gardeners occupy more than one personal plot, and the garden has less than 20 official members.

All current members of Old Chapel Field are Blacks, and some of them have Caribbean heritage – including Jamaica, Antigua and Trinidad. Most of its members are in their 50s, 60s and even 70s, though some of these older members have their children helping with their gardening work. There is also a small percentage of younger gardeners with young children, who joined the garden relatively recently. This injection of new blood brought many new ideas and new approaches to gardening, though the difference in ideology, lifestyle and character, as well as the deep lying generational divide within the community, has also proven to be a source of friction. The racial and ethnic composition of the garden is reflected in the types of plants people grow here.

In addition to some of the more popular plants seen in all community gardens, callaloo, a type of amaranth widely consumed in the Caribbean, is very popular among gardeners at Old Chapel Field. Collard greens, though popular in all community gardens for its availability and frost resistance, are even more widely grown at Old Chapel Field due to its significance in the culinary heritage of African Americans.

Unlike the other gardens covered in this research, only half of the garden members from Old Chapel Field live within the proximity of this garden, and some members even need to drive across the city to work on their personal plots. This, along with the fact that some gardeners operate multiple personal plots, reflects the relatively low community interest in this garden in this neighborhood. It is also partially a product of Old Chapel Field's immense personal plot size – which can prove daunting for many beginner gardeners who also have a busy work and family life. These "commuting" gardeners are undoubtedly some of the most experienced and dedicated gardeners at Old Chapel Field. Many are attracted to Old Chapel Field due to its large personal plot size, which gives them the canvas they need to truly express their passion for gardening. Some also stated that the reason they joined was because Old Chapel Field is a predominantly Black community garden, and this membership demographics make them feel more comfortable than in many other community gardens, which as gentrification proceeds, gradually became more White. Because driving across the city after work can be rather inconvenient, some of these commuting gardeners sometimes share their ride with others, both a testament and a catalyst for their deep friendships.

The Old Chapel Field Community Garden has many communal plots scattered across the garden, including a sizable orchard of apple and peach trees, and many flower patches. As gardeners and visitors alike enter the garden through its front gate and walk along the main aisle,

their view would be greeted by some truly impressive ornamental trees. These include Japanese maples, magnolias and a beautiful wisteria trellis with vines thicker than a human arm. Together, these beautiful trees line the garden's central pathway. During the warmer months and in years with good rainfall and adequate human care, their lush canopies greet each other across the main garden aisle, shading the scenic path almost completely. As the centerpiece of the garden, Old Chapel Field has a small fishpond supported by two electrical pumps connected to solar panels, completed with a wide array of aquatic plants, a wooden bridge, and a few goldfish. The trickle of the water, along with the song of birds and insects, creates a unique atmosphere. As part of the membership obligation each gardener is assigned to a section of the communal plots, but the communal work mainly relies on self-reporting and not all gardeners actively contribute. Other communal facilities in the garden include a shed for storing large gardening tools and a portable toilet maintained by a hired cleaner. The garden waters using hoses that are connected to the city's water system.

To encourage gardeners with physical disabilities and elderly people to work at the garden, Old Chapel Field has constructed a few raised beds dedicated for their usage. These raised beds, however, were in general underutilized for their intended purpose despite the garden's aging membership population, as many of the older members in the garden were not only its most dedicated, but also received a helping hand from their children. During the 2020 covid pandemic, after seeing an increased community interest in gardening due to the economic hardship and the increase of time people spend in their neighborhood, these handicapped plots were repurposed as training plots for youth and aspiring new gardeners alike. This adjustment truly rejuvenated these plots.

The organizational structure of the Old Chapel Field Community Garden is relatively formal,

sometimes even a bit rigid. In the past, the garden was headed by a charismatic yet draconian founder, who managed the garden with hard rules and strict disciplines. After he stepped down, the garden has since become a bit more flexible in its organizational structure. A few measures were implemented to avoid the "dictatorship" of charismatic leaders, yet many of the historic regulations are still in place - though they are not necessarily strictly enforced. Today, it has a garden committee of five members, including two co-chairs, a secretary, a treasurer and a membership coordinator. The leadership positions are not rotated among garden members. The garden organizes monthly meetings and has two garden cleanups every month to keep the large garden well-weeded. The participation of clean-ups is not mandatory, but those who cannot join must make contribution to communal work through self-reporting. All members are required by the by-law to manage a section of the garden's vast communal areas, but the level of enforcement is rather limited, and the lack of contribution from certain garden members can be an important point of contention. Old Chapel Field is a member of the City Harvest program, but the designated plot is not very well-maintained – the donation mainly comes from the large surplus produce harvested from the personal plots. Education is a central organizational goal of Old Chapel Field, and it often hosts field trips and volunteer sessions for students from local schools and summer camps alike.

Old Chapel Field is one of the first case studies for this dissertation, and I have been conducting ethnographic research in this garden for five years. To supplement the ethnographic data, I have conducted semi-structured interviews with 8 gardeners at Old Chapel Field. I have distributed surveys at this garden, with a response rate of around 50%.

2.2.5. Newtown Heath Community Garden

Newtown Heath Community Garden is a medium size community garden with an informal

organizational structure located in a fast-gentrifying neighborhood in South Philadelphia. Historically an enclave of working-class European immigrants, it now has a predominantly working class African American population who constitute more than 60% of the neighborhood residents. In the recent decade, it experienced rapid gentrification characterized by a spike increase in real estate prices and an influx of young, predominantly White professionals in the neighborhood. The aggressive developments and the change in the neighborhood demographics have triggered some frustration and even conflict between the "original" residents and the newly arrived gentrifiers.

A true newcomer to the city's community gardening scene, Newtown Heath Community Garden launched less than ten years ago under the initiative of the city government and the support from both the community members and prominent public figures who have close ties with the neighborhood. It is part of a larger project which aims to revitalize the neighborhood through reclaiming and renovating vacant lots in the area. As a result, Newtown Heath is often referred to as a "top-down garden" by many community garden practitioners. The garden later acquired another plot of land for communal gardening, but the new garden section lacks any facilities other than a few beds, and is disconnected from the original community garden area. Newtown Heath has been a member of the NGT since the inception of the garden, and has a secure land ownership status since its foundation. But because it is located in a fast-gentrifying neighborhood with a lot of aggressive and entitled developers, the security of their land use was often contested. Today, Newtown Heath has around 20 functional personal plots attended by around 30 garden members, though it's worth noticing that in some seasons, only around half of the personal plots at Newtown Heath are planted. This low occupancy rate reflects both the limited community interest towards the garden, and the over-optimistic planning involved with the garden's top-down design during

its inception. The dimension of the personal plots is roughly 2m (7ft) by 3m (10ft). Some of the personal plots are raised to waist level to accommodate older gardeners.

The membership of Newtown Heath reflects the changing demographics of its neighborhood. About half of its members are young Whites who recently moved into the neighborhood, while the other half are composed of mostly working class Blacks whose family have lived here for a relatively long period of time. The level or gardening experience and expertise varies significantly between garden members – much higher than the state observed in other case studies covered in this research. There is a garden shed that stores larger gardening tools for communal use, and the garden is currently trying to establish a few communal plots such as a flower patch, an herb garden and a few berry bushes. However, these communal plots are either undermaintained in the case of the herb garden, or just recently planted in the case of the berry bushes. The gardeners mainly use hoses for watering at the original site. And since there is no irrigation facility at the new sites, gardeners need to bring watering cans. Green Terrace is a truly open community garden and has only decorative wooden fences along its borders. Together with its murals and the flowers along its entrance, the garden strives towards creating a welcoming image through its architecture.

The organizational structure of Newtown Heath Community Garden is semi formal, and it would not be exaggerated to say that the garden leadership has been tumultuous over the years. In the beginning of this research, Newtown Heath has a functional garden committee which rotates its leadership positions on a three-year basis. But as the garden experiences intense in-fighting over ideological and organizational differences, partly reflective of the stark racial and socioeconomic division in the neighborhood and the inadequate planning of the garden, the garden has seen the untimely resignation and departure of multiple garden leaders. The turnover rate of garden membership is also relatively high due to this organizational instability. As for today, this

struggle for leadership still has not been fully settled, and the debates around organizational purpose, membership policies and other organizational matters are still a central theme during garden meetings.

Newtown Heath has a monthly garden meeting, which is usually followed by a garden cleanup. The attendance of both the meetings and the cleanups are, however, voluntary and the attendance rate can vary quite significantly. Due to the organizational challenges faced by this community garden, however, the organizing process of these meetings is by no means smooth. The date of these meetings may vary without notice according to the availability of the community garden committee leaders who organize these events, and may even be canceled on the spot when the member attendance rate was low. This irregularity further undermines the organizational capacity of this garden. The exact date and time of these events are coordinated primarily through emails, though phone calls are required for some of the garden members who do not use them. Newtown Heath is not a member of the City Harvest program.

I worked on Newtown Heath for three years, but the amount of ethnographic data from Newtown Heath was limited compared to the other gardens covered in the study - partly due to the fluctuating state of its leadership. I have interviewed 6 gardeners at Newtown Heath, though several of them have since departed from the garden.

2.2.6. Saint Mary's Park Community Garden

Saint Mary's Park Community Garden is a small community garden with an informal organizational structure located in a working class Black neighborhood in West Philadelphia. The neighborhood does not experience gentrification. Saint Mary's Park Community Garden is a young community garden. Established in the early 2010s, it was founded under the initiation of two passionate community members, who saw community gardening as a viable tool to address the

threat of food insecurity and crime faced by the neighborhood. Together, they mobilized a group of gardeners from the neighborhood who were interested in the project, and reclaimed a vacant lot once filled with trash and weed. As a community revitalization project, Saint Mary's Park Community Garden is undoubtedly a resounding success. The rate of violent crime in the neighboring areas has decreased significantly since its establishment. The garden attained secure land ownership status for the majority of the lot five years later, though a small corner of the garden, which belonged to a different owner, was secured a bit later. Today, Saint Mary's Park has about 30 personal plots managed by around thirty members, though some gardeners oversee more than one plot, while others share their plot with their friends and families. These raised beds are relatively small, with a dimension of roughly 2m (7ft) by 1m (3ft).

All current members are African Americans. Most of the founding members of the garden are retired elderly, but recently the garden saw an influx of younger members, including some immigrant families of Caribbean heritage. This increase of community interest is partially driven by the covid-19 pandemic lockdown, when many community members were forced to stay at home and spent more time walking around in the neighborhood on foot. The economic hardship presented by the pandemic and the lockdown also made the need for food sovereignty more acute, functionally increasing the general community interest in the project.

As a relatively new grassroot community garden without a wealthy patron, Saint Mary's Park is still in the process of building their communal plots. Nevertheless, the gardeners take care of a few large trees they inherited from the vacant lots, and it also has a few flower patches and a small melon patch for all to enjoy. In recent years, they are also test growing a few fruit trees, such as peaches and figs under the advisory of PHS as well as other more established community gardens (one of them being Old Chapel Field). Other communal assets in the garden include a shed for

storing large gardening tools, and many tables, benches and parasols for socializing. Community building is a central mission for Saint Mary's Park, and these community spaces are often used for hosting community outreach, youth education programs and social events. Although not a member of the City Harvest program, gardeners of Saint Mary's Park donate a significant amount of their harvest to the neighboring community. Saint Mary's Park is fully gated – while garden initiators were reluctant to build this hostile physical barrier that seems to be contradictory to their organizational mission, they had to contend with the reality that, especially during the first few years when the garden was established, safety was a real concern among many garden members.

The organizational structure of Saint Mary's Park transitioned from a relatively formal to a more informal one over the years. During the early days of its development, the founding coordinators saw the garden as a space for socialization and community building, and wished that gardeners could garden together as a team. Therefore, during its early days, only the two coordinators had the key to garden's gate, and they expected, perhaps quite naively, that all gardeners would come to the garden and work in their plots in the same window of time, thereby realizing the community building potential they envisioned for the project. This mode of operation obviously was not sustainable, and to some extent reflects the founders' lack of experience with community gardening during the early stage of the garden's development. Not only did different people have different schedules, lifestyles, physical conditions and gardening routines, coordinating this many people on a weekly basis also put immense strain on the organization – not to mention the unpredictable nature of the weather means that gardeners often have to attend the garden on a short notice. Nevertheless, this failed model was a valuable lesson for the garden's coordinators, and the garden now uses a combination lock, where the code was shared among all garden members.

This sober revelation, that a community garden with a formal, highly centralized operational model does not suit the situation of Saint Mary's Park, also prompted the garden to become more informal and flexible in other garden affairs. The participation of the regular garden clean-up is entirely voluntary. Garden meetings are also not mandatory, and are often attended only by the most senior founding members of the garden, who, by going through the arduous process of building a community garden from the ground, are also often some of the most dedicated and experienced gardeners. These garden meetings are often quite intimate, where a small group of old timers sit around the table under the parasol, and discussions on garden affairs are often variegated with topics of more personal matters.

I have worked with Saint Mary's for three years and have conducted interviews with 4 members of the garden.

2.2.7. Entfield Row Community Garden

Entfield Row Community is a medium sized community garden with a semi-formal community garden located at the boundary between a mixed-race gentrifying neighborhood and a White middle-class neighborhood in North Philadelphia. The historic neighborhood where the garden is located saw waves of working-class European immigrants through its early history as a European settlement. In the 1950s and 60s, part of the neighborhood experienced an influx of low-income Southern Blacks, which unfortunately triggered a White flight in many parts of the neighborhood. Today, this neighborhood has a mixed raced demographic with a predominantly Black working-class population. Some areas of the neighborhood have been experiencing rapid gentrification and has a sizable population of White residents, composed of both its old working-class residents and the new influx of middle-class professionals. Entfield itself is located near the boundary of this racial divide, though its immediate surrounding is mainly composed of White

residents.

A relatively new community garden, Entfield Row was established around twenty years ago. It attained secure land ownership status with the help of NGT around 10 years ago. Unlike many community gardens in Philadelphia, the garden is ungated and is fully accessible to the general public. Its physical boundary is only marked by a short fence made of thick metal wires that extend underground, intended to stop the industrious burrowing of local groundhogs from the public park next door. The lush fruit trees grown along the outer edge of the garden bleeds seamlessly into the park greenery. The garden features some innovative features in its design. Instead of using city water, the garden uses ground water which it extracts from a well using solar powered pumps. This is supplemented with rainwater which it collects using rain barrels. These features are indicative of the garden's emphasis on environmental sustainability, but they also reflect the relatively high volume of social resources the garden founders could mobilize.

Entfield Row is a large community garden both in terms of area and membership. Today, it has 45 personal plots managed by around 60 gardeners. The personal plots, roughly 3.5m (12ft) by 3.5m (12ft) , are relatively large compared to other community gardens. Due to their large sizes and square shape, many gardeners further divide their plots into 2 or 4 smaller beds so they could access the center of their plots more easily. It has a formal organizational structure, with regular garden meetings and clean-ups.

More than a quarter of the garden's total land area is designated as a communal green space, featuring an expansive short turf lawn for children to play, and a few tables and chairs for meeting and social purposes. In addition, it also features many smaller communal plots along the boundary of the garden, including flower patches and fruit trees. Perhaps due to the relatively short history of the garden, most of these communal plots are arranged in standardized raised beds similar to

the personal plots, though only a third of its size. There are also communal plots designated for food donation purposes. Entfield Row has a relatively mixed membership demographics of both working and retired members. Although the garden can be characterized as mixed-raced, the percentage of Black gardeners is lower compared to the percentage of Black residents within the garden's catchment. Effort has been made to further promote the racial diversity of the garden's membership, and the garden leadership has also attempted to introduce programs that promote the garden's accessibility and communal contribution – with mixed but somewhat positive results.

The interesting case study of Entfield Row came relatively late in the project. And with the covid-19 lockdown restrictions in place during the later phase of my research, I was only to pay a few visits to the garden upon finishing the dissertation. The data from this garden is biased towards interviews, where I conducted semi-structured interviews with 5 garden members.

2.3. The plants

The community garden, as its name implies, has a dual purpose. While their human members and organizational structures are central for community gardens to realize the community part in its namesake, the plants are inseparable from realizing the gardening part of the community gardening experience. Indeed, many of the social interactions that take place in community gardens not only revolve around the plants as topics of interests. Rather, these interactions are also facilitated and mediated by the plants themselves, which represent the carrier of meanings in these exchanges. Plants are therefore both the platform and the medium of these social interactions.

This communicative dimension of plants will be one of the focuses in this study. To achieve this, however, it is important for us to acknowledge and appreciate the diversity of plants grown in these community gardens. From both a horticultural and a social perspective, different plants are not qualitatively exchangeable. Indeed, the difference between different species and cultivars

matters, and would often dictate the form and content of these interactions. As a result, to analyze the social dynamics within community gardens, it is important to understand the different characteristics of plants, and by extension the influence they may have on the social dimension of community gardening.

The most apparent, and perhaps the most superficial difference between different plants is how common they are. Different types of plants can vary significantly in how common they are grown in the community garden setting. Growing under the same climate, with the same umbrella organizations that give them advice and support, and oftentimes relying on the same shops and nurseries to source their plants, it is not surprising some plants gained almost ubiquitous popularity among community gardeners of all horticultural competence, cultural identities and socioeconomic backgrounds. Tomatoes, for instance, are by far the most popular crop among community gardeners. Not only are they extremely easy to source and have a high diversity of cultivars, the quality of a locally grown vine ripe heirloom tomato is also far superior compared to its bland store-bought counterparts. Similarly, hardy herbs like parsley, basil, mint and dill, which can be rather expensive to buy, grow like weeds in community gardens and can often be harvested year after year. They are very popular among gardeners. Other popular crops include lettuce, peppers, squashes, cucumbers, and eggplants. Other vegetables, such as beets, legumes, okra, carrots, radishes, alliums like onion and garlic, as well as brassicas such as broccoli, cauliflower, kale, collard, and bok choy, while not as ubiquitous, are also relatively common. And while the community gardens often discourage growing solely ornamental flowers, some, such as hardy flowering bulbs like daffodils and irises, as well as composites like daisies, dahlias and sunflowers, are also very popular. In contrast to some might presume, at least with the cases covered in this study, there is no correlation between the socioeconomic status of gardeners and whether they

grow ornamental plants in their personal plots. Afterall, gardening does not necessarily have to be an expensive hobby, and the appreciation of natural beauty is universal.

Other plants, in comparison, are not so easily encountered. In addition to economic considerations, as some crops are more expensive or difficult to buy from the supermarket than others, there are many factors that could contribute to a plant's relative rarity among community gardeners. Some of these include cultural familiarity, technical difficulty, and size. These attributes, like rarity, can have an impact over the social interactions they sprout. First, the popularity of plants is strongly influenced by their cultural familiarity. The most popular plants found in community gardens are those most familiar to the American diet. In contrast, "ethnic" crops such as callaloo, tatsoi, lemongrass and bitter gourd, for instance, are mostly grown by gardeners with cultural backgrounds where these cultivars are a mainstay in their respective cuisines. While seedlings of these plants are often distributed by PHS as an encouragement for gardeners to broaden diet, promote cultural exposure and entice horticultural interest, they are still less common due to their unfamiliarity. This unfamiliarity, however, should not be interpreted as a lack of interest – as this dissertation will continue to explore.

Second, the popularity of a plant is to some extent influenced by its technical difficulty. Most of the common crops grown in community gardens, such as tomatoes, mint and pepper, are relatively easy to grow. Their requirements on water and fertilization are fairly reasonable, and the types of pests they have are relatively easy to control in the community garden setting, where there are plenty of insect predators offering free biological control. The main threats for tomatoes, for instance, are small sapsuckers such as aphids, spider mites and thrips, as well as the larvae of tomato hawk moths and other moths. This roster is surely a handful, but with the high abundance of ladybugs, lacewings, predatory shield bugs and parasitoid wasps present in community gardens

(not to mention the visiting birds), both naturally occurring and artificially introduced as biological control, these rarely become a significant source of concern.

In comparison, brassicas, despite having some of the most popular vegetables in the North American diet, are not as common. One of the main reasons for that is the problem they have with pests. In addition to usual suspects such as aphids and caterpillars, which as mentioned earlier are relatively easy to deal with, brassicas like cauliflower and kale are also the favorite hosts for harlequin bugs. Harlequin bug is a type of colorful and highly gregarious shield bug, and they represent a major challenge for many inexperienced gardeners. Because of their resistance to mustard oil, the main chemical defense of brassicas against animals, and their ability to store the chemical in concentration for their own defense, harlequin bugs have few natural predators. And due to their gregarious nature, they can easily kill a plant if left unchecked. To address this menace, gardeners often have to remove these pests by hand, which requires quite a lot more manual labor and willpower, as harlequin bugs are often numerous, beautifully colored and can emit a pungent odor when in distress. Thus, brassicas are usually grown by inexperienced gardeners who are either unaware of their technical challenges, or by experienced gardeners who could contain their heavy pest loads. Strawberries and peas require even more diligence and are indeed even more uncommon. Local strawberries and fresh peas in season outshine their store-bought counterparts by an immense margin. Yet they are cherished not only by humans, but animals alike. Thus, gardeners often have to be astute and innovative, otherwise the fruit of their labor would be robbed by a whole band of garden thieves, from sparrows, robins and squirrels to the occasional opossum and even raccoons.

Other plants can be even more technically challenging even for more experienced gardeners, and for various reasons. Asparagus, for instance, is a delicious spring vegetable and can be rather

expensive to buy from the supermarket, but they are rarely grown in community gardens. This is because an asparagus plant requires three years to reach maturity, and only then could it be harvested on a reasonable scale. And by early summer, when the seasonal harvesting has to end, the asparagus plant would quickly mushroom into a huge lacey bush, which, though beautiful, occupies a lot of otherwise valuable space in a small personal plot. Other long-term investments, such as horseradish and rhubarb, are also relatively rare for the same reason. Some ornamental flowers present gardeners with a different set of technical challenges. While most of the plants grown in the community garden setting are relatively hardy, many annuals and perennials look very similar to weed when not in bloom. Attending plots with these plants not only requires the gardener to be truly familiar with plants, but also makes weeding a lot more time consuming. Highly artificially selected ornamental cultivars, especially roses, are perhaps the most technically difficult of all, as they not only have a heavy pest load, but also are very vulnerable to fungal and viral diseases transmitted by these pests.

Third, how commonly a plant is grown in community gardens is also heavily influenced by the size of the plant. Tall plants, such as maize and sunchoke, cast a long shadow. Because the personal plots in many community gardens are small and densely packed, growing these plants would often compromise the sun exposure of the neighboring plots, and is therefore often discouraged. In all community gardens covered in this study, despite the immense popularity and short shelf life of sweet corn, maize is only moderately common in Old Chapel Field, which has extremely large personal allotment size. Many community garden by-laws strictly forbid the growing of trees in personal plots for the same reason. In addition to height, the sprawl of many plants can also be too problematic to be viable. Most notably, pumpkins and melons can quickly take over a personal plot, sometimes even spilling over to the neighboring plots if left unattended.

All these three factors not only affect how common a plant can be found in the community garden setting, but, as I will explore in the following chapters, also have social implications.

Figures

Figure 2.1 Community Garden and Median Household Income in Philadelphia (Map by Borowiak, Craig 2015)

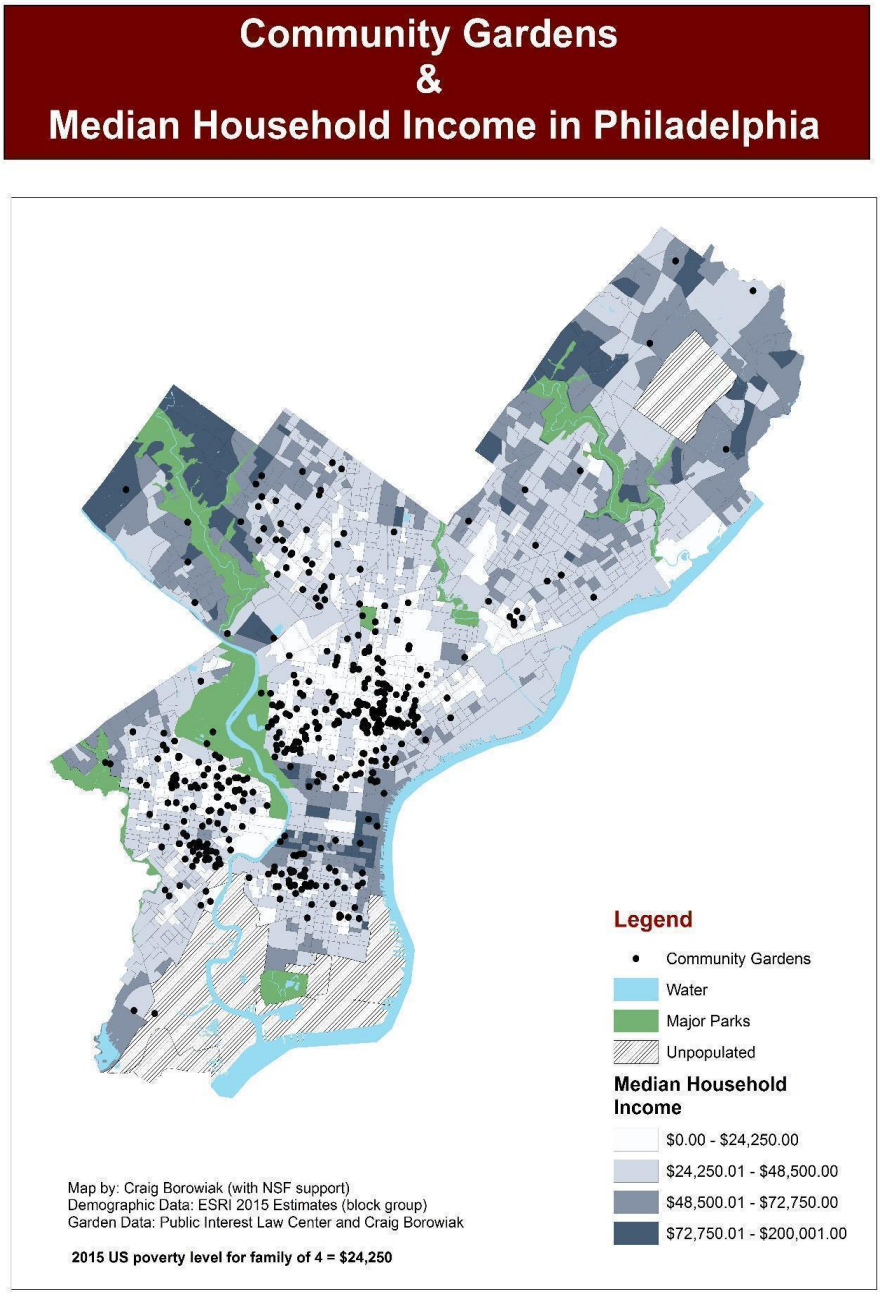
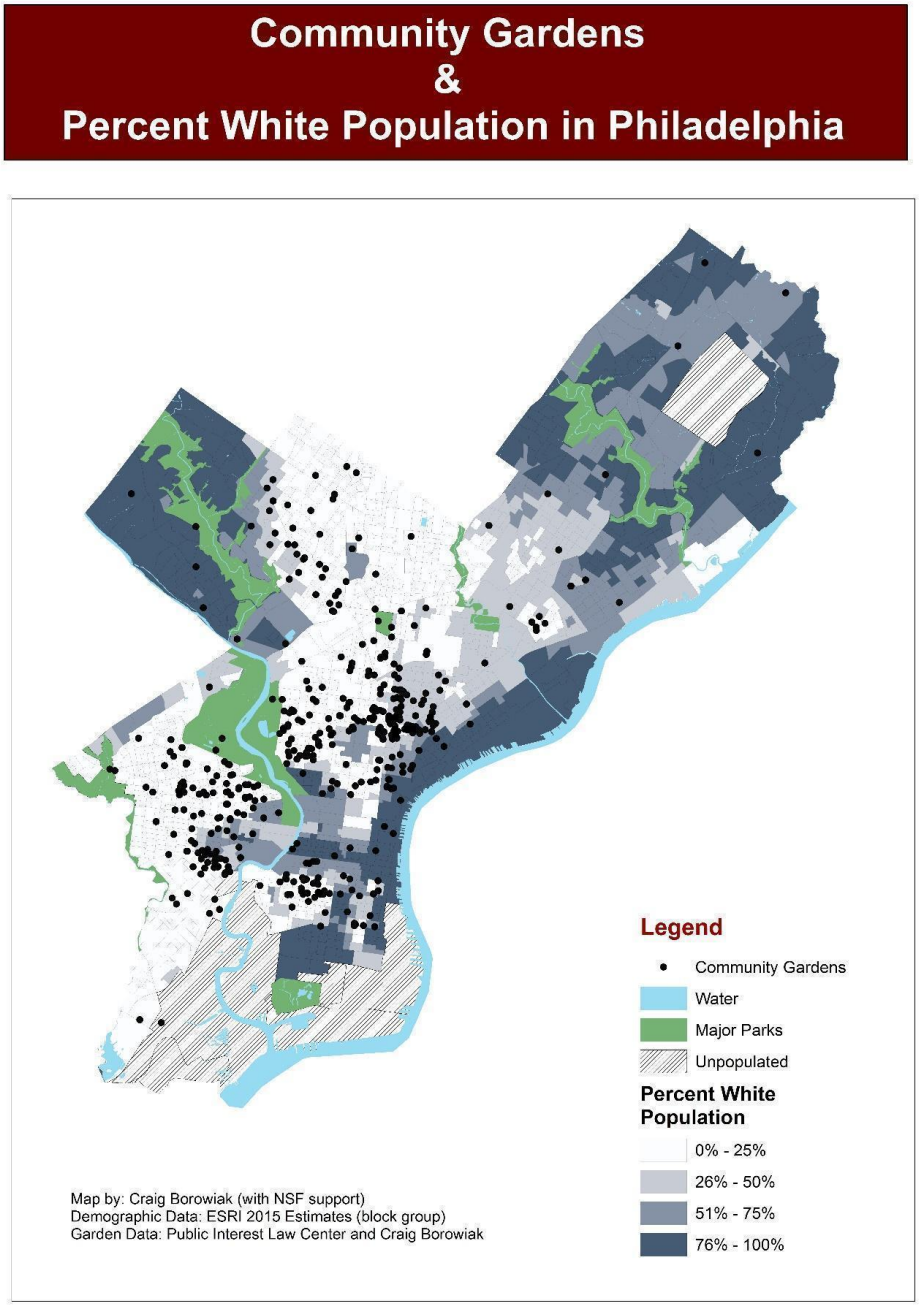


Figure 2.2 Community Garden and White Population Percentage in Philadelphia (Map by Borowiak, Craig 2015)



Chapter 3 | History of Community Gardens in Philadelphia:

Umbrella Organizations and their Impact

Communication is heavily dependent upon a shared context between the participating parties. Thus, to understand the communicative aspect of community gardens in Philadelphia as well as their social implications, we must first establish the contextual structure that defines the main discourse relevant for the community gardening movement. Philadelphia has a rich tradition of gardening and horticulture, and this tradition has had a profound influence over the community gardening movement. And while most community gardens are grassroot initiatives, many are also deeply influenced by umbrella organizations who offer valuable support to garden initiatives across the city. Two of the most important advocates of community gardens in Philadelphia in particular, the Pennsylvania Horticultural Society and the Neighborhood Gardens Trust, have a defining influence over the community gardening movement in Philadelphia. Not only do these two organizations supply plants, gardening material, knowledge, funding, legal aid and other support to community gardens across the city (including all gardens covered in this study), their organizational ideology and their perspective on the community gardening movement have also left a mark on the prevailing discourse in many gardens across Philadelphia. These, in turn, have shaped the social interactions that take place in many community gardens.

The Pennsylvania Horticultural Society (PHS) is the primary patron of community gardening in Philadelphia. PHS was founded in 1827 as an exclusive horticultural hobbyist group with a distinctive 19th century flavor, with the primary organizational goal being “to establish a Horticultural Society in the City of Philadelphia for the promotion of this interesting and highly

influential branch of Science" (Pennsylvania Horticultural Society 2014). Over the years, the organization expanded significantly in size, and has gradually become more inclusive in its membership profile. Reflecting this diversity, PHS has also expanded its operation, with its current organizational goals being namely "creating healthy living environments", "increasing access to fresh food", "expanding economic opportunity", and "building meaningful social connections" with the power of plants and gardening (Pennsylvania Horticultural Society 2024). PHS today operates a wide range of horticulture related programs such as food accessibility programs, gardening education for a diverse population ranging from children to inmates, urban greening. It is perhaps best known around the public for its flagship program the Philadelphia Flower Show, which is the largest flower show in the country and the primary funding source for the organization.

PHS' involvement with the community gardening movement in Philadelphia began in the 1970s under the initiation of Ernesta Drinker Ballard, an extremely wealthy woman, a prominent feminist, and the then director of the PHS. Seeing community gardening as an effective way to address vacant lots around the city, she used the funding generated by the flower show to start the Philadelphia Green program, which in turn funded community gardens around the city – a bold move at the time. In the early days of the program, however, these community gardens were quite different from the vegetable-dominated community gardens of today. Instead, these gardens were predominantly sitting gardens not unlike the public parks scattered across the city, just on a smaller scale. While they are still maintained by community volunteers like the community gardens of today, rather than producing food, these community gardens – though still taken care of mainly by community horticultural enthusiasts – were mainly used for socializing, meditation, and the display of flowers, and hence leave more to desire in community engagement and social inclusion. Their primary community benefits of these gardens were to stake claim to the land and keep the

drug dealers out. This ornamental centric approach, however, arguably fell short in its community impact. Most notably, it may create the unfortunate side effect of green gentrification. While the presence of these community gardens helped to address the social problems caused by vacant lots, and despite the consistent effort from PHS in fighting against redlining, these sitting gardens also functionally drove up real estate prices. They also had limited engagement with the general public outside those who have great interest in gardening and horticulture, rendering these spaces rather exclusive.

In the 1990s, the community gardening paradigm in Philadelphia began to shift. The social and communal benefits of community gardening became a new organizational priority, and many PHS sponsored sitting gardens were gradually converted into the format of community gardens today, where most of the land was dedicated towards growing vegetables. This shift coincided with the fear and subsequent response by the Philadelphia city government against urban decay, where a major injection of funding was dedicated towards the removal of vacant lots in minority-dominant, low-income neighborhoods. The PHS responded to this increase of governmental interest by converting the Philadelphia Green program into community workshops, training local residents to become more competent gardeners while organizing communities around these community garden initiatives (Pennsylvania Horticultural Society, Philadelphia Green 1999; 2002). This shift in focus helped PHS to steer away from its organizational root as an almost Victorian upper-class hobbyist group, and towards a more modern, inclusive and socially conscious operational model. This change of vision towards community building, along with its historical emphasis on horticultural knowledge and the social benefits of plants, have very much dictated the organizational discourse of many community gardens in Philadelphia. It has since become an extremely impactful player in the community gardening movement in Philadelphia,

lending their horticultural resources and expertise to garden initiatives across the city. And unlike many other sponsors of community gardening, most notably many city governments, PHS (as well as many other stakeholders in the Philadelphia community gardening movement) does not see the community gardens as a means to an end, but rather as a merit in itself. However, even though PHS now has placed great emphasis on the improvement of social, economic and communal wellbeing through the means of growing plants, it still stays true to its horticultural namesake, and its focus on plants remains important as an organizational mission central to its identity. This in turn has a profound impact over the predominant discourse in community gardens they sponsor.

The ideological influence of PHS on community gardens in Philadelphia can be observed most evidently through its yearly garden contests. Every year, PHS organizes garden contests between community gardens across the city. While the garden competition does not contribute much to the funding of community gardens, it has nonetheless shaped the way community gardens are designed and discussed by both gardens and gardeners in profound ways. And unsurprisingly, the participants, rules and foci of this contest have drifted over the years, while retaining the core elements central to the PHS mission. In the 1980s and 1990s, the call for participation took the form of a published pamphlet called the *City Gardens Gazette* which also contains detailed judgment criteria, snippets of gardening knowledge, and words of encouragement from the jury. Today, such information has moved online. Different gardens are put into different competition categories based on their size and functionality[1]. After a garden has registered to participate in the contest, a group of volunteer judges – mainly composed of other fellow community gardens across the city – would visit the garden and rate a garden based on the aforementioned categories of that year.

[1] That is, between ornamental, mixed, and vegetable gardens. In practice, the distinction between the latter two can be rather blurry, though the exact criteria for evaluation between these two can be quite different.

Looking at the *City Gardens Gazette* in the archival record, we can observe a significant shift in the predominant discourse of PHS regarding its understanding of community gardening. In the 1980s, the garden competition showed a clear preference over ornamental "sit-and-show" community gardens that fit the traditional "garden" definition. It is a competition that showcases the gardeners' artistic and horticultural prowess. The emphasis on the garden's educational contribution was rather limited, while the food production, community engagement and ecological sustainability aspects of community gardening were largely overlooked during this period. While it acknowledged the variation in skills and the uncircumventable challenge of weather faced by all community gardeners, it also expressed the jury's expectation for gardeners to make the garden more visually presentable. The garden competition judges visit the competing garden with a prior notice, and according to the *City Gardens Gazette*, the gardeners are expected to prepare the garden for the competition, making it more tidy and pleasant to the eyes. As fellow community gardeners themselves, the judges were probably very familiar with the natural state of a community garden, as well as the labor required to elevate it away from such a state. Thus, the judges were not viewing the gardens in their "natural state", but rather as a curated performance catered towards a very specific group audience – one that would not only appreciate the horticultural aspect of community gardening, but also discern the work and skills that went into such display.

This mainly atheistic and horticultural hobbyist discourse of community gardening and garden contest was reflected in the *City Gardens Gazette* of the time. One issue in 1983, for instance, suggests that "the secret to a winning garden is to keep it well-groomed, fresh-looking and as green and productive as the weather allows", and the gardeners should not "let up", highlighting the importance of constant diligence in maintaining an impeccable garden image while holding a dismissive attitude towards having a garden in a wild natural form where plants are allowed to take

their own course (Clarke 1983). Another issue from 1988 suggests that the main competition criteria as following: “entertaining and educational”, having interesting “ornamental plants”, growing “exotic and rare varieties collected from all over the world”, and having “the most comprehensive and informative catalogs” – a list that would not seem out of place when describing a well curated botanic garden (Pennsylvania Horticultural Society Coordinator’s Desk 1988). And while the horticultural dimension of the community gardening experience is clearly reflected in these commentaries, the communal and ecological dimensions – two elements that take the center stage in the garden contest evaluation rubrics of today – are conspicuously absent.

The shift in PHS’ organizational priorities that emphasize the social and ecological function of community gardens in the 1990s coincided with a change in discourse in the *City Garden Gazette*. Vegetable gardens and mixed gardens of different organizational scales were added to the list of participant categories, and PHS began to actively advocate for the growing of vegetables in community gardens. An issue in 1993, for instance, listed the “seven joys of vegetable gardening”, namely exercise opportunity, food accessibility, health benefits, ornamental beauty (which states that “a vegetable garden is as pleasing to the eye as a flower garden”), knowledge and youth education, self-satisfaction, and economic supplement (Pennsylvania Horticultural Society Coordinator’s Desk 1993). Such change of rhetoric signaled a more socially conscious and multidimensional understanding of community gardens with greater emphasis on the people, and the community. As a continuation of this transition towards community engagement, and the increasing social awareness on diversity, equality and inclusion, today’s PHS garden contests are based on a further enriched list of categories that is no longer limited to the horticultural aspect of community gardening, namely: “aesthetic appeal including beauty, creativity, resourcefulness, and effective design”, “plant health”, “crop productivity (if applicable)”, “sustainable practices”,

"habitat for beneficial wildlife", and "social impact and connectedness" (Pennsylvania Horticultural Society 2020).

Gardening creativity, however, remains important to the assessment, and many recent winners of the community garden contest award reflected this. But while the garden contest winners of old impressed the visiting judges with their fancy flowers and beautiful garden arrangements, community gardens today are expected to make an impact that benefits the greater community beyond the garden boundary, whether in the form of ecological benefits, communal outreach, or socioeconomic contribution. This represents the newest shift in PHS' organizational mission, and this new philosophy seems to be picked up by a few gardens across the city. For instance, one of the widely praised winners of the garden contest, the Doyle Square Community Garden, was awarded the golden prize for featuring a beehive, a number of insect hotels, a large native wildflower patch, and a bat house hanging on the wall. Through these installments, the garden can function as an ecological hotspot that provides important habitat for pollinators and other native animals for the greater neighborhood. PHS itself is now also actively involved in helping community gardens to have a greater communal impact. Starting the *City Harvest* program in 2005, PHS now distributes fruit and vegetables from designated plots in partnering community gardens as well as excess produce from personal plots to low income neighborhoods, building a network in which community gardens can have a bigger impact beyond their fences.

And while the PHS garden competition has evolved from its early days where community gardens were evaluated purely based on their ornamental qualities, the PHS discourse of treating community gardens not as a small piece of farmland, but rather as a true garden with horticultural merits is still strongly present in the general approach towards community gardening in many initiatives. Community gardens and the personal plots of their members are expected to be

aesthetically pleasant, and the competition's emphasis on innovation, design ingenuity and horticultural prowess can also be observed on a smaller scale within these community gardens. The yield of a plot is rarely, if ever, an important consideration. Some authors have hypothesized that community gardens with more wealthy members are more likely to grow ornamental flowers than their low-income counterparts (Clarke and Jenerette 2015). But based on my observation with the seven gardens covered in detail in this study, as well as many other gardens I have visited in Philadelphia, this cannot be further from the truth. With proper support, community gardeners of all socioeconomic backgrounds can have an aspiration towards beauty and innovation, and the PHS garden contest has certainly inspired many to pursue horticultural refinement within the limit of their budget, energy and skill level. Through the discourse of the garden competition, many community gardens have become an opportunity for learning and a venue for horticultural self-expression. In addition, while many researchers and garden practitioners alike are often inclined to draw a sharp distinction between ornamental and edible plants, in actuality the boundary between the two are a lot fuzzier. Some food crops, most notably sunchokes, okra and many beans, are beautiful when in bloom. Many community gardeners are consciously aware of this, and often use these plants to their advantage in their horticultural setups, making their plots both pleasing to the eye and nourishing for the stomach.

During the course of this research, I have witnessed many examples of masterful gardening practices in gardens across the city, and in gardeners of all class, gender and ethnicity backgrounds. Most notably, Old Chapel Field, a garden with a predominantly working class Black membership, is heavily influenced by the English gardening tradition in its design. This is spearheaded by one of its former chairs who recently reliquished her leadership roles, an elderly Black woman living right next to the garden. The lilac-colored planters, benches and gazebo of Old Chapel Field

complements the blue and purple flowers of irises and wisterias along the garden's main isle, while the naturalistic waterlily pond features layers of aquatic plants, each with its unique color, shape and texture. Thanks to her design and stewardship, Old Chapel Field is one of the most artistically inspired community gardens across the city.

Another umbrella organization which has a significant influence over the community garden movement in Philadelphia is the Neighborhood Gardens Trust (NGT). Founded in the 1970s, the NGT's current main organizational mission is to help community gardens secure the land ownership status of the vacant lots which they have been cultivating, thereby "preserving and promoting community gardening across Philadelphia" (Neighborhood Gardens Trust 2024). A vacant lot is one of the quintessential preconditions for community gardens to emerge, and community gardening has been adopted by the city of Philadelphia and many other city governments alike as an effective means to address the health, safety and economic risks associated with urban vacant lots. However, most (if not all) community gardens do not have secure land ownership over the vacant lots under their stewardship when they are first established. As the vacant lot gets cleaned, and the neighborhood begins to reap the social benefits the community garden brings to the community, the property value of the vacant plot often goes up. This, along with other socioeconomic forces such as general gentrification, unfortunately often makes these gardens juicy targets for real-estate developments, rendering the long-term survival of these community gardens truly precarious. The organizational mission of NGT is to help community gardens secure the land ownership status for the vacant lots under their stewardship, working closely with gardens, community groups, the city government, as well as other relevant stakeholders. A close partner of PHS, NGT is a much smaller organization, having a fulltime employee size of only three people – though all of them are highly dedicated towards the

conservation of community gardens and are well-known figures across the Philadelphia community gardening scene.

While currently being primarily a land trust advocating on behalf of community gardens for secure land use through legal means, NGT, like PHS, has deep horticultural roots. Its history in other gardening and urban beautification projects in the past arguably has a significant impact over its current discourse, which in turn influences the community gardens they sponsor. Formerly known as the Neighborhood Gardens Association (NGA) and with a history very similar to the history of PHS, NGT began as a garden hobbyist club with a predominantly White, suburban, middle class female membership. Initially based in the Philadelphia suburbs, NGA was founded by Louise Bush-Brown, a landscape architect and a horticultural specialist, in 1953. At the time, the organizational goals of NGA covered both the horticultural and community aspect of gardening, namely “to encourage and foster an interest in flowers and gardening in the city”, “to awaken a sense of civic pride among adults and youth”, and “to develop and encourage volunteer leadership through educational workshops, tours and constructive gardening projects" (Neighborhood Gardens Association by-law).

While these organizational goals overlapped with the objectives and ideology of the burgeoning community gardening movement in Philadelphia of the time, NGA had not yet grown into its current form and pivoted towards land preservation. One of the first major projects of NGA in the 1950s involves neighborhood beautification projects in Germantown and other neighborhoods in the (then) Philadelphia suburb by installing and planting window boxes. Known as the Garden Block Program, it was inspired by the window-box gardens Bush-Brown saw during her visits in many European cities. NGA in its infancy was principally an organization that focused on the horticulture hobby, and saw gardening as a viable way to beautify the cities. And by

requiring a minimal 70% household participation rate for a block to be eligible, NGA used the installation of window-box gardens as a leverage to encourage community socialization and civic engagement. Relying on the organizational scaffolding and resource sponsorship of existing civil societies, such local church groups and garden interest clubs, the Garden Block Program was quite successful, spanning a total of 830 blocks (Stokes; Neighborhood Gardens Trust "Flower Power").

As NGA moved its operational center away from the suburbs and into urban Philadelphia in the 1960s, it faced new opportunities, which in turn gradually transformed its mission. Unlike the affluent suburbs, the Philadelphia city center has a lot of vacant lots. These, coupled with other social factors, channeled the attention of NGA towards community gardening. In 1963, the NGA itself became directly involved in reclaiming a vacant lot on 38th and Mt. Vernon Streets in West Philadelphia and converting it into a community garden (Stokes; Neighborhood Gardens Trust "Flower Power"). Sponsored by the Philadelphia Board of Education, the garden was intended as a model to demonstrate the viability of community gardens in small urban lots, as well as its transformative social potential in community improvements. During this time, NGA became more generalized in its organization missions, and its organization focus shifted away from neighborhood beautification and ornamental plants. Reflecting upon the harsh socioeconomic reality faced by many marginalized urban communities, NGA began to pivot away from its earlier mission that focuses almost entirely on urban beautification through the use of ornamental plants. While the social and psychological benefits of communal greenspace in building community remain important, growing vegetables in urban gardens became a new priority for NGA. Rather than sponsoring window garden boxes, NGA began to build community gardens that grow both ornamental plants and edible vegetables.

This shift in its organizational focus made the NGA cross paths with PHS, the two

organizations have worked closely with one another since that time. This culminated to NGA signing a contract with the PHS in 1978, a timeline that roughly overlapped with the changing organizational framing of PHS itself, which were also in the process of becoming more involved with the community based gardening projects (though, as demonstrated earlier, not necessarily community gardening in its modern iteration). Through their agreement, PHS took over the NGA flagship project of the Garden Block Program, providing plants to the member blocks while overseeing the recruitment of new members and the maintenance of relationships with old established members. NGA itself, on the other hand, could in turn free up organizational capacity and pivoted towards supporting community gardening projects, mainly in the city. This shift in priorities also led to the renaming of NGA to Neighborhood Gardens Trust in 1986, where NGT took on its current form and affirmed its primary function as a land trust dedicated to the preservation of existing community gardens (Neighborhood Garden Association & Pennsylvania Horticultural Society 1978).

Today, NGT has a truly outsized impact over the community gardening movement in Philadelphia despite its relatively small organizational size. As of 2023, NGT has 52 community gardens preserved under its name, with 30 more in the pipeline. Compared to PHS, which mainly provides material resources and oversight to community gardens, NGT enjoys a more intimate relationship with the community garden practitioners on the ground, while also having higher stakes in the community garden movement due to the very nature of its involvement. As a land trust first and foremost, NGT holds titles for the land, and gives the garden initiatives support on insurance, tax assumption, and other legal matters. Working closely with PHS, NGT also helps to provide assistance to community gardens in other areas. These include material assistance in the form of funding and technical expertise for garden infrastructure, as well as organizational

assistance, training, and community outreach. NGT organizes leadership and self-governance workshops for garden coordinators (often with the help of third-party expertise), provides samples of garden by-laws for references, and is sometimes actively involved in mediation and de-escalation of conflicts in their member gardens[2].

And since it has been working closely with many community garden initiatives and other related organizations across the city, NGT is also in a prime position to facilitate connection between different garden initiatives. Through their networking, gardens can learn from each other in both horticultural practices and organizational arrangements, and such exchange of knowledge, experience and social resources strengthens the network of community gardens across the city. They also connect gardens with external organizations to help these gardens gain access to relevant resources in attaining their goals, catering towards their various organizational priorities in the social, economic and ecological aspect of the community gardening movement. These range from conservational organizations and wildlife refuges, to NGOs, local activism groups and other institutions working for the promotions of diversity, equality and inclusion.

Nevertheless, the historic legacy of NGT as a horticultural organization still has influence over its organizational discourse, though it is not nearly as horticultural-centric as the PHS. And since a community garden has to follow a set of protocols for it to be sponsored by the NGT, their organizational ideologies and priorities in turn have cast a significant influence over the discourse of the community gardening movement in Philadelphia. Like PHS, NGT emphasizes heavily the ecological sustainability aspect of community gardening. All member gardens have to practice organic gardening to be protected. Other prerequisites, such as soil condition and the level of

[2] It should be noted, however, that the coordinators of NGT are not social workers with a specialized expertise in conflict diffusion. While they surely want all their membering gardens to excel, conflict diffusion is certainly something they are rather reluctant to do.

gardening competence, are also taken into consideration. These protocols highlight the importance of gardening and environmental sustainability as an important organizational priority, and show NGT's dedication towards guiding community gardens in Philadelphia (and its member gardens in particular) to embrace these philosophies. Given that land insecurity is one of the most pressing threats faced by community gardens, many community gardens are understandably obliging to these protocols. This, together with NGT's strong consistent advocacy in promoting these values and practices, set the tone in many community gardens. The commitment, technical competence and environmental sustainability aspect of gardening are adopted as core values by many gardens, and this in turn shapes the way how individual gardeners plan and review garden plots themselves.

In contrast, NGT can sometimes feel underequipped when helping gardens realize their social goals, as well as addressing the social challenges faced by many community gardens. This is especially true when it comes to the divides between different demographic groups, most notably age, race and gender. Connecting people of different socioeconomic backgrounds is an important organizational priority for many community gardens. Some, such as the Newtown Heath and Saint Mary's, were founded with these community-oriented goals explicitly as their primary mission. However, because many community garden members are not professional community activists but rather amateur horticultural enthusiasts with other personal priorities, community gardens can often be ill-equipped in addressing these socioeconomic divides with all their gravity and nuance. In addition, the competition between the community and gardening aspect of the community gardening experience, which will be elaborated in greater detail later in this dissertation, can sometimes be a main source of conflict between garden members with competing interests. In these scenarios, due to the intimate organizational ties between NGT and its membering gardens, it is not uncommon for community garden coordinators to reach out towards NGT for support, and

sometimes, rather misguidedly, jurisdiction. During the course of this research, some of the most dramatic episodes of conflicts between garden members culminated in the mediation of NGT coordinators. In some cases, they were responding to the request from garden coordinators mired by the issues they faced. But in at least one case, a young Black garden member from the predominantly Black garden of Old Chapel Field contacted NGT directly after feeling that she and her daughter were racially abused by a fellow gardener, while accusing the garden leaders of inaction and nepotism[3].

However, just like the community gardens it serves, NGT itself too is a small organization that does not specialize in tackling these complex social issues – it is after all a land trust first and foremost. Thankfully, due to its extensive organizational network, NGT can often serve as an information hub, and can connect community gardens to organizations who specialize on social issues in these situations. Nevertheless, the outcome of NGT's mediation can often be rather mixed, and is often dependent on a wide range of organizational and personal factors beyond the control of NGT. Sometimes NGT can be quite successful in addressing conflicts rooted in greater socioeconomic problems. For instance, when the Raven Cottage community garden, which has a predominantly White middle class membership, encountered difficulties with Black children and teenagers from local recently built low-income housings vandalizing the garden, NGT helped to connect them with a local community building organization. Instead of escalating the conflict, the intervening organization helped Raven Cottage transform the unpleasant encounter into an opportunity for community outreach and social inclusion. The garden now has established a solid

[3] This specific conflict was left unsolved by both the Old Chapel Field coordinators and NGT, who were unable to address the problem effectively. The accused garden member, who was an old Black woman, was clearly suffering from mental illness, and the episode reflected long standing tensions within the Black communities in the United States regarding race, gender, and mental health. In the end, the young woman left the garden, while the older woman died during the Covid-19 pandemic due to a preexisting condition.

education program catered towards the local youth, who were also given a plot of their own.

In some other scenarios, however, NGT can appear underequipped. In particular, the organizational history of NGT as a gardening hobbyist group in the predominantly White, middle class suburb has created some noteworthy tensions in its operation. Most community gardens, at least during the early phase of their development, do not have legal ownership on the vacant lots they work on. Many community gardens in Philadelphia are located in working class neighborhoods with mixed-race or predominantly ethnic minority demographics, and these initiatives are often under the greatest pressure due to the high rate of gentrification in their neighborhoods. To make matters worse, community gardens are very effective at removing vacant lots as well as addressing the series of socioeconomic problems vacant lots tend to generate[4]. This effectiveness, as explained earlier however, can contribute to the process of green gentrification. As they inadvertently increase property prices in the neighborhood, these community gardens often draw unwanted attention from real estate developers. This can come not only at the detriment of these garden initiatives themselves, but also harm the livelihood of many garden members and the greater community which the community gardens seek to uplift in the first place. For these gardens, the work of NGT is desperately needed.

Yet, the relationship between NGT and minority predominantly gardens (and to some extent mixed-raced gardens which may face contentions along racial lines both from the general community and within their own membership) can sometimes be an uneasy one. NGT, due to its history, is sometimes seen by these beleaguered community gardening practitioners as a White middle class organization with their own organizational agenda. NGT's historical mission of neighborhood beautification through gardening can be seen by some, albeit perhaps a bit

[4] Most notably, in this context, violent and drug related crimes which often take place in vacant lots.

misguidedly, as an important precondition of gentrification, and therefore detrimental to the long-term livelihood of the local minority community. And given the difficult social circumstances these gardens often have to contend with, it is unsurprising that some community gardeners may be critical or even defensively towards NGT and its protocols. This relationship is further complicated by the division in ideology among community gardeners themselves and its correlation with garden "identity politics". While NGT champions both the gardening and community building aspects of the community garden movement, like PHS it tends to place more emphasis on the gardening aspect compared to many other stakeholders in the community gardening orbit (most notably the city government), and its expertise in addressing some of the main social issues faced by community gardens can sometimes feel limited. This is not necessarily a bad thing – compared to the city government which often sees community gardening a means to an end, the horticultural focused position of NGT makes it extremely dedicated towards preserving the garden as a long-lasting entity. Yet it can still make the collaboration between NGT and minority gardeners more difficult on certain issues.

This inexperience is further compounded by the social dynamics often seen in community gardens whose neighborhood experiences gentrification. This is most evident in Newtown Heath, a garden located in a fast gentrifying neighborhood and, at least at the time it was founded, has a mixed raced and mixed class membership. Founded as a project of community revitalization, the garden attracted many members with a younger, relatively more affluent demographic profile. Many of these younger gardeners also show a very high level of dedication towards gardening, which coincides with the advocacy of NGT. Some (but certainly not all) Black working class members whose families have resided in the neighborhood for decades, however, put more focus on the community building and social engagement potential of the garden, and see the garden as a

venue for communal activities and a banner for communal self-sufficiency. Yet despite their unquestionable dedication and passion, the interest of these community-focused garden members towards gardening itself can sometimes be rather limited – the garden is seen as a means to an end, while their merit as an urban greenspace and a site to practice urban agriculture is often overlooked. The balance between these two overlapping, yet sometimes competing priorities can be difficult to achieve, both for the garden and for NGT. When confronted with such ideological differences, and given the history of Black communities in the United States with agriculture, it is not surprising for some Black gardeners at Newtown Heath to conflate ideals with identities, and see the emphasis on gardening by a historically White suburban organization in a hostile light. This also creates a sense of false dichotomy, where the community centric gardeners and the gardening centric gardeners – and by extension NGT – are pitted against one another, making the already contentious garden politics even more complicated. In the case of Newtown Heath, this culminates to not only a sometimes contentious relationship between it and NGT, but also within continuous conflicts between its members.

Other umbrella organizations have also been moderately influential in the community gardening movement in Philadelphia. The Penn State Extension, an agricultural science social engagement program initiated by the Penn State University, has been a great supporter of community gardening efforts in the city. A close collaborator with the PHS, it provides support on the technical aspect of community gardening. This includes soil testing, water quality control, information on pest control, as well as many others. In recent years, the Penn State Extension has taken a less proactive role, and this position means that while important, its influence over the discourse of the community garden movement in Philadelphia is relatively limited. Another organization important to the community garden movement in Philadelphia is Soil Generation.

Founded in 2013, Soil Generation is a Black and Brown led organization dedicated to the mission of racial and economic justice through the means of community gardening and urban farming. Relying mainly on community organizing, education, and advocacy, Soil Generation focuses mainly on the community aspect of community gardening, while highlighting the unique experience of minority gardeners. Its work with marginalized minority groups addresses a very important part of the community gardening mission, while its advocacy provides a more radical alternative discourse to the gardening centric perspective of PHS. Unfortunately, today Soil Generation as an organization is no longer as active as it was, which limits its impact on gardens on a material level. Nevertheless, it would be interesting to see how its involvement in the community garden movement influences the discourse and perspectives of community gardens on an ideological level, especially gardens with a sizable minority membership – such as Old Chapel Field and Saint Mary's Park.

Chapter 4 | Self-Recommendation and Self-Certification:

Social Interactions through Personal Plots

Abstract

Gardening activities in personal plots should be understood as a channel, a "technology", for indirect interactions, and is an important part of the social interaction that happens in community gardens. The temporal insensitivity of gardening as a channel for social interaction allows the message to be relevant for a longer period of time, giving them the potential to overcome the difficulty presented by the lack of physical and temporal copresence in many gardens. Among all the channels which gardeners may socialize, personal plots play a pivotal role in shaping the sense of communal solidarity among garden members. A defining feature of personal plots as a channel for social interaction is the high degree polysemy of its message, where a garden can be a conglomerate of potentially meaningful information open to interpretation. The personal plots contribute to the communal solidarity of garden members in two main ways. First, garden innovation as a form of self-recommendation fosters new friendships by attracting the attention from like-minded gardeners. Second, personal plot upkeep as a form of self-certification maintains harmony across the whole membership through displays of dedication and neighborly courtesy. The communicative effectiveness of personal plots relies heavily upon a shared context for it to be viable, in this case being the shared passion for gardening and horticulture.

4.1.Overview

As illustrated earlier, community garden as an actual activity seems, perhaps counterintuitively, to be a rather solitary affair. In all seven community gardens covered in this study, apart from the regular garden meetings and cleanups, there are usually very few people working simultaneously in a garden at the same time. During the summer months when the gardens are at their most vibrant, most of the gardening activities are concentrated in early mornings and in late afternoons when the temperature is lower. This not only makes garden work physically easier, but also reduces water evaporation from the summer heat. Older garden members can often be seen working in the garden both in early mornings and late afternoons, while young members prefer hours after work. Yet even in Stanford Bridge, a very large garden with more than 90 members, there are usually fewer than five gardeners scattered across the garden during peak hours. During the middle of the day, the gardens are almost always empty. The main reason for this is that most gardeners only spend limited hours working on their plots. Survey results from four of the seven community gardens suggest that most gardeners spend less than 4 hours per week working on their plots. In addition, while some gardeners report that they sometimes coordinate their visits to the garden with others, and social gatherings do happen in gardens from time to time, this is certainly not the norm. Therefore, the community gardening experience in the seven gardens covered in this study is mostly constituted by individual gardens working independently in their own personal plots. This lack of physical copresence among gardeners, coupled with the lush vegetation that easily masks the sight and sound of people working in their plots, means that the opportunity for spontaneous face-to-face social interaction among gardeners can be often very limited. This means that to build a sense of community, gardeners must rely on a channel of social interaction that does not require the physical or temporal copresence of the interaction participants.

The garden itself, and especially the personal plots, is an obvious candidate.

But do community gardeners really see their garden as a medium for social interaction, let alone a physical avatar for the plot caretaker? Based on my empirical observation, the communicative potential of gardening is often (though not always) consciously recognized by the gardeners themselves. In addition to interpreting and responding to the personal plot of other gardeners, as will be demonstrated later in this dissertation, there are also instances where gardeners intentionally used their personal plot gardenscapes to broadcast message to others, evidence that community gardeners are, at least in some cases, consciously aware of the communicative nature of gardening. In these cases, gardeners usually employ plants and structures that carry a clear message easily recognized by their intended audience. They also sometimes make references to established iconography and major social discourses to make these messages even more unequivocal.

Such purposefully communicative gardening is most often observed, unfortunately, during negative interactions among garden members, where hostile gardening is used as a passive-aggressive channel to voice grievances towards others. In one community garden, a rather eccentric but very talented gardener planted a hedge of blackberry bushes along the edge of her plot near the garden's main aisle, which has grown ever taller and denser over the years. Blackberries, also known as brambles, are dense and thorny. Deeply frustrated by other gardeners trampling her plot during clean-ups, this gardener uses this plant intentionally as a signal of deterrence, dissuading others from trespassing. She even purposefully left these bushes unpruned, allowing them to mushroom into the path of the main aisle. This clearly compromises her own gardening experience, as the bramble bushes not only make accessing her own plot more difficult, but also cast a tall shadow and thus limit the light exposure in parts of her plot. Nonetheless, such

a gesture of hostility is well recognized by her fellow gardeners as a deterrence against trespassing. The visually imposing bramble bush and their vicious spines are both hard to miss for any would-be "trespassers", who would probably be also reminded that walking across other gardeners' plot without permission not only is unneighborly, but also violates the garden by-law. Quickly, people have learnt to circumvent her plot during clean-ups and respect her territorial claim, while the gardener herself often gifts her excess blackberry harvest to her fellow gardeners as a gesture of reconciliation.

Similarly, when one gardener at another community garden was deeply frustrated by the aggressive growth of plants in her neighboring plot which often invade her own plot, she chose to build a "wall" with loose bricks along the boundaries of the two plots, in addition to the wooden boards that already separate the two beds, as a gesture of protest. Such a humble structure obviously would not deter the aggressive sprawl of the neighbor's squash vines, nor would it prevent her plot from having volunteer plants from lateral roots and seed deposits. Yet by evoking the xenophobic "build the wall" rhetoric deeply rooted in the contemporary political lexicon in a tongue in cheek fashion (in a garden with an overwhelming democrat-voting membership no less), she intended to broadcast her grievance towards her neighbors' overly ambitious planting scheme and rough gardening style, demanding them to keep their plot contained. This gesture of protest certainly did not go without notice, but only towards those who shared her grievances. After the wall was erected, some of her other neighboring gardeners who were also critical of the condition of the neighboring plot in question have later approached her in-person, expressing their sympathy to her while voicing their condemnation. Many also lamented the perceived lack of drastic disciplinary measures from the garden coordinators. It is also important to note, however, that many other gardeners were unaware of the wall's communicative significance, as they either were

unfamiliar with the territorial tension between these two gardeners, or did not find the plot in question was insufficient in its plot maintenance. Thus, despite making a direct citation to a well-recognized iconography, the communicative potency of the "wall" only rings a bell for those who share the stance of initiator.

In both these cases, the personal plots are used intentionally by the gardener as a means for communication, with varying effects in the eye of the beholder. As a "technology" for communication, the garden has its unique characteristics. Due to the material nature of its medium, gardens often present the uptaker with a multifaceted conglomerate of potentially meaningful information pieces open to interpretation. However, the personal plot as a medium for social interaction is not just characterized by the non-verbal medium it adopts, or the lack of physical copresence of interaction participants. Rather, I propose that one of the most important qualities of gardening as a medium for social interaction is its *temporal insensitivity*. A communicative message, and thereby the social interaction it is situated in, is more temporally sensitive when a timely response is socially expected. When a social interaction is highly temporally sensitive, the pause before a reply could quickly become a meaningful message in itself if the response was delayed beyond the socially expected timeframe. For instance, a face-to-face conversation using the combination of verbal and nonverbal cues is usually highly temporally sensitive (Sacks et al 1974). The speaker expects a timely response from the listener, and the content of the interaction is often only relevant and valid at the very moment. In fact, face-to-face conversation is so temporally sensitive, that a slow response can be perceived as a meaningful message in itself, sometimes signaling hesitance, deep thinking, distractedness, dishonesty, and a myriad of other meaningful non-verbal cues to the first speaker.

4.2.Gardening Innovation and Self-Recommendation

So, how does gardening as a form of social interaction influence the sense of community among community garden members? In an environment where gardeners have limited opportunity for face-to-face contact, gardeners rely heavily on their personal plots to serve as an avatar for the plot owners, and function as a catalyst that helps to spark spontaneous conversations. Specifically, innovative gardening practices in personal plots as a form of material-mediated indirect social interaction can help to foster new social connections among gardeners. By introducing novel plants and adopting unusual gardening practices, gardeners can initiate direct interactions by attracting the attention of like-minded individuals who share their passion for gardening. This helps them build new friendships and social networks in an otherwise highly individualistic environment.

Novel plants can help to foster new social connections between previously unacquainted gardeners by inviting curiosity. They function as catalysts that encourage conversation and cooperation between previously unacquainted garden members. Many gardeners showed great appreciation for the novel plants in personal plots of their peers, and will often approach the owner of these plots to learn more about these garden oddities. Through these inquiries, novel plants help these gardeners foster new social bonds with other gardeners who they would not know otherwise, where these novel plants become the talking point in these conversations. With the personal plots representing an embodiment of their caretakers' gardening persona, the curious uptakers do not need to catch the garden creators in the act to recognize their gardening skill and ingenuity or the overlap of interests. Instead, the uptakers may choose to approach the gardener and initiate a conversation whenever the circumstance allows. And without the plant to serve as a mediator for their shared passion, one would imagine that such inquiries can appear rather nosy and awkward.

These weird and wonderful plants include unique heirloom cultivars of popular vegetables, most notably tomatoes and squashes. Thanks partially to their increased availability and the

advocacy of PHS, heirloom cultivars are increasingly popular in community gardens. Some, like the ink-black tomato cultivar "Indigo Rose" and the bizarre purple and green "Blueberry", often spark conversations due to their intriguing appearances. Unusual species of plants uncommon in the community garden settings, such as lemongrass, horseradish and beer hop, also tend to capture the curiosity and imagination of gardeners passing by. A gardener from Entfield Row, for instance, keeps asparagus in her plot as a long-term personal project. Unlike most vegetables, asparagus needs three years of growing before it can be viable for harvest. It is also a highly seasonal vegetable, where the delicate tender shoots can only be harvested in a short window in spring. During the warmer months, the asparagus plant balloons into a tall lacy monstrosity more than 2 meters tall. Many members of Entfield Row, apparently unfamiliar with asparagus in its fully grown form, were flabbergasted by the sight of it during the first two years of the project. Many approached the gardener and asked her questions about the husbandry of this seemingly unrecognizable plant, only to be pleasantly surprised by its true identity. Although no other gardener at Entfield Row has since started growing asparagus for themselves (there is a small section in a communal plot dedicated to asparagus), these curious inquiries have helped this gardener make many friends along the way. Other outstanding examples include the surprising popularity of amaranth (callaloo) at Old Chapel Field, clearly inspired by its members with Caribbean heritage. Similarly, at Stanford Bridge, many conversations surrounding tatsoi - an Asian leaf vegetable first introduced to some its gardeners via the PHS City Harvest program[5].

Similarly, curiosity often arises among observant gardeners when gardeners intentionally tolerate or even propagate certain types of wild plants such as mosses, horsetails, purslane and

[5] A cousin of bok choy, which is not much more familiar to US consumers, tatsoi was first introduced to the gardeners of Stanford Bridge as seedlings for their City Harvest plots, which caters towards local low-income residents with a sizable Asian population. Curious looking and extremely cold hardy, it first became popular among a small group of gardeners who volunteer for the City Harvest program.

many native wildflowers for their aesthetic, edible, medicinal or ecological purposes. One group of co-gardeners who share a plot at Stanford Bridge, for instance, keep bushes of horsetails in their personal plot as a decoration. A living fossil hailing from times before the dinosaurs, this tall, segmented relative of the ferns requires minimal care, and its bamboo-like appearance gives their plot an elegant riverine aesthetic. Many keen-eyed gardeners were quick to notice, and asked the couple many questions about these unexpected plants – what they are, are they an invasive weed, and how to take care of them. Lucky for them, horsetail is very easy to propagate, and today these prehistoric plants are a common sight at Stanford Bridge. Interestingly, these gardeners themselves do not really know the name of the plant. One for the longest time referred to it as the Chinese eye-poking plant due to its sharp pointing stem, which can be potentially hazardous to the eyes when one bends down to work in the dirt. She also wrongly assumed that the native plant was introduced from China, perhaps due to its bamboo-like appearance which perhaps evokes an East-Asian origin. Of course, this erroneous identification of the horsetail as an invasive species, however, clearly did not stop her from propagating it for its beauty. Other gardeners purposefully keep a small patch of native wildflower in their plot as a means to help the local wildlife. Some gardeners grow tube-like flowers rich in nectar, such the common jewelweed, to attract the charismatic hummingbird. Likewise, milkweeds, the lifeline for the threatened monarch butterfly, are immensely popular among many gardeners.

The circumstances in which these conversations actually take place can be rather varied. Sometimes, these curious inquiries happen during spontaneous encounters between gardeners when they stumble upon one another on occasions. This is especially common among gardeners who have neighboring personal plots, where the chance of them rubbing shoulders is more likely – though sometimes gardeners whose personal plots are located near the entrance of the garden

may also enjoy an elevated level of communal interest, as their plots receive a higher level of exposure. Unsurprisingly, many community gardeners have developed a good relationship with some of their garden neighbors, and many have reported that seeing unusual plants in the neighboring plots served as a catalyst for their friendship. In spontaneous garden encounters, unusual plants can often serve as an initiator that opens up and substantiates a conversation, making these interactions last longer and memorable than just ritualistic greetings. But perhaps more importantly, this can be an invaluable window for many young, inexperienced gardeners with short membership tenure to befriend more experienced peers. Attending a full-sized personal plot for the first time can be a daunting task. Unusual plants in personal plots can function as symbols that signify the passion and competence of the plot owners, advertising these gardeners as a reliable source of horticultural knowledge and social knowhows. Inexperience gardeners read these unusual plants as signs of seniority and experience of the plot caretakers, even if they do not recognize these plants – if anything, the unknown nature of these plants adds credential to the growers' knowledge. Many reported that they have learnt a lot from their more knowledgeable neighbors. This helped them immensely during the early phase of their garden tenure, when they had limited gardening experience and limited social network to rely on. One young gardener describes her experience as following[6]:

> *"When we're at another plot, we're like, between two senior gardeners who have a lot of knowledge. They grow these long snake-like zucchinis, I believe they are from Italy[7]. I don't even know the name of those things. So we would just ask them questions, especially when we*

[6] Interview 12

[7] The squash she is describing here is a tromboncino, an heirloom summer squash originated in northern Italy. Rare and extremely eye-catching, these squashes can grow to nearly a meter long, longer than a human arm. Interestingly, the owner of that plot, though an extremely talented gardener indeed, does not really know the exact name of the squash, and refers to them simply as trombone squash, which is an eggcorn of a name that fits these squashes rather perfectly.

first took over the plot. We weren't sure about a lot of things as we were introduced to so much new stuff – what is this, is this a weed, is it not, etc. And they were helpful. It wasn't anything formal, like more informal."

But in many other cases, unusual plants spark conversations between gardeners when the curious uptaker deliberately seeks the gardeners of interest. Most community gardeners walk straight to their own plot for their chores, and leave their gardens immediately after they are done. But a sizable minority of them enjoy a long stroll around the garden after finishing their work. These gardeners are truly passionate about gardening, and they are always on the lookout for new exciting projects to experiment with. They often go out of their way to find new ideas from their peers, and are not limited to drawing inspiration from neighbors. Seeing unusual plants in other personal plots entices the curiosity of these horticultural enthusiasts. With the assistance of the garden plot maps and membership contact lists often available in garden sheds, they will try to purposefully reach out to the plot owner of interest during garden meetings, clean-ups, garden social events, or even through emails and messages. These curious gardeners enthusiastically approach these garden innovators, asking questions about where they got these plants, how to take care of them, how to use them in everyday cooking, and how good the harvests are. By using unusual plants as a lead, these garden enthusiasts can identify other garden members who share their passion, and through their curious inquiries they are able to befriend like-minded peers. One especially passionate and experienced gardener explains this as such[8]:

"If I see somebody trying something I haven't tried before, I will definitely approach if it catches my eye and catches my interest. I mean, I will approach them and ask them the whys and how it is doing and advice and how I might try it myself. (…) I think people gardening out

[8] Interview 24

there experimenting does promote interaction, because you just naturally are driven to something new or attracted to something new to then inquire about it. And you might talk to a gardener that you hadn't talked to before."

Novel plants can also facilitate face-to-face interactions by encouraging exchange of knowledge and experience as well as direct cooperation between gardeners who share a common interest in growing them. Because of the great diversity of heirlooms available, and the fact that heirloom cultivars tend to be less prolific than commercial varieties, growing unusual plants in the community garden often carries a great sense of uncertainty. This uncertainty encourages gardeners to actively seek others who also grow heirloom plants for advice and company, sprouting new friendships through these contacts. In these scenarios, heirloom cultivars are again used by gardeners as markers for overlapping interests. Some gardeners also share joyful moments of friendly competitions where they celebrate the most unique and flavorful breeds of heirlooms vegetables, or those with the most robust growth. It is also common for gardeners to exchange heirloom seeds from their harvests. While not all these exchanges grow beyond the limit of horticultural interests into lasting multi-dimensional friendships, they nonetheless represent an important channel for initiating direct interaction in the community garden setting.

In addition to novel plants, innovations in gardening methods also have the effect of bringing people together. Community gardeners often face many challenges with weeds, pests and space utilization. Without the use of synthetic pesticides, herbicides and fertilizers, maintaining a personal plot with robust growth can be both physically demanding and time consuming. In addition, because most gardens with the exception of Old Chapel Field have personal plots that are small and tightly packed, gardeners have to juggle between the competing priorities of planting density and light exposure if they want to maximize their plot output without being unneighborly.

All these challenges push many gardeners to think outside the box and experiment with novel, sometimes borderline bizarre approaches to gardening. These experimental projects not only serve a utilitarian purpose, but are also an integral part of the community gardening experience where gardeners can embrace their creativity in garden engineering. From constructions and methods inspired by industrial practices, to weird and wonderful contraptions dredged from depth of the internet, community gardeners display great diversity with their gardening approaches.

There are many examples of these innovative gardening methods. For instance, many experienced gardens employ biological pest control using natural predators, parasitoids and parasitic fungi. As part of the organic gardening ethos, most gardeners covered in this study are well aware that beneficial insects are a gardener's greatest ally, and many can recognize many rather obscure beneficial species. In addition, both the PHS as well as many community gardens themselves are avid advocates for beneficial insects, and the PHS hold annual workshops that educate gardeners on biological control. Some gardeners embrace these ideas by purposefully introducing beneficial insects, incorporating them as part of their garden maintenance routine. Cards and boxes meant to disperse beneficial insects are not uncommon in many community gardens. Some gardeners will even put up small, laminated information cards in their personal plot, educating their peers about beneficial insects, informing them not to be alarmed by the gruesome sight of a parasitized caterpillar or the sudden "invasion" of gnarly ladybeetle and lacewing larvae.

Other gardeners build interesting contraptions to improve the yield of their diminutive personal plots. Some gardeners try to address this by stretching the gardening season by building cold frames and even small greenhouses in their plots. Many more seek to address this limitation through building vertical structures, thereby reducing the footprint of each plant. Among them, many are unsatisfied with commercially available trellises, and choose to build custom structures

themselves. One young gardener at Stanford Bridge, for instance, built large vertical trellises more than 2 meters tall using wood, PVC pipes and fishing line. With these structures for vines of beans and cucumbers to climb on, his personal plot not only boasts a great yield, but also gives his plot a uniquely layered appearance that evokes the futuristic aesthetics of a vertical farm. Although much to the dismay and begrudgery of some garden old guards due to their "large, intrusive appearance" and "potential safety hazard", these constructions are well received among many gardeners for their ingenuity. They earned the plot owner – a young man with engineering backgrounds – a great reputation as a dexterous craftsman who thinks outside the box. Several other gardeners, both young and old, have since imitated his design.

A gardener from Entfield Row is perhaps even more dedicated. A retired working-class man proud of his Irish heritage, his passion for growing heirloom potatoes is unmatched among community gardeners. And in order to grow them at a higher yield and to make harvesting the root vegetable easier, he built an elaborate vertical potato garden in his plot using a large, repurposed oil drum. Using his experience in metal works, he cut out large semicircular holes on the side of the metal drum, and welded the cutout materials to it as lips. The drum is filled with soil and has additional holes underneath to promote drainage. The potatoes are grown in these pockets on the side of the drum. Each pocket has its own label, indicating the cultivar of potatoes and sweet potatoes grown in them. These include the Irish White potato which he grows mainly as an homage to his home country (even though he thinks it doesn't really taste as good), colorful heirloom cultivars from Peru, and sweet potato varieties he bought as tubers from Asian grocers. This vertical arrangement improves the amount of potato he could grow in the given area immensely, and the structure itself is a truly theatrical site to behold. This contraption, among many others, earned him the reputation of an eccentric yet highly skilled and ingenious garden engineer, a label

which he fully embraces by hanging the sign “mad scientist at work” on another vertical structure he built in his plot. These structures have also drawn a lot of attention from his peers, and throughout the years many gardeners have approached him for advice and assistance on building projects both inside and outside the garden. Many gardeners at Entfield Row have custom-built cold frames and insect netting in their plots, partly due to the inspiration and knowledge input from this maverick gardener.

In addition to adopting innovative gardening methods and structures for utilitarian purposes, personal plots also give gardeners a canvas to explore and express their passion for art and garden design. In addition to growing ornamental plants, many gardeners further decorate their personal plots with artifacts and other installations. Most notably, many community gardeners are clearly inspired by the famous local mosaic artist Isaiah Zagar and his openair installation museum the Magic Garden, whose artworks introduce an assortment of objects and materials from different cultural influences. Some of them incorporate a variety of materials in their plot aisles and other ground coverings, creating a mosaic of visual and tactile textures using hay, bark chips, pebbles, patterned brick, broken ceramics and glass fragments, rescued Belgium blocks, and various ground-covering plants such as moss and creeping thyme. Others decorate their personal plot with various trinkets, gadgets and accessories. From self-watering devices made of stained glass and ceramics, to wind chimes, metal strips and pinwheels intended as half-hearted attempts for bird deterrents, these objects create a serenade of light, sound and motion that converse with the natural world, while contesting the boundary between aestheticism and functionality.

Some garden installations are even more unexpected. One gardener at Stanford Bridge built a small mound in the otherwise flat bed, topped with tall ornamental and edible plants – such as sunchokes and sunflowers, highlighting the vertical dimension of gardening that is often

overlooked even in professional gardens. Another gardener at Doyle Square built a minuscule fishpond the size of a kitchen sink in her plot, completed with a small solar-powered pump, micro aquatic plants, and even a small colony of tiny mosquitofish which she always scoops out during the colder months. Though due to concern over overheating the fishpond is almost always covered, this unorthodox undertaking, so out-of-the-box in its planning and execution in the context of community gardening, is always on the lips of her fellow gardeners. Innovative gardening methods are not limited to overachieving gardeners too. Some elderly gardeners, who find managing a full-sized personal plot too physically demanding, often seek ways to make theirs a little less laborious. Some build tall waist-height raised beds to reduce the need for bending over, while others install metal benches in their plot, sometimes completed with matching metal artworks to complete the aesthetics.

As with novel plants, innovative gardening methods can help to foster new friendships by attracting curiosity as well as encouraging exchange and cooperation among gardeners with overlapping interests. Having innovative gardening methods in one's personal plot often attracts the attention of other curious and observant gardeners, who often see these innovations as the testament of the plot owner's passion and ingenuity. Similar to the case with novel plants, many gardeners will deliberately try to approach these innovative gardeners for advice and company. This helps to foster new connections with others who share this propensity for learning, experimentation and self-expression. Innovative gardening methods arguably have an even greater "audience appeal" than unique plants. While not all gardeners find interest in growing rare and unique breeds of plant, and can often be rather conservative in their plant selection, community gardeners often face the very same challenges in gardening, most notably the never-ending battle with pest and weed control and the pressing need for space. Innovative gardening methods can be

an interesting solution to these problems, and fit nicely with the "do it yourself" ethos many believe community gardens should embody. Hence these novel gardening methods are always seen to be worth a try, and the inquiries into their effectiveness and execution can often be the beginning of new friendships. One gardener explains[9]:

> *"So you might see somebody build a better bean cage. And you might go over and say: 'Hey! That's a trellis. That's a cage. How does that work?' And even if you don't even ask the question right out, you might go over and look at it. And next time, you will go over to that gardener and say: 'I was checking out your substructure, your bean cage and that looks really great. I'd like to know how it works.' The diversity of how people grow things definitely promotes interaction."*

Similar to novel plants, novel gardening methods also foster new friendships by opening direct channels for exchange and cooperation. Community gardeners often lack the tools and expertise in tackling these custom-build projects. This makes collaboration not only appealing, but often unavoidable. Some particularly skillful gardeners with backgrounds ranging from home renovation to engineering have reported making multiple friends through collaborative projects thanks to having interesting contraptions in their own personal plots. These installations quickly attracted attention from their peers, who subsequently approached them, asking them to either teach or help them build a replicant version for their own plots. In addition, when facing a common challenge, gardeners sometimes conduct multi-plot experiments to test new gardening methods, such as testing various pest traps using daily appliances and trying deep mulch for moisture retention. It is not uncommon to observe unique trends in innovative gardening methods being practiced in one community garden, while seeing completely different approaches to the very same

[9] Interview 41

gardens in another. And even though not all these innovative methods prove effective or desirable (many, like the aforementioned sound and motion-based bird deterrents, seem largely inadequate), these coordinated attempts at garden innovation represent important opportunities for gardeners to work together and socialize with other gardeners. They also represent rare instances where cooperation between members sprouted spontaneously in the community garden setting.

Therefore, through garden innovations such as growing novel plants and practicing novel gardening methods, gardeners can foster new connections with like-minded individuals who they often otherwise would not interact with. These garden innovations appeal to an ideal shared by most gardeners, the fulfillment of their passion for gardening, and at the same time challenge the conventions of what to grow and how to grow them. Gardeners often have limited previous social overlaps, and can feel rather awkward to start a conversation without having some form of initiation. Garden innovation fulfills this role. The intentional or unintentional display of novelty in personal plots recommends the owners as a passionate, creative and capable gardener, while advertising their specific interests to like-minded peers. This in turn encourages further conversation, cooperation and exchange among them, and sows the seeds of new friendships.

Such interaction can be characterized as a form of *self-recommendation*. In self-recommendation, the "initiator" of a social interaction fetches the attention of people who share their passion through outstanding expression of interest on a specific matter. Through acts of novelty and innovation that challenge the social norms, self-recommendation can help the message to stand out above the noise and reach the potential responders. The relative temporal insensitivity of gardening as a form of interaction allows such a message to stay relevant for even longer, where it could be picked up, unpacked and interpreted by a potential responder at a later date. This is extremely valuable in social interactions where the physical copresence of the participating parties

is never guaranteed. The act of self-recommendation can also be observed in other temporally insensitive social interactions, from clothing style that evokes the iconography of a sub-cultural group, to yard signs that broadcast one's political alignments. It is most notable perhaps in online communities, where outstanding statements and behaviors from the initiators can be foundational in encouraging conversations, fostering connections and building circles.

However, garden innovations need to be noticed and appreciated by other gardeners in the first place in order to have the self-recommending effect. The interpretation of garden innovation, and in fact the recognition of it as meaningful displays with communicative potential can be highly context dependent. Similar to how the biofluorescence display of many cryptically colored fishes only becomes visible under certain light conditions, these self-recommending displays may only shine through to those who share the vernacular. And while some gardeners are always curious about the novel plants and innovative gardening methods, and are always on the look-out for new features in other gardeners' plots, others pay little attention to the personal plots of their fellow gardeners. Some barely walk around their community garden and focus only on their own plots, paying little attention to even their neighbors. Some gardeners design their personal plots in ways that would make them more eye-catching for potential spectators, such as having shorter plants toward the "front" of the plot and having a tall, lush "hedge" of bean vines with vibrant purple flowers at the "back" in one case. However, this type of intentional self-expression with a clear communicative message is not the norm. Indeed, despite being handed a blank canvas in the form of a flower bed, most gardeners do not design their personal plots with the intent for communication and social outreach. Therefore, the coverage and effectiveness of garden innovations as a medium for interaction relies heavily on the curiosity of the potential uptaker.

In addition, it is worth noting that not all garden innovations are welcomed. Rather, garden

innovations are often expected to follow a set of unwritten norms. Those that are deemed too disruptive are often widely condemned. Some garden innovations are criticized for their disruptive nature from a utilitarian perspective, especially for their negative impact on neighboring plots. For instance, because personal plots are often rather small and tightly packed, tall plants and large vertical structures are usually not welcomed as their shade will compromise sunlight in neighboring plots, and growing them would be deemed as inconsiderate and unneighborly. Thus, while being relatively easy to grow and very popular summer treats, corn and sunflowers are rather rare in community gardens. Small trees are often discouraged for the very same reason. Similarly, plants that tend to sprawl (such as squashes) and plants that are likely to spread seeds (such as many native wildflowers) are not universally well-received. Personal plots that grow only sprawling vines without any supporting structure are often interpreted by their fellow gardeners as a lazy effort to fill a plot with minimal effort, and thus often viewed as an In fact, these plants, as well as the associated territorial disputes between neighboring plots, can be a major cause of conflict. And while the need for planting space have spurred many gardeners to build innovative vertical structures in order to maximize the yield of their personal plots, structures that are too tall, such as the 2m (~7ft) tall trellis built with PVC pipes and fishing lines at Stanford Bridge, are seen by quite a few as unneighborly, unsafe and excessive despite the ingenuity of their designs and the great utility they could provide.

Other garden innovations are criticized mainly for their disruption to the image and ideology of the community garden as a united whole. For instance, certain large structures with intrusive appearances, such as large plant cages with chicken wires aimed to protect crops from wild animals, are often extensively criticized due to aesthetic reasons. Their bulky shapes, hard material, and industrial looks are often deemed to be “things that do not belong in a community garden” even

though they are often constructed from scratch by the plot owners, and hence embodies the DIY spirit many would stand behind. In contrast, smaller plant cages and garden netting rarely suffer the same level of scrutiny. And when a few elderly gardeners at Old Chapel Field and Entfield Row put large garden benches in their small personal plot due to their physical difficulties (one even covered a large section of their personal plots with mulch in order to cut down the area which she has to work with), many gardeners expressed their dissatisfaction. Despite these garden benches may seem quite fitting in a public garden setting, many believe that while the lack of physical vigor of these elderly gardeners is completely understandable, these structures demonstrate a lack of effort and/or capability and hence have no place in a community garden. Many also argue that if these plot owners could no longer keep up with the physical demand of garden labor, given the long waitlist in many community gardens, they should share the duty with an additional co-owner, or even give up their plot ownership entirely. Similarly, garden coordinators often explicitly discourage gardeners from growing only ornamental plants in their plot, stating that this is at odds with the community garden's central mission of being a vegetable garden.

Thus, the novelty and innovation of plants and gardening methods in personal plots can be interpreted as disruptive when they are at odds with the community gardens main organizational missions and predominant ideologies. Despite the diversity and plurality often associated with community gardens, for many garden members, garden innovations are only welcomed and championed when they fit within a loose set of unwritten rules and norms. These innovations should not bring any major disruption to the community garden status quo, be it utilitarian, ideological or symbolic. A particularly draconian gardener at Old Chapel Field even suggests that, in response to some of the "unacceptable" garden innovations, personal plots should have some

level of “regularity” while expressing his distaste for certain visually disruptive installations.

4.3.Personal Plot Upkeep and Self-Certification

In addition to fostering new ties among smaller groups of like-minded individuals, gardening activities also play a key role in maintaining a sense of community across the entire garden membership. In all gardens covered in the study, there are cliques of gardeners who have developed strong friendships over the years, often dictated by their interests, backgrounds, personal characters, and the proximity of their plots in the gardens. Given the colorful, strongly opinionated and often eccentric characters present in community gardens, the sense of community that binds these small groups of tight-knit individuals is crucial for the long-term organizational sustainability of the garden. While group events like organized clean-ups and garden meetings can certainly help to create a sense of community, the condition and style of personal plot upkeep, and more importantly how one’s personal plot upkeep is perceived by other gardeners, often plays a central role.

While even the most formally organized gardens do not have a strictly enforced code regarding the management of personal plots, there are usually an elaborate set of expectations that gardeners should follow. Garden by-laws often state that personal plots should be planted by a certain date. The gardeners are also expected to keep their plots clean, well-weeded and free of major pest infestation that would jeopardize their neighbors. And while as spaces dedicated to plurality and biodiversity, community gardens technically allow their members to grow anything in their personal plots, growing solely ornamental plants is strongly discouraged. This aligns with one of the central missions of community gardens – the promotion of food sovereignty, food security and sustainability. If a gardener fails to meet these requirements, they may or may not receive a warning from the garden coordinators, depending on how strictly the by-laws are enforced.

However, regardless of their level of organizational formality and by-law enforcement, personal plot upkeep is always a central issue in the social dynamics among garden members on the informal level. Because of the general lack of enforcement from the garden leadership, failures to meet the requirements of the by-laws are often tolerated, and the gardeners in question are rarely, if ever, expelled. Afterall, the garden committee is hardly a position of power, but rather a position of responsibility. Yet, the lack of by-law enforcement does not mean that personal plot upkeep is socially unimportant. On the contrary, the lack of personal plot upkeep, or the perception of it, will always ruffle a few feathers in certain sections of the garden memberships, and can often be a key source of open conflicts among garden members. Indeed, one of the most prominent divides among garden members is between gardeners who are highly devoted to their garden in terms of time, energy and dedication, and casual gardeners who spend only a few hours per week working in the garden for basic maintenance. Highly devoted gardeners also tend to have more knowledge and experience with gardening than casual gardeners, have held membership for a longer period of time, and have deeper emotional attachment to their community gardens. Casual gardeners, on the other hand, do not have a defining demographic feature. Though young working gardeners could only spend a limited amount of time working in their plots due to their busy schedules, many older gardeners, and those with long tenures, can also be rather casual with their style of gardening.

During the course of this study, quite a few highly devoted gardeners from different gardens have expressed their dissatisfaction to me about the apparent lack of seriousness and dedication they saw with some of their fellow garden members. Such judgment is almost always drawn based on the appearance of their personal plot upkeep. Common sources of complaint include failing to control weeds and pests, failing to cut back invasive growth or to control seed deposits by their plants, not harvesting in time, growing a limited variety of extremely hardy plants that require

minimal care, or even simply having a messy-looking plot. All these are often interpreted, at least by some garden members, as signs that indicate a lack of interest, commitment, or desire to learn of the plot owners. Some highly dedicated gardeners would even go as far as suggesting that gardeners with unkempt-looking personal plots join the garden only because they love the abstract concept of community gardening, presumably as a gesture to demonstrate their support for the ideal of community building, economic equitability and environmental sustainability. Yet, based on the state of their plots, they have failed to show any level of commitment to community gardening as an actual activity. As one of the more dedicated gardeners explains[10]:

> *"If you don't take care of your plot, you should get kicked out because you're not doing what the garden needs and not doing what your neighbors need. And you're not showing the level of interest. Some gardeners are not very interested. And so therefore, I don't know why they're doing it. (…) And I feel like a lot of the people coming in now are more casual about gardening and the more casual about what they grow and how they grow it. (...) They like the idea of community gardening. They really like when we have this barbecue that they can, you know, buy tickets, bring the family and be like, look at this wonderful garden that I am a member of. But when it actually comes to dirt, no… they don't really have a lot of interest."*

This hostile sentiment towards the lack of personal plot upkeep is common among gardeners, and its association with personal dedication is driven by a diversity of reasons. First, these complaints at least partially stem from utilitarian considerations, as a lack of personal plot upkeep in a neighboring plot can compromise the gardening experience of others. Weeds and pests are not bound by plot boundaries and can spread quickly across the entire garden. Similarly, certain "low-maintenance plants" such as squashes and many wildflowers can be extremely invasive when

[10] Interview 7

unattended, easily "spilling" into a neighboring plot. These can often be the source of territorial disputes, as many neighboring plot owners do not necessarily appreciate these "voluntary plants" in their territory. And if the harvest is not picked in time, it is not only unsightly to see fine produce rotting on the ground, but also presents a legitimate concern for hygiene and pest control. Thus, it would be responsible and neighborly for gardeners to keep their personal plots well-maintained, and is often required as part of the garden by-laws. Second, these sentiments also have an ideological dimension. Notably, there is a strong objection against monoculture among many devoted gardeners, who believe such a style of gardening evokes the imagery and by extension the philosophy of industrial farms, hence fundamentally contradicts with the value of diversity and sustainability that community gardens cherish.

Third and perhaps most importantly, given the lack of temporal overlap among gardeners, personal plot upkeep is perhaps the most visible indicator that communicates the level of labor one puts into one's plot. Organic gardening can often be a time and labor-intensive activity with a steep learning curve. As a result, good personal plot upkeep often requires great effort and a good amount of ingenuity, and hence can indeed be interpreted as an indicator of great personal dedication. Weed control, in particular, can often be a never-ending battle that requires a lot of diligence. This is especially true during wet summers, when long daylight hours and high precipitation give weeds a lot of fuel to grow and multiply. As a result, having a well-weeded personal plot is viewed by many (including the judges of the PHS garden competition) as a good approximation for the sheer volume of labor the plot owner has poured into the garden, which in turn indicates a high level of personal dedication. If the neighboring aisles near a personal plot are also well weeded, one may also deduce that the person is an unselfish character with neighborly courtesy and communal spirit.

Likewise, plants maintained in an immaculate state could be a good indicator for a high

volume of labor input. Some garden plants are hardier and more pest resistant than others. On one hand, growing only hardy plants with vigorous growth, especially pumpkin and native wildflowers, are often interpreted as a lack of experience or effort. On the other hand, plants such as eggplants and many brassicas with tender leaves are very vulnerable to a few species of significant pests, most notably flea beetles and harlequin bugs. To keep these plants safe from any pests demands great diligence from their caretakers. In addition, the damages made by these insects, or in this case the lack thereof, can be easily observable to the trained eyes. Thus, having these pests on these plants under control and keeping damage to a minimum is an impressive achievement that, in the eyes of many, speaks volume for the level of experience and dedication of the plot owner. This is especially true in the organic gardens covered in this study. For comparison, other pests, such as squash borers, are a lot sneakier. While they can deal great damage to squashes, cucumbers and melons, they forage within the stems of these plants hidden from view. The damage they inflict on the host plants often only become visible when it is too late for the plot owner to do anything about it. This difficulty makes them less relevant as a proximation for individual effort, and the infestation itself a lot more excusable.

However, despite these associations between plot upkeep and labor input, the appearance of a personal plot may not always be a good indicator for the level of personal commitment from the plot owners. Context matters, and a personal plot may look unkempt for many reasons in addition to the level of personal commitment. The gardeners in charge may have been temporarily preoccupied by other personal priorities, or have recently experienced major unexpected events. They may also have a rather rough, unconventional gardening style, or simply adore a particular type of plant that happens to be low maintenance. Thus, while an immaculate personal plot could reliably indicate a high level of labor input, the lack of garden upkeep does not equate a lack of

personal commitment, nor does it necessarily indicate that the plot caretakers are inconsiderate and unneighborly. Many garden disputes attributed to lack of personal plot upkeep can usually be resolved with relative ease through communication, cooperation and compromise. In addition, in many cases, these unkempt personal plots may not necessarily compromise the wellbeing of their neighbors, and the nimby-like panic from other gardeners can often be overblown.

Most community gardeners are well aware of these limitations. Yet due to the lack of direct interactions in many community gardens, there is little alternative. Personal plot upkeep, despite its flaws as an indicator, often has to be the primary channel for gardeners to display their level of dedication, hence constitutes the main qualifying criteria for gardeners to retain their membership status. As a result, it is important for gardeners to be able to communicate their commitment through the fruit of their labor. This communicative aspect gives the matter of personal plot upkeep a performative dimension. On one hand, some gardeners seek to protect their membership status by curating their personal plots so they can maintain a visually lush and immaculate plot with minimal effort. They are functionally "cheating" a flawed system without any nefarious intent. This is most notable in community gardens with a formal organizational structure and strict by-law, such as Stanford Bridge and Old Chapel Field, where gardeners are often compelled to make sure that their commitment is clearly communicated through their work, without any room for misinterpretation. While some achieve this by enlisting their family and friends as helpers, others address this problem through gardening, and can be quite creative at that. Some gardeners, consciously aware of the arbitrary nature of plot upkeep jurisdiction, intentionally maintain a tidy "façade" of plants painstakingly staked along the aisles with the highest volume of traffic. This makes their plots more visually appealing to the passing gaze. One gardener at Stanford Bridge, for instance, grows a row of large irises along the edge of her plot next to the garden's main passage.

At more than a meter tall, these are proud specimens. Yet in her own words, she does not grow them for their flowers, but for the foliage. With their long, densely packed leaves arranged in a fan-like fashion, these irises act like folding screens in traditional East Asian architecture, blocking the line of sight and help her hide the tomato vines in the middle of her plot. Her plot is well planted and well weeded, but she is worried that her tomato plants, with their messy appearance and their tendency to fall over, could be a subject of peer scrutiny. The irises help to ease her nerves against any marauding "garden police" who might nitpick the state of her personal plot upkeep.

Other gardeners grow hardy plants with a large volume of leaves to make their gardens appear lusher when they are preoccupied by other priorities. Okra is particularly popular for this task. Compared to other common garden plants, okra is relatively tall. It boasts huge leaves and impressive palm-sized flowers that match hibiscus – a close relative – in beauty. It is also very hardy, with very few pests and moderate watering requirements. But most importantly perhaps, the okra season is slightly later than other popular garden vegetables, such as many nightshades (tomato, peppers, etc.) and the summer squashes, reaching its peak in early autumn. Due to these qualities, okras are often adopted by gardeners with a busy working schedule as a placeholder for their personal plots later in the season, where many popular vegetables have already withered. With its large size, a few specimens can have a significant visual presence that fill up an empty bed. Unfortunately, okra is not necessarily a staple in the diet of many American families, and has only a few culinary applications that can be quite laborious for home cooks. In addition, although okra is easy to grow, okra seed pods have to be harvested young for it to be edible. Thus, it is not uncommon for gardeners to leave large okra seed pods, too fibrous to have any culinary merit, on the plant without harvesting them. In these scenarios, the okra plants still serve a purpose, albeit a

rather performative one. With their beautiful flowers and bountiful fruits, they function as "ornamental" plants – not just for the aesthetic enjoyment of the plot owner, but also for the appeasement of their peers. One retired lady from Old Chapel Field even explicitly states that, though she rarely cooks okra due to its slimy texture, she still grows them so that her plot "won't be empty" later in the growing season. Such sentiment was implied more subtly by other gardeners as well. In this case, the performative attribute of okra outclasses its culinary merit.

On the other hand, failure to clearly communicate one's labor and commitment through personal plot upkeep can sometimes make the plot owner the target of criticism, and is indeed a major source of conflict. A garden that looks unkempt may put the plot owners' under scrutiny, even if they are truly diligent gardeners. An outstanding case involves a woman in her 70s who appears to have grown a field of larkspur (Delphinium) in her plot at Stanford Bridge. Larkspur is a hardy native perennial with beautiful purple and white flowers that bloom in early summer, which staggers with the growing season of many popular crops such as tomato, peppers and cucumber. As a wildflower native to the Philadelphia climate, it requires minimal care and can produce numerous tiny seeds. The lady says that her passion for larkspur is inspired by the English gardening tradition, and to some, her plot is truly a thing of beauty when the larkspurs are in full bloom. After the larkspurs begin to die back after flowering, she will collect their seeds, remove them, and proceed to grow edible crops as their season begins. And given that she grows a total of more than 20 species and breeds of plants across the span of growing season while working an average of 6 hours per week in her plot, she by no means lacks interest or commitment to the garden.

Many gardeners appreciate the beauty of her larkspurs, and are patient enough to recognize the evolving nature of her plot. Yet, her gardening style also received a lot of complaints from

some other gardeners, especially those whose personal plots are near hers. Every year for an extended period of time, her plot appears to be planted solely with a hardy, extremely fecund wildflower. Many of them fear that the entire garden would be taken over by larkspurs. More importantly, because larkspur requires minimal care, they argue that she has shown minimal commitment to her personal plot, which appears to be a monoculture of a wildflower. Some of these gardeners have confronted her personally, and some have even tried to punish her through the garden committee. This interpretation of her character through the appearance of her plot, however, is rather misguided. As one of the gardeners who are supportive of the "larkspur lady" explains[11]:

> *"The garden is not overrun with larkspur as much as people want to say it is, it really isn't. (...) A lot of people completely missed this. In the middle of all those larkspurs, down low on the ground, there are other plants that she plants in between when the larkspur just comes up. So when the larkspurs are done, she cuts that down, and she starts a whole lot of gardening. Like these tomatoes There's a lot of that. They've been growing maybe a little slower because they're not getting full light, but they're in the ground planted ready to go and it's, it's an entirely different garden. And she takes care of that well. So the larkspur is just the, you know, a little phase of time. It's not very long. And if you ever have the good fortune to be here, when she comes in and has her husband taking pictures of her standing in her larkspur. You kind of go like, you can't just tell her she can have larkspurs, like that's just mean. It's a simple happiness. Just let it go for crying out loud. So yeah, but there are people who are really, really offended by it all."*

Thus, the condition, appearance and style of personal plot upkeep play a central role in

[11] Interview 13

maintaining communal harmony and reducing direct conflicts among community gardeners. Driven by their passion for gardening and under the influence of local umbrella organizations such as PHS and NGT, both having deep historic roots in horticulture, many Philadelphian initiatives put heavy emphasis on the gardening half of the community garden namesake – and perhaps rightly so. In all but one garden covered in this study (which will be discussed later in greater detail), the garden membership status depends on their commitment to the garden as a responsible, diligent gardener. Yet due to the lack of temporal overlap and direct personal interactions among gardeners, the level of personal commitment cannot be deduced based on direct observations alone. Garden coordinators and other gardeners alike have to rely on other channels to gauge the level of commitment from their peers. The temporal insensitive nature of gardenscapes as a channel for social interaction offers itself as a viable alternative. Community gardening can be a labor-intensive avocation, and the heart and sweat of a gardener can indeed often be reflected in the plot. Through maintaining a personal plot that is well-weeded, well-pruned, punctually harvested, visually organized, and appears to have a healthy diversity of plants that require more than minimal care, the time and labor gardeners put into their plots are made apparent for all garden members to see and interpret. This display of conformity helps gardeners communicate their dedication. Through such display, even if their work schedule rarely overlaps with that of their fellow gardeners and hence rarely seen to be working in their plots, gardeners can still present themselves (albeit often unintentionally) as dedicated members of the garden. This reaffirms their membership status within the garden membership community, certifying themselves as diligent, responsible members with basic neighborly courtesy, while avoiding the scrutiny from the "garden police". Personal plots that do not meet these criteria would be deemed by some as insufficient, and the level of commitment of the plot owners will be put into question. In some extreme cases, some

highly devoted gardeners even take up the policing role, aggressively pursuing gardeners who they deem lack commitment. They are sometimes ridiculed as the "garden police" by their fellow members. This observation resonates with Neo and Chua's finding, which characterizes community gardens as spaces of responsibilities, and whether a gardener "meet(s) minimal expectations of the gardening activities in which they are engaged" is an essential component in the "practices of inclusion and exclusion" (2017).

However, as the previous findings have demonstrated, treating the state of personal plot upkeep as an approximation for personal interest and commitment sometimes has its drawbacks. Looking at a personal plot alone may not give the observer a full, truthful description of the plot owner's work rate, let alone his or her sense of commitment. Instead, personal plot upkeep, like garden innovation mentioned earlier, should be treated as a channel for social interaction. And just like other forms of communication, it is thus not immune to miscommunication and misinterpretation. In the previous case for instance, although the "larkspur lady" spends a lot of time working on her plot, the lack of physical copresence in community gardens makes this information inaccessible and therefore irrelevant. This means that other gardeners have to rely on alternative channels to evaluate her dedication. Her plot provides this alternative channel for communication. Unfortunately, her unkempt-looking plot, at least before the end of the larkspur season, gives some the impression of a casual gardener who lacks commitment or interest. This misinterpretation in turn led to division and confrontation. Such misunderstanding is often the source of conflict among community gardeners.

In addition, like other forms of communication, the interpretation of personal plot upkeep is influenced by social contexts and social forces. The criteria for which personal plot upkeep is evaluated are often the embodiment of social norms and prevailing ideals in these community

gardens. In most community gardens covered in this study, this is again And while Aptekar suggests that the prevailing vision of a garden is often the reflection of the ideology of those gardeners with a privileged socioeconomic status and more resources (2015), this study shows that while this is true to a certain extent, the framing of these norms is also heavily influenced by the ideals and priorities of highly dedicated gardeners with more experience, longer tenures, and stronger emotional attachment to the garden. In the specific case of Philadelphia, umbrella organizations such as PHS and NGT, which historically have a strong horticultural background, may also have a significant impact over the interpretative framing when gardeners evaluate each other's works.

Many gardeners recognize the limitation of personal plot upkeep as an approximation for commitment. As a result, their interpretation of the personal plot upkeep can often be more nuanced, taking into account the myriad of factors that could influence the visual appearance of a garden. Many gardeners are consciously aware that the look of a plot is not only determined by personal attitude, but also a multitude of uncontrollable factors such as weather and luck. Gardeners, especially young, inexperienced gardeners, may also be preoccupied with other priorities. They often simply lack the energy, knowledge and experience needed to meet the ideal expectations for personal plot upkeep. As fellow practitioners who face these same obstacles themselves at least somewhere along their horticultural journey, many gardeners are very sympathetic to these challenges, and will take these factors into account when evaluating the personal plot upkeep of other gardeners. One gardener, who is an extremely talented master gardener herself, argues[12]:

"I think that a lot of people are juggling, and they just don't have a lot of time. You know, in

[12] Interview 20

the United States, people are working, they have kids, (the garden) just like, it's not a 40 hour a week job. And I think some people get the plot and they don't really know a lot about plants. Part of the reason they might do just a few things is because they're learning. I don't think… I totally disagree that what happens in a plot is equal to level of commitment. I don't think that is true at all."

In addition, many gardeners can also be very patient when they evaluate the personal plot upkeep of others. Gardening itself is a slow process, where gardenscapes gradually evolve in rhythm with the seasons. Gardeners often say that gardening is the world's slowest performance art, and this temporal dimension is certainly not lost among most garden members. As the supporters of the "larkspur lady" have demonstrated, many gardeners are well aware that the look of a plot can, and often will, evolve over time. Perhaps the plot will look better given a few weeks of time; perhaps the owners are having a vacation, and it is their helper who was not doing his job; perhaps the person has other priorities since she has always been a committed gardener for years. In addition, gardening has a steep learning curve, and many experienced gardeners understand that new garden members may require years to truly master the skills of gardening. These possibilities dissuade gardeners from hastily jumping to conclusions about individual commitment when "reading" a plot, and would think twice before making moralistic judgments about its caretakers. Such cautiousness makes social interaction through gardenscapes an even slower process. Consequently, it usually requires many years and numerous formal complaints before gardeners with poor personal plot upkeep have their membership revoked. This is true even in Stanford Bridge, one of the most rigid community gardens in Philadelphia. The former chairperson of a garden committee summarizes the whole dynamic as such[13]:

[13] Interview 4

"I think that's human nature, right? In the neighborhood when you fix up the front of your house, you start looking across the street and think 'Gee, they haven't painted their house in 20 years, that's kind of shanty'. I think it's human nature, and that may not be the better part of our nature. In the garden, you get that as well. But yes, here, you do get that. And I think most people or at least a fair number of people recognize that other gardeners don't garden like them, and they are forgiving. You know, where they look across, they look at a little-by-little bit of fence or whatever's dividing the plots and they think 'Well, I got more time and I've been gardening for 20 years. It's my plot that's their plot.' You know, I think a lot of gardeners are pretty forgiving."

It is worth noticing, however, that while the division between highly devoted gardeners and casual gardeners is centered around their level of perceived dedication as displayed through personal plot upkeep, such division is sometimes (often wrongly) attributed to demographic differences. In Stanford Bridge, for instance, many gardeners believe that there is a significant division amongst its members along the generational fault line, where younger gardeners are sometimes stereotyped to be more casual than their older counterparts. On one hand, a few old founding members of the garden express the concern that young gardeners may lack the dedication and enthusiasm to sustain the garden in the future, when they themselves have to pass on the torch. On the other hand, some young gardeners complain that older gardeners can be too rigid with the enforcement of garden rules, and lack empathy towards their busy working schedule and their lack of gardening experience. Such sentiment can be observed, to various extent, in other gardens as well – especially among founding members who went through the great physical and organizational hardship of building the community garden from the ground up. In the predominantly Black community garden of Old Chapel Field, the perceived division is often

framed to be a gender one. Some female, US-born gardeners often complain about their male counterparts, especially ones with Jamaican heritage, for their perceived lack of commitment to the garden. For many female members of Old Chapel Field, this is mainly due to their rough and highly utilitarian approach to gardening, where a few male gardeners of Jamaican heritage have been accused of using artificially synthesized fertilizer in their plots. Their complaint is further compounded by the often patronizing and chauvinistic attitude of some male gardeners (especially during garden meetings), and their seeming reluctance to contribute to the management of communal plots.

These demographic-based characterizations demonstrate how personal plots as a medium for social interaction are vulnerable to stereotyping. It also shows that community gardens do not exist in a social vacuum. The social relations among gardeners are fundamentally rooted in the social relations of the greater community where these gardens are located, and community garden politics that involve "conflicts about different ethnic and gender backgrounds" (as well as between different age groups) are not unheard of (Schmelzkopf 1995). Nevertheless, when many gardeners try to rationalize their perceived divisions among garden members along these demographic lines, they almost always do so through the language of commitment and dedication rather than using the general attributes and stereotypes of different demographic groups. Personal plots upkeep and other displays for personal dedication are always central to their narratives. So while social contexts can often have a profound impact over the social dynamics in community gardens, the communicative dimension of personal plots plays a key role in how these macroscopic social forces are embodied within the garden context.

It is also worth noting that despite their demographic and ideological differences, it is clear that most gardeners are well aware that the division between highly devoted and casual gardeners

does not lie conveniently along demographic lines. Because the promotion of social justice is central to the organizational mission of many community gardens, many gardeners are conscious about the unique challenges members of certain demographics may face when it comes to personal plot upkeep. Some gardens even take deliberate actions to make the evaluation of personal plot upkeep more inclusive. In Stanford Bridge, Old Chapel Field and Newtown Heath for instance, waist-height raised beds are installed using garden fundings to accommodate the needs of elderly and physically handicapped members – albeit with mixed results. And when a Black member of the Entfield Row, a White majority mixed-raced garden located in a gentrifying neighborhood, consistently fall short in personal plot upkeep, the garden coordinators rebuffed calls to withdraw her membership due to concerns over the garden's commitment to promote diversity, equity and inclusion.

Personal plot upkeep can be characterized as another form of indirect interaction: self-certification. In self-certification, an individual validates oneself as a non-disruptive member within the greater community through display of conformity. This is achieved by adherence to the social norm in an often-symbolic gesture, or at least by avoiding any serious disruption to it. Using forms of temporally insensitive statements similar to personal plot upkeep in the community gardening context, these statements of conformity could linger for an extended period of time. Again, the overlap of interests and ideology among interaction participants, in this case the shared passion for gardening among community gardeners, serves as crucial semiotic contextual structure that allows the social interaction to be functional and meaningful. Self-certification is perhaps one of the most common forms of temporally insensitive interaction found in our daily lives, from unspoken dress codes in schools and offices, to the different conventional styles of portrait photography used in personal resumes for different social functions.

And just as the communicative effectiveness of garden innovation depends on the shared passion for gardening as a foundational context, the interpretation of one's personal plot upkeep relies on this common value among gardeners as contextual reference. As mentioned earlier, the reasons for individual gardeners to practice community gardening can be incredibly diverse. But in most cases, their shared passion for gardening represents a major overlap of their diverse interests and hence serves as an important common ground for them to communicate indirectly. However, such ideological overlap is not always guaranteed. When this crucial common ground of communication is no longer shared, personal plot upkeep is no longer seen as a valid indicator for personal commitment, and its impact on the maintenance of solidarity between gardeners will be different. One controversial member of Caribbean heritage with farming background in Old Chapel Field, for instance, values output and efficiency over the "hobbyist" approach of his peers. He often openly confronts other gardeners and questions the effectiveness of organic pest control during garden meetings. He also practices monoculture in his plot, growing only callaloo, a leaf vegetable important in Caribbean cuisines. Rumors spread that he sells his harvest, and uses synthetic pesticides and fertilizers in his personal plot. Both these practices, if true, would violate the garden by-law. In this scenario, other gardeners, who are aware of the ideological differences they and him, take the impeccable look of his crops not as a testament of his devotion, but rather as evidence for his misdemeanor, claiming that he is "doping his plot" and should be expelled. One gardener, eager to prove his point, even led me to the plot of the "doping suspect" and asked me to feel the texture of the soil, and argued that the soft, fluffy, and rather homogeneous texture of the soil can only be achieved with store-bought products. In this case, due to the ideological misalignment, the context for interpreting personal plot upkeep must be adjusted.

Similarly, for those who join the community garden mainly for its community and social

benefits, the importance of personal plot upkeep as a channel for social interaction is outside their lexicon. These gardeners appreciate the social benefits which the community gardens may bring, and can be highly involved in garden organizing and community outreach. But their interest in gardening itself is often limited. To many of these garden members, any neighborhood residents should be able to access their local community garden as an urban green space, regardless of their labor contribution. Hence, their perception of membership status legitimacy is not necessarily tied to the labor input of gardeners, and whether a garden member maintains his or her plot "properly" is not important. The community garden is no longer treated as a space where inclusivity is justified through responsibility, as what Neo and Chua have theorized, but rather a communal space where all members of the targeted community should be entitled to. For these garden members, the potency of personal plot upkeep as carrier of communicative meanings is sidelined, and they see the emphasis on personal plot upkeep as unnecessary and divisive.

This ideological division is at its most notable in Newtown Heath, a "top-down" community garden established by external funders located in a gentrifying neighborhood. The more community-oriented garden members, including many Black residents who lived in the neighborhood for generations, see the garden as a powerful tool to lift their community socially and economically. Their passion for gardening, however, is often lacking. This, unfortunately, resonates with the position of many city governments, who see community gardening as a mean to an end in the struggle against vacant lots and the associated socioeconomic issues. The lack of interest towards gardening among some garden members is clearly reflected the huge disparity in the state of personal plot upkeep at Newtown Heath. While some personal plots are lush and vibrant, others are completely overtaken by weed, under-watered and barely planted – a vivid reflection of the stark ideological difference among the members of Newtown Heath. In one

outstanding episode, some have even proposed that if gardeners were unable to fulfill their monthly clean-up duties, they should be able to "bail out" by paying a small fine, completely unaware that for established gardens with secure land ownership like Newtown Heath, it is the labor not money that is in real demand. The ideological division between community-oriented and gardening-oriented members is one of the main factors that contribute to the organizational instability of Newtown Heath in recent years. This is further exacerbated by the fact that many gardening-oriented members of are of a younger, Whiter demographic profile.

In summary, personal plot upkeep plays an important role in maintaining harmony and community cohesion across the garden, especially between different circles of gardeners with minimal social overlaps. In the eyes of many gardeners, any garden member should keep his or her personal plot well weeded, well pruned, punctually harvested and visually organized. It should also contain a good diversity of plants that require more than just minimal care. When a gardener fails to meet these expectations, he or she will often be perceived and even condemned as an irresponsible garden member who lacks interest and dedication. But just as with garden innovation, the effectiveness of personal plot upkeep as a medium for communication relies on the shared passion for gardening – without this foundational contextual scaffolding shared by all potential participants, the social interaction is no longer viable, and the significance of personal plot upkeep as a meaningful proxy for commitment can fall on deaf-ears. Furthermore, as many examples have shown, personal plot upkeep does not necessarily reflect the level of personal commitment due to a multitude of reasons. This often leads to misunderstanding and conflict.

4.4.Discussion: Perfect Plot as a Conceptual Totem

This dissertation finds that contrary to common belief, the community gardening experience in these seven gardens in Philadelphia is often characterized by individual gardeners working

independently in their own personal plots. Due to the lack of physical copresence, other than garden meetings and organized clean-ups, the opportunity for face-to-face interaction among community gardeners can be really limited. Nonetheless, previously unacquainted individuals can build new, and sometimes strong friendships despite this lack of opportunity for in-person conversation. In addition, on the organizational level, these gardens can maintain a sense of communal solidarity despite the colorful characters. These observations highlight the importance of gardening activity as a form of social interaction in these settings, which constitutes the majority of social interactions that take place in a community garden. The personal plots in particular are arguably the most important and accessible channel of social interaction for most community gardeners.

This study also demonstrates that community gardeners communicate with one another through two specific forms of temporally insensitive interaction, namely self-recommendation in the form of garden innovation, and self-certification in the form of personal plot upkeep. Self-recommendation initiates new connections and builds new friendships among small groups of like-minded individuals, while self-certification maintains harmony across the entire community and reduces the risk of direct conflicts.

The viability of indirect interaction like these depends heavily on a shared context – semiotic ideologies gradually shaped and constantly negotiated by the participating parties, and are often the products of pride, prejudice and existing social structures. Yet in a highly individualistic and heterogeneous community, this shared context can be rather elusive. Thus, it often needs to be underpinned and materialized by a conceptual totem. In the case of the community garden, this is represented by the image of the ideal personal plot. An ideal plot is a plot that is both innovative and compliant. It has elements unusual enough to incite curiosity from others, yet also stays within

the norm and presents minimal disruption. The ideal plot is therefore a symbolic icon in the garden semiotic ideology, a bundled exemplar of desirable qualities that is both deviant and compliant. It evokes the passion for gardening shared among most community gardeners as a common ground of their diverse interests, such as food sovereignty, community building, sustainability, biodiversity and recreation. These overlapping yet distinct priorities are often the product of macroscopic socioeconomic forces, organizational influence and constant negotiation between garden members. Conceptual totems like this make semiotic ideologies more tangible for the interaction participants, yet pliable enough to accommodate their diversity as long as there is some overlap with the underlying shared values. Such concrete pliability means that these conceptual totems can help to calibrate the contextual semiotics of the participants in an interaction, so they can communicate on the same page.

However, this study also shows that even in community gardens, a universally shared semiotic ideology cannot be guaranteed. When the underlying shared values of the conceptual totem, in this case the shared love for gardening, have no overlap with the ideal of an interaction participant, the message it entails is rendered illegible and its calibrating function obsolete. Such big differences in ideologies and presumptions can often lead to different interpretations of the same message – sometimes in polar opposition. In these scenarios, negotiation is often needed – sometimes in the form of conflict. To make it worse, unlike in a temporally sensitive interaction, the uptaker in a temporally insensitive interaction is by no means compelled to participate in a two-way exchange. As a result, while the participants are given ample time to contemplate, some individuals may also jump to a premature conclusion and hold on to it, without reaffirming their interpretation with the presumed interaction initiator or their peers. Stereotyping, therefore, is not only common, but also an arguably integral component of these interactions.

At the center of this display of garden innovation and personal plot upkeep lies the image of the ideal personal plot: a plot that is well weeded, well pruned, punctually harvested, and visually organized. The ideal personal plot also needs to contain the right amount of novelty: it should have elements unusual enough to incite awe and curiosity from other gardeners. Yet it has to stay within the norm of what many believe a personal plot should look like, and present minimal disruption to its neighboring plots and the garden as a whole. While these observable qualities of an ideal personal plot have their rational roots and to some extent do reflect the skill and dedication of the gardener(s) working in that plot, they can also sometimes be blunt, arbitrary, and morally charged.

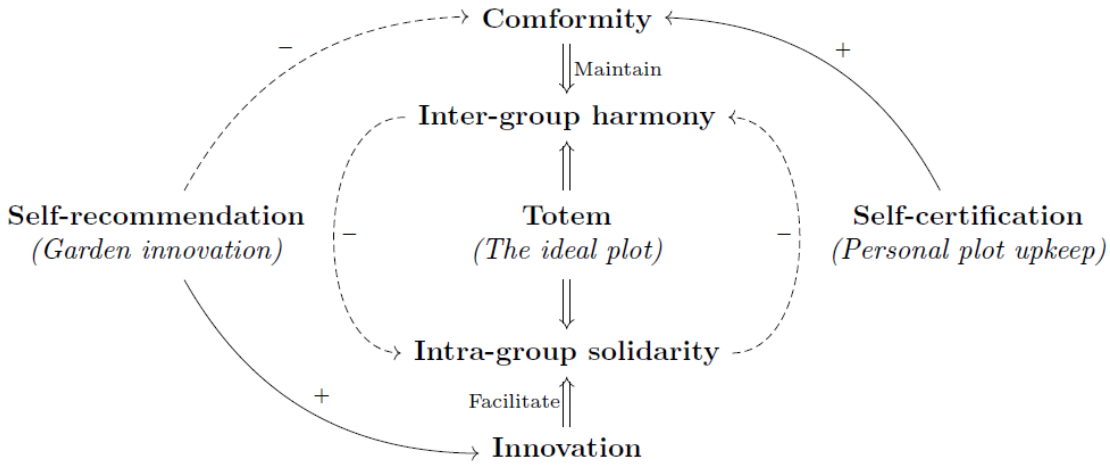


Figure 4.1 The conceptual totem of the ideal plot and its impact on garden solidarity.

Thus, the inability to comply with these expectations does not necessarily reflect the lack of commitment of a gardener. Instead, the ideal plot is a symbolic icon in the garden ideological semiotics, a bundled exemplar of desirable qualities that is both rational and arbitrary, both deviant and compliant. This icon is undoubtedly rooted in rational horticultural concerns, gardening aesthetics, organizational experience, and basic neighborly regards. Yet as a whole, it is ultimately an idealized representation of what many believe to embody the values of a great gardener who is knowledgeable, dedicated, passionate and organized.

Like Durkheim's totem, the ideal plot is an abstract representation of the desirable qualities of a gardener in its most ideal forms, evoking the passion for gardening shared among most (but definitely not all) community gardeners as a common ground of their diverse interests. It is a summative material embodiment of the predominant ideologies in these community gardens, and these ideologies are often the product of macroscopic socioeconomic forces, organizational influence and constant negotiation between garden members. In the case of the community gardens covered in this study, the sponsorship from PHS, an organization with a strong emphasis on the promotion of horticulture, has certainly shaped the ways how community gardens are envisioned.

Conceptual totems like this not only represent beacons that symbolize social cohesion among gardeners despite their differences. They are also crucial for the indirect interactions – self-recommendation and self-certification – that help to foster and maintain the sense of solidarity in an individualistic and heterogeneous community. This is especially important when the material carrier used in the indirect interactions lacks a highly codified tradition of symbolism and cultural references. By embodying the abstract ideals into a concrete image, the conceptual totem helps to make the semiotic ideologies more tangible for the interaction participants, yet pliable enough to accommodate their diverse backgrounds, ideologies and interests as long as there is some overlap with the underlying shared values. Such concrete pliability means that these conceptual totems can help to calibrate the contextual semiotics of the participants in an indirect interaction, so they can communicate on the same page. But when the underlying shared values of the conceptual totem have no overlap with the ideal of a given participant, the message it entails is rendered illegible and its calibrating function obsolete. In these scenarios, negotiation through direct social interactions is often needed – sometimes in the form of conflict.

Chapter 5 | An Unequivocal Message:

Social Interaction through Communal Plots

Abstract:

Compared to personal plots, communal plots offer more opportunities for direct social interactions among garden members where gardeners may collaborate and work with one another. However, despite being a shared amenity, communal plots often have a polarized reception. Some are enjoyed by many, while others are either monopolized by a possessive minority, or ignored by a freeloading majority. The most important contributing factor to this polarization is that, as a channel for indirect interaction, communal plots often carry an explicitly coded, unequivocal meaning with little room for open interpretation. Each plot serves a specialized function and represents a specific aspect of the garden's mission. However, the community gardening movement encompasses diverse, sometimes competing values, with individual gardeners holding distinct ideals about the garden's mission. The ideal of a gardener therefore may not always align with the specific function which a community plot embodies. This misalignment of values can sometimes lead to conflicts. Such inflexibility, however, also grants plot designers great control in framing their message. By making the plots more technically accessible and socially minded, communal plots can create a landscape of inclusion, thereby having a significant positive contribution to the sense of community.

In addition to personal plot, another important part of the community gardening experience revolves around the communal plots. Communal plots are plots in a community garden that are not assigned to any specific gardener, but are rather communal amenities that, in theory, are attended and enjoyed by all garden members. They might take the form of ornamental flower patches, fruit tree orchards, native wildflower meadows for pollinators, and other shared greenspace. There are also communal plots designated for growing fruit and vegetables for the PHS City Harvest, a program dedicated to promoting food accessibility. Along with other shared properties such as the garden gazebos, tool sheds, compost bins, grills and the communal irrigation system, these shared features represent the main communal assets in a community garden. These communal spaces also represent an important venue for gardeners to socialize. And because the community gardening experience could best be characterized as individual gardeners working independently in their own personal plots, works in communal plots may represent a rare opportunity for gardeners to have direct interactions with one another.

However, among the seven gardens targeted in this study, there is significant variation in the actual communal accessibility and general membership reception between different communal plots. A significant difference in attitude can be observed even between communal plots within the same garden. By providing face-to-face opportunities for gardeners to cooperate and interact with like-minded individuals, communal plots clearly have the potential to encourage socialization and promote communal solidarity among garden members. Yet, compared to personal plots discussed in the previous chapter, the benefit of communal plots in fostering social connections among gardeners can sometimes be surprisingly limited when compared to the sense of solidarity arising from interactions surrounding personal plots. What is the cause of such limitation? What are the main reasons behind the huge degree of variation in the social impact of communal plots

across the board?

5.1 The functional limitations and potential opportunity of communal plots in community building

To understand the variation in their social impact, we first need to acknowledge the multitude of reasons that may limit the community building potential of communal plots. Some of these limitations are functional constraints that are practically impossible to overwrite. First, the overall impact of communal plot over solidarity may be limited due to self-selecting volunteerism from highly devoted gardeners. While communal plots provide additional venues for gardeners to cooperate and socialize, those who actually have the opportunity to volunteer and thereby benefit from these venues of socialization might already feel a high sense of belonging to the garden in the first place. Although many gardeners I have spoken with show a high level of verbal support for at least some common plots, and the garden by-laws in some garden initiatives explicitly state that the maintenance of communal plots is a communal effort, not all gardeners put their words into actions. Those who actually work in them extensively are usually highly devoted gardeners with a long tenure, great social connections, and a great sense of pride for their community gardens as a whole. Some of them even prioritize the common plots over their own personal plots. As a result, it is arguable that these individuals do not need the additional venue of communal plots to build a sense of belonging to the garden or a sense of communal solidarity with their fellow gardeners. The person in charge of the City Harvest program at Stanford Bridge explains[14]:

> *"There's kind of two types of people, one who just want to garden for themselves, so they can grow some food and take it home and, you know, that kind of thing. And then there are the people who really get the sense of community and often those people are the ones who*

[14] Interview 3

are going to want to get involved in City Harvest because they already have that, you know, community involvement aspect in their thinking."

Second, working in communal plots may not be accessible for all garden members. Due to bureaucratic reasons and other conditional factors, the maintenance for communal plots is often arranged on weekday mornings. Social workers who come to collect produce donations for the City Harvest program, and PHS associated drivers who deliver woodchip, mulch and compost for the gardens, for instance, only visit the community gardens during weekdays. Gardeners who work in communal plots that have these external associations, therefore, must be able to accommodate these inconveniences into their schedules. This to some extent limits young working gardeners from getting involved in these communal works. Thus, instead of fostering solidarity across different generations of gardeners, they might only consolidate old friendships among preexisting clades of retired or semi-retired gardeners with long membership tenure and flexible daily schedules, while reinforcing the common intrinsic bias among older gardeners, where younger gardeners are stereotyped as not "serious about gardening" and make limited contribution to the garden as a whole.

Despite these structural limits, there is no denial that communal plots and other communal amenities have a significant presence in the community garden experience. Being the most public facing feature in a community garden with potentially the widest membership appeal, communal plots provide an important venue for members to socialize and collaborate. By hosting community events and offering food donations, communal plots can also connect these gardens with the community beyond the garden in one way or another – something which personal plots can barely contribute. Garden potlucks in these common greenspaces, for instance, not only represent one of the only social settings where the entire garden membership could potentially socialize in a casual

setting, they are also important venues for fundraising and public outreach. Similarly, the communal plots dedicated for the City Harvest program not only requires the collaborative contribution of garden members, their donation of produce to low-income households in the neighboring communities allow these often-exclusive organizations to make contribution to the greater community at large. In addition, communal plots and other common spaces are often used by community gardeners as a space for casual gatherings, both with other garden members and their friends outside the garden. Therefore, despite the functional limitations, the positive social impact communal plots may bring should not be overlooked.

5.2 The polarized reception of communal plots among garden members

Among garden members however, the reception of a communal plot, and by extension its impact on the sense of community within the garden membership, are often more polarized than that of a personal plot, both drawing people together and driving people apart. On one end of the spectrum, some communal plots enjoy an unparalleled amount of community attention, and are widely loved. These plots, such as the city harvest plot at Stanford Bridge, the fruit orchards at Old Chapel Field and the communal flower bed at Saint Mary's, are widely cherished by almost all their respective members as a great amenity. Almost all members speak highly positively of these plots. They are sometimes even championed as the physical embodiments of the community gardening mission and are central to their gardens' identity.

These popular plots can bring substantial social benefits to their garden. In some cases, these plots are often used as hubs for informal gatherings among gardeners, acting as greenspace that help to facilitate social interaction. Some communal plots have a significant shade overhead thanks to having large trees (sometimes fruit trees) planted in or around these areas. Examples include the shade garden in Stanford Bridge, the communal lawn in Entfield Row, the planted main aisle at

the Old Chapel Field, as well as many communal areas in Doyle Square, Saint Mary's and Raven Cottage, just to name a few. These communal plots are also sometimes dotted with chairs, benches, tables, and sometimes even grills. On hot summer days, these shaded areas can sometimes be rather appealing social spaces for gardeners and their friends. Some bring wine and finger food (as well as liberal and diligent applications of insect repellents) to their community gardens, supplemented by fresh fruit and vegetables picked right at the garden. Surrounded by lush greenery, great food and the peaceful sounds of nature in these communal plots, these gardeners can enjoy long meaningful conversations – including with friends and family who do not have a garden membership. And in the evenings, many gardeners host barbecue parties in their community gardens, making full use of the amenities these communal plots may offer. This is most evident at Doyle Square, which has multiple small grills strategically placed in different communal plots across the garden. In all these cases, the social function of some communal plots is clearly recognized by many communal gardeners. During the course of my research, many of my interviews are held inside such communal plots under the suggestion of the gardeners. This is especially true for community gardens located in low-income neighborhoods, where there is a clear deficiency of available urban greenspace.

Communal plots can be a conduit for social interactions through more peculiar ways. While many fruit orchards in community gardens do not have any seating, the fruits from these plots, at least in some cases, can be a powerful catalyst for social interactions among garden members. The harvests in these plots are a communal asset shared by all gardeners, meaning that in theory, any garden member can pick these fruits to their liking at any moment. Some fruit orchards, such as the fig trees at Stamford Bridge, the berry bushes at Entfield Row, and the peach trees at Old Chapel Field, are greatly popular among gardeners, and are therefore keenly monitored by some

of their most passionate enthusiasts. These soft fruits often attract insects and birds due to their bright color and sweet scent, who, unlike the gardeners, can always keep an eye on the ripening process of these fruits. This constant "threat" of animal mischief makes these communal plots, albeit half-jokingly, the center of a communal information exchange network. Many gardeners often share gossip on the progress of this year's fruit, compare its quality to the previous years' harvest, all while making joyous complaints about the ubiquitous nuisance of ants, starlings and squirrels. These conversations often sprung into spontaneous conversation on other topics of interest. In these cases, these communal fruit orchards are the center of attention among gardeners due to their popularity, which in turn springboards spontaneous social interactions among garden members.

Some of the more unusual fruits in communal plots can sprout outstanding interests and excitement among gardeners similar to garden innovations seen in personal plots. This is perhaps best demonstrated by the social interactions that revolve around the pawpaw. Pawpaw is a fruit tree native to the eastern United States. A temperate relative of tropical fruits such as cherimoya, sugar apple and soursop, the pawpaw has sweet flesh, a creamy texture and an exotic tropical fragrance often described to be a cross between mango and banana. It is however rarely, if ever, available in supermarkets. The delicate fruit only properly ripens when it naturally drops to the ground, and when they do they have an extremely short shelf life and will be fermented and spoiled in the matter of days. This natural scarcity fuels an unparalleled passion among gardeners towards this plant and the plots which grow them. In Stanford Bridge for instance, some gardeners often pay visits to the pawpaw orchard after finishing chores in their personal plots, searching for fallen fruit amongst the leaf litter. Once they find them, these pawpaw enthusiasts will carefully put them in a prominent yet shaded spot, such as on an elevated ledge under the shade of the pawpaw orchard

or the table under the grape trellis. Many will also try their best to notify their peers of these precarious fruits – some will even linger at the garden for an extended period of time, trying to fetch the attention of the next gardener which they may cross paths with.

This passionate "advertising" is the driver for many spontaneous social interactions, and can be a platform for bonding. In addition to sharing intel on the latest fallen fruits, gardeners often exchange factoids about this native plant, and share recipes of ice creams, custards and other desserts that could preserve the transient flavor of this seasonal delicacy. During the course of my research, I myself was approached by multiple gardeners who strongly recommend me trying pawpaw. Almost all these recommendations were followed by extensive, fruitful conversations that epitomize the serendipitous nature of spontaneous social interaction in community gardens, and strongly mirror the conversations that sprung around garden innovations in the personal plots. Interestingly, the pawpaw trees of Stamford Bridge and other community gardens have even attracted attention outside their garden membership. Fruit tree enthusiasts from Saint Mary's and Doyle Square have both inquired about the cultivation of these native fruit trees from other community gardens, which helped to build bridges between different garden initiatives.

If possible and necessary, some communal plots are also keenly attended by a substantial number of passionate volunteers, which provides the stage for gardeners to collaborate and learn from each other. Examples of this include the many City Harvest program plots, but also some flower patches planted with common ornamental flowers. These volunteers often see these communal plots as a venue for them to contribute to the garden and the greater community, and are very proactive with their watering, weeding and pest control efforts. Thanks to their almost excessive enthusiasm, these communal plots are sometimes at an even finer state compared to the personal plots which these volunteers are individually responsible for. Since communal plot

maintenance is either evenly distributed across the garden membership, or designated to specific individuals by the garden by-law, such voluntary favoritism surely demonstrates the popularity that certain communal plots enjoy, and the friendship cultivated through these collaborative efforts should not be overlooked. Again, this represents one of the few instances where community garden members can collaborate and socialize with one another under some formal structure. The gardener who is in charge of the City Harvest program at Stanford Bridge, for instance, really appreciate the direct social interaction and personal connection her communal plot can bring to an otherwise highly individualistic environment[15]:

> *"Everybody feels a little connection to it, cuz they've taken responsibility for it. And while there was that, you know, just that they have that extra chance to contribute, I think, does that. But then on the whole, just being here and having the chance to actually work and talk and, you know, I think it's made some very good connections. (...) It is definitely much more conducive to getting people to interact, and, again, not necessarily always becoming best friends or anything, but just having that chance to communicate with each other a little more personally. And I can still feel that we're missing out on some depth, it was, it was forced in a way. So by extension, you, you know, you're learning to interact with people. And that's not necessarily a bad thing. Some people need that."*

On the other end of the spectrum, however, communal plots can be a site where lines of distinction are drawn, people are divided, and power is concentrated and consolidated. Due to the purposeful or circumstantial monopoly, some communal plots can be a rather exclusive space despite their communal titles and shared ownership. In Old Chapel Field for instance, their beautiful communal greenspace, including flower patches, ornamental trees, fruit orchards and

[15] Interview 3

their picturesque pond with waterlilies and goldfish, are only attended and appreciated by an attentive few. The community garden by-law explicitly states that all gardeners need to contribute to the maintenance of communal plots. Yet due to its relatively casual leadership structure and the physical limitations of some garden members, such regulation is not necessarily enforced. A significant proportion of its garden members (including people with leadership roles) make minimal contributions to the communal plots, either by reporting false hours or even by paying other members to do their work. The maintenance of these plots, therefore, often fall on the shoulders of a few extremely dedicated, passionate, albeit sometimes begrudging gardeners. From mowing the aisles between personal plots, pruning fruit trees and flower beds, to even removing hornet nests overhanging, these gardeners do the lion's share of the work in these communal plots. And despite their immense contribution to the garden as a whole, their labor and contribution to the garden is without doubt underappreciated by those who do not prioritize communal plot work. Their contribution simply does not translate into positive recognition across the entire garden membership, and these industrious gardeners do not necessarily hold leadership positions.

Such a lack of recognition manifests itself in a few notable episodes. For instance, unlike many other community gardens, the aisles between the plots at Old Chapel Field are not covered by any ground coverings such as mulch, wood chips or gravel, but rather in turf lawn grass. Turf lawns, however, have many shortcomings. It requires constant maintenance like watering, mowing and weeding, which in an organic garden without a large pool of funding, means a lot of manual labor. Manual labor, unfortunately, is something that is of short supply in a community garden. This is especially true for Old Chapel Field, a garden of immense size but a relatively small membership. In addition, for many older and physically handicapped garden members, the turf lawn aisles can be a major safety hazard. Due to the shallow roots of turf lawn grass, the aisles' soil foundation is

not well stabilized and can become uneven after rain, and long grass due to lack of manpower and hence lack of maintenance can even hide sharp gardening tools that can be quite dangerous when stepped on.

Despite all these potential flaws, and the constant protest from garden members who actually actively take care of communal plots, the community garden members of Old Chapel Field have voted to keep the grass-covered aisle design repeatedly on multiple occasions. The rationale behind such seemingly irrationally stubborn preference is largely driven by aesthetic reasons, and supported by people who are not actually personally involved in the maintenance of those aisles. For these gardeners, the turf lawn aisles communicate a sense of regularity that not only fits with the lush greenery of the garden, but also accords with the traditional American garden aesthetics which champions this high maintenance ground covering with a passion. In the most extreme and morally questionable scenarios, one of the garden coordinators who strongly supported keeping the turf lawn aisles actually often pays another gardener – who is a professional landscaper by trade – to do the lawn maintenance duty on his behalf. Therefore, despite his strong opinion, he has little firsthand experience with the inconvenience of having such an arrangement. Such instances not only highlights the severity of freeloading that may happen in community gardens when it comes to communal plot maintenance when by-laws are not strictly enforced, but also provides a vivid example of the dissociation between leadership position and gardening commitment in many community gardens.

In a separate incident, the volunteer labor devoted to communal plots is not only overlooked, but in fact ignored in a rather unpleasant fashion. The main aisle of Old Chapel Field is decorated with a few proud specimens of ornamental trees, including a huge wisteria vine supported by an overhanging trellis. The wisteria's regular husbandry was primarily the responsibility of one of the

garden's coordinators – a highly devoted middle-aged female gardener that lived rather far away from the garden. One of the reasons she moved from her previous garden near her home all the way across the city to Old Chapel Field was due to the large personal plot here, and with her car packed with gardening tools and supplies and infused with the scent of fresh soil – in her own words "smelling like a garden center" – few would question her passion and dedication to the garden. And with its main stem having the thickness of a small tree, the wisteria is definitely worthy to be treated as a garden heirloom. However, because of its large size, fast growth and vining nature, the wisteria can be rather difficult to maintain. This is especially when it comes to pruning, where heavy tools and a steady stepladder are required. Perhaps due to such reason, during a major garden clean-up, the gardener who took the responsibility of pruning – the son of another garden coordinator – made the seemingly unthinkable decision to aggressively cut back the wisteria under the rationale it would reduce the future labor needed, without notifying its primary caretaker. The excessively heavy-handed pruning reduced the wisteria vine to a mere stump. While the wisteria survived the incident, the pruning striped the flowering vine of all its ornamental values that would take years to recover. Thus, the lack of widespread membership attention towards some communal plots not only limits their potential in promoting membership engagement and collaboration, but can also be detrimental to these plots themselves.

While sometimes the lack of general membership involvement in some communal plots can make them overlooked and underappreciated, in other occasions communal plots are purposefully monopolized by a few highly territorial gardeners. Due to their monopoly, many young inexperienced gardeners and other casual gardeners alike – including some highly experienced gardeners in some cases – are intentionally sidelined. As mentioned earlier, many community plots are managed by designated individuals under the garden by-law. These designated caretakers are

often highly devoted gardeners with a high level of gardening experience, and have specialized knowledge regarding the specific plants they work with. While their expertise has the potential to help foster new social bonds by giving the garden a pool of specialized knowledge, unlike the case with personal plots, this potential rarely materializes. Instead, many designated caretakers are very defensive of "their plots" and manage them in the same way one would with their personal plots. As a result, other garden members rarely approach these designated caretakers for knowledge and advice.

The designated caretakers of communal plots can sometimes even be quite aggressive when other gardeners approach their plots. This dismissive attitude is especially pervasive towards younger gardeners, who they deem to lack the experience, expertise and dexterity to attend difficult plants. In addition, those who control these exclusive communal plots often assume a position of authority, either formally or informally, in the garden community. Such observation is not unlike what Schmelzkopf has described in her study, where "a few strong-willed individuals take control of what is supposed to be a community place and in effect turn it into a private club," which is detrimental to the sense of solidarity among garden members (1995). One young gardener, who is in fact a very experienced gardener with professional training, explains[16]:

> *"Some of the older gardeners are really prissy gardeners. They don't want anyone near plants (in the communal plots), they don't want anyone to pull a plant mistaking it is a weed, they don't want anyone to touch it. (…) Like some of them will start shouting at other plot members who are trying to help by weeding because they are pulling out flowers. We are supposed to be learning! We are supposed to be getting people excited about plants! Give them hope if they pull out plants by mistake. (…) And at some points what these old*

[16] Interview 45

timers say is actually wrong. What they'll be like protecting a weed or they'll be… But it was weird… It's not a relaxed approach to gardening. It's very possessive, and like I said prissy, but they don't want anything to get out of the order."

The defensive behavior of some communal plot caretakers have built a , and triggered

So similar to the social dynamics observed around personal plots yet to a far greater extent, the way communal plots are viewed, utilized and received among community gardeners vary significantly from plot to plot, individual to individual. While some communal plots are maintained and enjoyed by a significant section of their respective garden memberships, others – even plots in the very same garden – are only used, attended and appreciated by a very small group of people, either being monopolized by an exclusive, highly possessive minority who are the sole caretaker of these plots, or willfully ignored by a freeloading majority.

5.3 The cause of polarization: contextual expectation and interpretational inflexibility

What causes such extreme polarization? Why communal plots can become even less community-like in the forms of social interaction they induce than personal plots despite having communal in its name? The source of such a great range variation can be the product of various factors, such as the general membership climate, variation in gardening expertise, the personal character of individual gardeners, as well as the wide array of functional limitations highlighted earlier. Gardeners with a stronger character and greater horticultural expertise would surely be more confident to take on the responsibility of communal plots maintenance for better or worse, and the flexibility of one's personal schedule also has a significant influence over one's likelihood to contribute to the communal plots.

But perhaps the most important factors that contribute to such extreme difference in the membership reception of communal plots, and the reason why they are often seen as a more

polarizing light compared to personal plots are the different contextual expectations people view communal plots, and difference in their designs. Unlike the personal plots discussed in the previous chapter, communal plots as a medium for indirect social interaction usually carry a very narrow and clearly defined meaning. As explained in the previous chapter, personal plots as a medium for communication are characterized by their non-directional, conglomerate and open-ended nature. In personal plots, community gardeners usually grow a wide variety of edible and ornamental plants – many of them are almost universally popular. Gardeners also often practice crop rotation with their personal plots due to seasonality, soil regeneration and personal preferences, meaning that the gardenscapes of their personal plots are constantly evolving through the seasons. As a result, these personal plots represent an ever-changing, multifaceted conglomerate of potentially meaningful information open to interpretation. There is something for everyone. Therefore, despite the fact that people may join community gardens for different reasons (Silva, etc. 2016), and may have different visions of what a community garden should be (Aptekar 2015), it is relatively easy for gardeners to suspend their ideological differences. By searching through the mosaic of information presented through the personal plots, gardeners can always find some common ground with one another, either through overlaps in their plant selection, the common problems they face in pest, weed and climate, or their shared passion for plants and horticulture in general.

This openness for interpretation is not present in communal plots. Just like the personal plots, communal plots as a medium for communication takes a non-verbal form. However, the material nature of the communicative medium alone by no means guarantees the freedom for open interpretation. On the contrary, the meaning of communal plots are often highly codified messages that offer very little room for personal interpretation. Each of these plots is highly specialized towards a specific function, or even dedicated to a specific type of plant. Some communal plots

are dedicated to fruit trees, others to ornamental plants, yet others are designated for vegetables to be donated to the City Harvest program. In all these cases, the communal plots have a clearly defined function that embodies a certain specific aspect that the community garden as a whole seeks to address, either to please the eyes, enrich the lives and dinner tables of its members, or provide nutritious produce to those who are in need.

From these monocultures of functionality sprouts a discrete set of attached values. Unlike the personal plots which tend to bundle different ideals under the community garden umbrella into a conglomerated non-verbal message, the specialization of communal plots separates the different overlapping goals, purposes and ideals that community gardens cover, and presents them in a distinct, unequivocal message coupled with clear verbal annotations. While the gardenscapes of communal plots may change through the seasons as different flowers, fruits and vegetables come into season, the specialized functionalities of these plots remain the same. The purpose of these plots remains narrow and clearly defined, easily recognized by all garden members without any ambiguity. Therefore, while personal plots may potentially address a wide range of personal goals and ideologies among individual gardeners, communal plots are far less flexible in their interpretation. Different gardeners can have very different expectations of what function communal plots should serve based on their personal values, priorities, as well as their personal experience with different communal plots. As a result, with all their pride and prejudice, the mutual appreciation of different types of communal plots can sometimes be extremely difficult to accomplish among community gardeners with different values.

This contention between competing values caused by this inflexibility is at its most notable in ornamental communal plots, like the shade garden in Stanford Bridge and the lily pond in Old Chapel Field. While they arguably have the utilitarian function of attracting insect pollinators –

and are in fact often framed as such, in the eye of most gardeners they are almost purely ornamental in nature. The ornamental nature of these communal plots are well recognized by all garden members, and they often communicate, above all else, the horticultural competence of the plot caretakers. Unlike the hardy asters, daisies and sunflowers often grown in personal plots, or the native wildflowers grown in some other flower-dedicated communal plots, the flowers grown in these ornamental communal plots – such as roses, irises, hibiscuses and other gorgeous perennials – are artificially selected hybrids that are stunning when in bloom, yet also extremely prone to pests and diseases. They are on average more expensive and delicate than the ornamental flowers commonly found in personal plots, or the vegetables grown in personal plots and many communal plots alike. This daintiness is fundamentally at odds with the ideal functionality of communal plots among many gardeners, and perhaps even with their vision of community gardening as a whole. Many ultimately see their community garden as a vegetable garden first and foremost, and by extension a space for personal enrichment and communal sharing on a more utilitarian level. This stands in stark contrast with the technical exclusivity, aesthetical value, and horticultural showmanship implied by these ornamental communal plots, which are usually attended by a selected few. One of the more casual community gardeners at Stanford Bridge expresses her frustration with the rare and fanciful flowers grown in the communal plots as following[17]:

> *"I have no idea. I really don't know. I feel you should really ask them what they think. I don't know. I like relaxation and I like trying new things, and I like to see if new vegetables will grow or not. For me it's just fun and relaxing, but for them I don't know what they're trying to do. They're trying to create like a showpiece. The other thing I find really weird is why would you plant expensive unusual shade plants in a community garden, I would*

[17] Interview 9

never do that, I would do that in my house, like that's not a good decision in my life. Like it's like you should plant things in a community garden that you're not going to mind if something happens to them."

The difference in the value of a communal plot and the value of the gardeners also sparked a rather comical interaction at Old Chapel Field, which fortunately led to a peaceful and constructive compromise between conflicting priorities. Like many other community gardens, Old Chapel Field sometimes attracts stray and outdoor cats alike across the neighborhood. But while some gardeners appreciate the cuteness and hunting prowess of these occasional garden visitors, others become deeply concerned as cats may represent a threat to the local wildlife. The tall reeds, cattails and other ornamental emergent aquatic plants along the edge of the lily pond at Old Chapel Field is particularly problematic in the eye of those gardeners. These grasses are an essential part of the pond's wetland aesthetics, and are carefully planted and selected by the garden's chairperson – a passionate horticulturalist – as part of the overall garden design. But the carefully curated lily pond is also a popular place for birds to drink and bath, and the tall ornamental grasses along its edges can theoretically provide excellent camouflage for cats to set up an ambush. Thus, ironically, the naturalistic aesthetics of the lily pond contradicts with the value and expectation of more nature-oriented gardeners, who see these communal plots as a green space for people and other animals alike. The difference between the aesthetic-oriented and the nature-oriented values eventually came to a mutual compromise, where the tall grasses next to a shallow section of the pond, where birds are most likely to bath, were replaced by shorter ornamental plants, making the hypothetical cats more difficult when it comes to ambushing birds.

Episodes like these show that while communal plots are communal in their names, the functional specialization, as well as the explicitness and discreteness in their associated value

means that it is sometimes difficult for a communal plot to please everyone. Unlike the personal plots characterized by their multiplicity and vagueness as medium for communication, communal plots are often presented as an unequivocal message that can only be interpreted in a very specific way clearly implied by their specific functions and clear priorities. This could potentially lead to misalignment between the value of the plot and the value of the gardeners. Given all the community gardens covered in this study are principally vegetable gardens first and foremost, it is unsurprising that ornamental communal plots are often casted in a more polarizing light, as they have less overlap with the shared value of the garden membership body as a whole. While some gardeners may view a plot as a great delight that pleases the eyes, others might see it as merely a waste of precious land as a dainty showpiece. Unsurprisingly therefore, a significant percentage of communal gardens believe that some flower patches should be removed to make way for more personal plots. This voice is especially noticeable in gardens with high community interest in gardening and a long waiting list, most notably Stanford Bridge.

5.4 Controlling the message: architecture, technical difficulty, and ease of enjoyment

This rigidity of interpretation, however, may not necessarily be a detriment to the community building prospect of gardens. Although the discrete and inflexible nature of communal plots as a medium for communication constrains the freedom of interpretation from the perspective of the beholder, it also grants the designers and caretakers of these communal plots a lot more control. This gives them the creative authority to use the communal plots as their canvas, framing the message that they would like to convey through their work, whether intentionally or unintentionally. The physical setup, horticultural layout and organizational arrangement of communal plots carry a clear message, and define how social interactions unfold in these communal spaces. This, in turn, can often affect whether a communal plot can bring people

together, or split people apart.

Communal plot design plays an important role in defining the level of membership accessibility that revolves around it. The first area which a communal plot may have control the framing of its message is the horticultural and architectural design of the plot. Some community gardens recognize the social significance and community building potential of communal plots. In these gardens, a significant proportion of their land use are dedicated towards communal plots. These communal plots are often arranged in such a way that they can actually function as greenspace that invite communal socializing, even when such arrangement may compromise the growing of vegetables in personal plots. Their attention to community building is clearly expressed through the communal plots they work with, a message not lost among community gardeners.

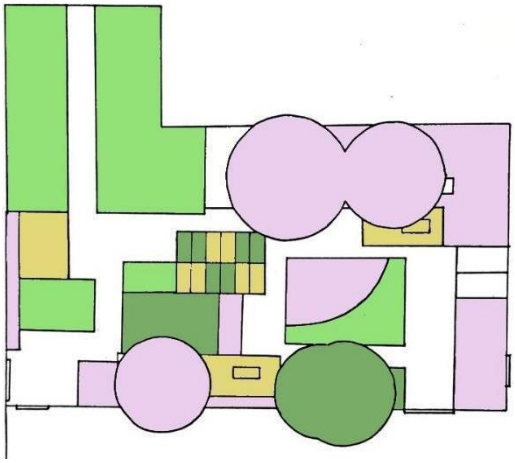


Figure 5.1 The layout of Doyle Square Community Garden. The recreational areas (yellow) and to some extent personal plots (bright green) are surrounded by ornamental communal plots (pink) – including multiple large trees and a native wildflower meadow in the center of the garden, and communal plots dedicated for edible plants (dark green), such as fruit trees and plots dedicated to the city harvest program.

While a few gardens across the city have adopted this design philosophy, among gardens covered in this study this is most notable at Doyle Square. Communal plots take the center stage

of the community garden planning at Doyle Square, both in terms of their location in the garden and the percentage total land use (fig. 5.1). The tall native wildflower meadows, with all the glorious seasonal blossoms and buzzing pollinator actions, can be appreciated from all angles and from almost all personal plots, bringing a slice of wilderness to an urban landscape. The wildflower meadow, along with other installations such the beehive, the bat house and the insect hotels under garden benches, serve as banners that highlight Doyle Square's commitment to natural conservation. Through such a setup, the communal plot designers are able to define Doyle Square as an urban greenspace that prioritizes sustainability over crop productivity and land use efficiency.

Tall trees and lush vines, which create a lot of shade and therefore are often discouraged in community gardens, are championed in this garden for the very same reason. Trees, both ornamental and fruit trees, play an important part of Doyle Square's historical identity as an urban tree farm, and a significant proportion of this legacy is preserved in the garden's planning. These trees give Doyle Square an almost park-like aesthetic, drastically different from the farm-like planning of most community gardens where the land-use is dominated by rows upon rows of personal plots. Thus, while Doyle Square is still without question a vegetable garden first and foremost, and in fact strongly discourages its members from growing only ornamental flowers, its communal plots communicate a rather different message. By evoking the image of a recreational public park, these communal plots highlight the social function of community gardens, and encourages garden members to use the space not only as a utilitarian producer of food, but also a space to relax and have fun. Tables, benches, and small grills are also positioned strategically in and around these communal plots under the shade of their tall trees. By providing these amenities, the communal plots of Doyle Square once again encourage garden members to utilize these common areas as communal greenspace for socializing.

Such architectural arrangement comes at cost – the personal plots and Doyle Square are the smallest among the seven gardens covered in this study. But these designs have certainly paid off, as casual gatherings among garden members and their friends are very common even before the covid-19 pandemic. And during pandemic lockdowns, these communal plots became invaluable for gardeners to socialize outdoors with each other at a relatively safe outdoor environment, allowing the invaluable social interactions and communal support during a difficult time. In contrast, in many community gardens, communal plots are positioned along the boundaries of the community garden – "place holders" that fill up small strips and pockets of empty lands too narrow to be used as personal plots, and their design do not take social interaction into real consideration (fig. 5.2). Under such arrangement, these community plots serve little social purpose other than that of aesthetics, yet even in the visual aspect they are sidelined to the periphery and are thus often underappreciated by most garden members. And the huge barbecue pit at Stanford Bridge, designed for large fundraising potluck events, are simply too big to be used for a small gathering of family and friends. The artist and architect couple who were deeply involved in design of the garden layout at Doyle Square, have these to say[18]:

> *"A lot of us spend a lot of time there, like a lot, like eight hours is easy. So I think ours is probably a little more unusual. When we pass by other established gardens, they're just all like totally vegetable gardens. And very often you see either no one, or just, you know, very few people there at any given time, or where in ours up to now anyhow, you know, there was there was, there were times really intense. Some getting together for various reasons, walking around, somehow building it out, you know, its whole structure."*

They continued:

[18] Interview 38

"Some gardens are so tight. Once you're done with your sometimes, you barely even see like the benches there, for you to sit down. In our garden, there are benches all over the place and tables too. So people can eat there, a nice place to bring your kids if you have kids, and then the other kids meet each other and play, you know, relationships formed that way. Particularly people who have kids, and the families started getting to know each other. So, it's actually been quite an opportunity for people to socialize, people really didn't know each other before and we've seen this again, and again already, since we've been there for quite some time. (...) We really kind of want to think of ways to, to really encourage people to use that space for the benefit of our neighborhood."

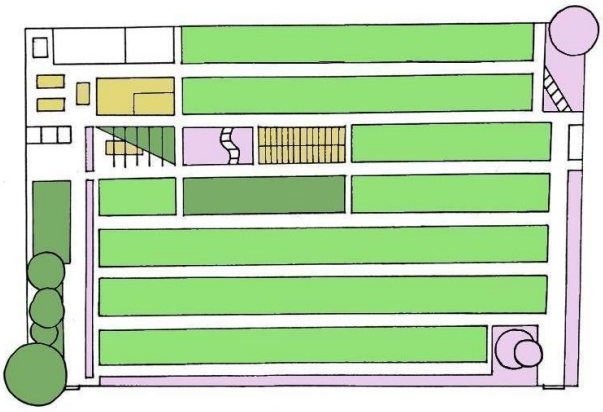


Figure 5.2 The layout of Stanford Bridge Community Garden. With a few notable exceptions, most of the communal plots dedicated for edible plants (dark green) and ornamental communal plots (pink) are located at the periphery of the community garden along its main aisles, separated from the recreational areas (yellow) and the personal plots (bright green). The crop-oriented communal plot located at the center of the garden is dedicated to the City Harvest program, and is by far the communal plot with the highest level membership participation.

But a more socially minded architectural design alone does not guarantee social interaction. Some communal plots at Stanford Bridge, Old Chapel Field and Newtown Heath are also designed

with community building in mind, yet their success in achieving such a purpose varies significantly from garden to garden, plot to plot. Another factor that contributes to the variation in the social impact of communal plots is the technical difficulty of attending the plants in these plots. Unlike in the case with personal plots, where unusual plants can help to foster communal solidarity among previously unacquainted individuals through self-recommendation, the unusualness of the plant may represent a significant barrier for membership participation in communal plots. Unsurprisingly, communal plots that grow common plants that do not require special care, such as common garden vegetables and native wildflowers, are more inclusive in their membership labor contribution than those that grow difficult plants – such as cultivated ornamental plants and unusual fruit trees which most gardeners do not have previous experience working with. Common plants are less daunting on a technical level. And because they do not require specific knowledge to be properly taken care of, these communal plots appear to be more inviting for members of all expertise to participate in their daily maintenance. The primary caretakers of these technical accessible plots often lean into such perception, and encourage volunteer participation. This allows opportunities for social interaction and cooperation among garden members, and sets the tone of these plots as spaces of inclusion. The gardener who is in charge of the City Harvest program at Stanford Bridge describes her experience with volunteer participation as following[19]:

> *"(The City Harvest plots) depend mainly on volunteerism, and a lot of crossed fingers and praying for rain (laughter). But generally, I would say they do really well. And it seems that we've always had a few people involved. Like right now one of the gardeners is just… she just really loves gardening and I think she'd be in everybody's garden if they let her. So we are probably doing a service to the rest of the garden by telling her sure, come in,*

[19] Interview 3

water pull leaves, well, you know, you think something needs to be done, go for it. But I've always asked the city harvest gardeners, if they would, you know, if you're in the garden, checking on your plot, if you think city harvest needs a little water, please consider watering. For a while, I tried to get people to communicate with each other, and they did that. That just never worked. So I gave up and said, okay, you know what, I'm in the garden a couple, at least one other times during the week. I'm not going to say I'm being a very good gardener right now. But when I come to a lot of my own thoughts, I will certainly check on city harvest. And it seems like it hasn't been watered, it gets watered. And I think other people do that too. It definitely gets more water than my plot (laughter)."

Even if the communal plot does not require any maintenance, such as the case with wildflower meadows, this lack of technical barrier would nonetheless make the plot seem a lot less intimidating for the uninitiated, and effectively prevent gatekeeping by experienced gardeners with aggressive personal agendas. This makes using such plots as a space and a channel for socialization a lot more inclusive and accessible to the general garden membership. Gardeners do not need to be excessively careful when using these plots to socialize, nor do they need to fear hostility from a highly possessive caretaker. And in plots dedicated for the City Harvest program, the common food crops grown in these plots means that gardeners may even contribute to these plots indirectly even if they cannot work in the plots themselves. Many gardeners leave their surplus harvest near the City Harvest plots as donations, helping the program's effort. Through these donations, gardeners can transform their personal plots into disembodied extensions of the communal plot, and thereby tapping themselves into the orbit of camaraderie that comes into form around these communal plots. By making such contributions, these gardeners can feel that, despite their inability to make any direct contribution to the plots, they can still be part of the program

(and in fact part of a city-wide effort) in one way or another. This can help to promote the subjective perception of solidarity among gardeners. In all these cases, the perceived accessibility of these communal plots gives them a more welcoming appeal, making the social interactions that happen around them a lot more inclusive and egalitarian.

In contrast, in communal plots with a high technical barrier with the plants they grow, the duty of plot maintenance often gravitates towards a much smaller group of highly dedicated individuals. This not only amplifies the self-selection effect of communal plots over highly dedicated gardeners significantly, but also leads to the general membership's alienation from the plot and the people who are in charge of it, making it a lot less inclusive and accessible. This would undoubtedly undermine the social benefit these communal plots may bring to the garden membership, and might even have a negative overall effect on the sense of solidarity among garden members as such arrangements promote insularism and trigger animosity. Because these obviously difficult plants are often seen to require specific experience and expertise, as well as their perceived "fragility" that is often emphasized by their caretakers, ornamental flower patches and fruit tree orchards are often attended only by dedicated individuals. These designated communal plot attenders are often revered, or even feared by other gardeners, and enjoy a position of authority even without official titles. The image of a highly possessive, territorial "garden police" who aggressively repels other gardeners from "meddling with" his or her plot, as mentioned earlier, quickly jumps to mind. And indeed, sometimes communal plot caretakers choose to grow difficult and fancy ornamental plants as an intentional gesture to assert their sole ownership to these plots. These communal plots are usually referred to as "their" plot by the general garden membership, further highlighting the exclusivity of these spaces. Other gardeners are quick to pick up these cues, and steer clear of these communal plots to avoid confrontation. A gardener from Stanford Bridge expresses her frustration

as following[20]:

> *"They don't want anyone else to mess with it. They'll even say things like this is someone's zone. And I'm like: 'No, it's not. It's the garden's', it's the communities, we should all be taking care of it'. It should not be one person and can't touch it unless they get permission. You know what I'm saying? Like there's, there's a gazebo and there're flower beds around that, and there's a flower bed along the front, and there's a flower bed along the wall where the composting toilet is, and then as a pollinator garden. It's like that's all garden land. That should not be any one person's extra plot. Like some people have, if you think about it, like multiple plots, because they have their plot and they've taken ownership of somebody's public spaces. I don't know. I think it's really weird for a community garden to be so… you know… exclusive."*

Even if the designated individuals are by no means of a person with strong character and aggressive temperament, their formal "ownership" over these communal plots granted by the plants' difficulty and their own technical expertise nonetheless often shroud them with an aura of awe. Thanks to their exclusive responsibility over these communal plots, these designated caretakers are often treated by their fellow gardeners as figures of authority for their knowledge and labor contributions. They sometimes hold leadership positions in the gardens. And even when these designated caretakers do not hold official titles, they are often half-jokingly dubbed as "the power behind the powers" (though the truthfulness of such characterization is questionable). The lady who is in charge of the rose plots in Stanford Bridge, for instance, is often referred to as the "rose tsar" by her fellow gardeners. Yet unlike the case seen in the previous chapter, where experienced gardeners with creative personal plots are championed as pools of knowledge, these

[20] Interview 16

communal plot caretakers are often avoided by their fellow gardeners. Rather than attracted by The ornamental plants cultivated in these plots are simply too distanced from the average experience of most community gardeners, who do not work with these cultivars. The overlap between plants, let alone the implied ideals, is very limited. Some gardeners may even go as far as say that they are somewhat afraid of them.

Perhaps as a result of such sentiment, many gardeners would also distance themselves from the communal plots they work on altogether, often out of fear and respect. Consequently, these spaces barely serve any social function. In Stanford Bridge, for instance, the shade garden is almost never used as a space for socializing despite having a small table and a few chairs under the canopy of a large tree. Similarly, the picturesque lily ponds and the benches along the main aisle of Old Chapel Field, lined with proud specimens of ornamental trees, are underutilized as socializing spaces. Many gardeners are also reluctant to entertain any involvement with these plots. When I approach other gardeners on simple questions regarding these communal plots with dedicated caretakers, many are often too eager to distance themselves from these plots by saying I the researcher should talk to the respective dedicated persons since “they are the experts with these flowers” – even when these questions are strictly logistical and do not necessarily involve any horticultural technicality. Some will even state explicitly that they do not ever work or even set foot these communal plots out of respect, thereby further removing themselves from any potential responsibility if anything went wrong.

Such deliberate distancing from the general garden membership is an understandable response to the message which these plots convey. Like a crane among chickens, these ornamental communal plots always stand out from the humble, practical and often chaotic vegetable-centric personal plots that surround them. The exceptional tidiness and the almost professional look of

many ornamental plots, though sometimes not intended by their designer, radiates technical prowess and horticultural refinement. This perception is further compounded by the perceived daintiness of the rare, expensive and/or difficult cultivars grown in these plots. Through their looks, these communal plots communicate themselves as pristine spaces that should be treated with distanced appreciation, while their designated caretakers are crowned as people with great skill and dedication. Yet, this image has made these plots extremely exclusive spaces that serve little social functions, functionally monopolized by the very few people who work with them. Like mentioned earlier, these communal plots are barely utilized as communal greenspace where gardeners socialize due to their perceived exclusivity. The lack of labor input from the general membership, not to mention the deliberate distancing from them, also discourages the exchange of knowledge between gardeners sprung by spontaneous curious inquiries – an important channel of direct social interaction in the community garden setting. It is due to this exclusiveness that communal plots can be, counterintuitively, damaging to the communal solidarity in community gardens, as one gardener explains[21]:

> *"They're trying to create like a showpiece. The other thing I find really weird is why would you plant expensive unusual shade plants in a community garden, I would never do that, I would do that in my house, like that's not a good decision in my life. Like it's like you should plant things in a community garden that you're not going to mind if something happens to them. There are some really nice kinds of unusual plants in the communal areas, that's what I mean. They should grow whatever the hell they want in their plot because nobody's gonna mess with them, but like in the communal areas like around where those picnic tables are and around the gazebo thing, there are some really nice flowers. I mean, I have*

[21] Interview 17

some of them, but I would never plant them in a communal area like that."

This general lack of membership participation and crowd input can also be counterproductive to the maintenance of these communal plots themselves. Gardening is not a hobby determined solely by knowledge and skills, but one that also requires a significant amount of diligence as well as a basic volume of routine labor. Although the gardeners who are assigned to the ornamental communal plots are undoubtedly skillful and knowledgeable, they are after all, in most cases, amateur hobbyists without rigorous professional training. They may also be preoccupied by other personal priorities, and their energy is, in the end, limited. Thus, despite their experience and dedication, the designated caretakers of these communal plots are not immune to mistakes, carelessness and mismanagements. Without the knowledge contribution, labor input, and general watchful attention of other community gardeners, many of whom are highly knowledgeable or even sometimes professionally trained, these communal plots with dedicated caretakers may actually as a result sometimes end up sliding into a rather unfortunate condition. For instance, in a particularly rainy summer, I noticed that the heirloom roses along the front fence of the garden at Stanford Bridge were infested with sawfly larvae. Yet to my surprise, the "rose tsar" of Stanford Bridge, widely acclaimed by gardeners as an expert in roses and is often feared by other gardeners, was completely unaware of the situation, and was even unfamiliar what sawfly – a leaf-eating relative of bees and wasps – actually is. These roses are located right along the main entrances of the garden, so if the communal enthusiasm towards these beautiful flowers was even just a little higher, people were bound to notice the infestation and take meaningful actions. And although they may not be familiar with roses or sawflies, their experience with other common vegetable pests would surely be sufficient in addressing the issue. This incident really highlights the total lack of communal interest in these ornamental communal plots with dedicated caretakers despite

their stunning beauty.

This exclusivity caused by the "technical barrier" of plants grown in communal plots is not only limited to the growing of these plants, however. Whether the plants can be easily appreciated and utilized by any average community gardener also plays a key role in the reception of a garden plot by the general garden membership. These sentiments will in turn permeate and ultimately dictate the general discourse of social interactions that these communal plots facilitate. In Stanford Bridge, Old Chapel Field, Doyle Square, Entfield Row and Saint Mary's, popular fruit trees like apples, peaches, pears and grapes are often welcomed by gardeners despite the high expertise requirements for their husbandry and their poor harvest from time to time. Their culinary popularity creates an atmosphere of inclusivity where everyone can see the value of these plots, and this inclusivity in turn helps to facilitate social interactions. Peach picking in these gardens is often a communal affair, and gardeners from different cultural backgrounds share their ethnic jam recipes of preserving this overflow of seasonal harvest with pride and curiosities. People volunteer to monitor the growth of grapes with close attention, racing to pick when they are at their ripest before the birds and lay on the tables for everybody to share – even though unlike in most cases with community garden, the fruits are usually of an inferior quality than store bought varieties, both smaller and a lot tarter. This makes the grape vines afocal point of communal attention even without the physical copresence of gardeners, and the mutual "hatred" for those mischievous birds and marauding squirrels is the best catalyst for a joyful conversation when they do rub shoulders. These valuable episodes of community bonding happen despite the apparent polite reluctance of many gardeners to take large bunches of grapes home, often stating that they have "already taken quite a few" with a knowing smile – the social value of these tart grapes far outweighs their culinary merits.

In contrast, both gooseberries and currants are extremely hardy bushes that require minimal care. Yet because most gardeners do not know how to incorporate these tart foreign berries into their diet, they often nitpick about these bushes' thorny branches and large visual presence, or at best giving them minimal attention. These bushes are seen not as a communal asset with a broad appeal, but rather as an inconvenience that only quenches the hobbyist passion of a few "tree nerds". Despite the fact that their husbandry requirements are minimal, the caregiving duties of these unpopular berries always gravitates towards a small group of passionate fruit tree "specialists". The reception of these berries among the general garden membership is also lackluster at best, and their impact over community building is minimal. Not only are they rarely mentioned in the conversations among gardeners, when they do, it is usually about how large and thorny these bushes are, and therefore somehow making the main garden aisle more than a meter across "too narrow and difficult to way through during events" due to their irritating presence. In the case of Stanford Bridge, this leads to the eventual removal of their gooseberry bushes. In contrast, black berries and raspberries, two other hardy berry bushes with equally thorny branches and aggressive sprawl, survived such scrutiny as their fruits are much more popular among Americans.

The most interesting example, however, concerns the large cherry tree located at the entrance of Stanford Bridge. Both the blossoms and fruits of the cherry tree are widely cherished among garden members. Its flowers in early spring are truly a magnificent sight to behold; and at more than 4m (12ft) tall, the large tree has a very impressive fruit yield of the highest quality. As a result, the tree was almost universally welcomed by garden members despite its difficult husbandry and the large shade it generated. However, because the old cherry tree is really tall, the harvesting process requires a team effort. This was not a problem before the covid-19 pandemic – in fact it's

a truly communal affair that strengthens social bonds among garden members of different cliques and backgrounds. In the past, cherry harvesting at Stanford Bridge usually happened during a garden clean-up event when most gardeners were present. Baskets and bags at hand, young gardeners clambered up the branches, while older gardeners helped to stabilize the ladders and picked up dropped fruits. In a festive atmosphere, the huge harvest was then shared among all members at the clean-up. With the high organizational capacity Stanford Bridge could mobilize, the cherry tree was seen as a symbol of community spirit, and a great asset of the garden.

This, however, was flipped on its head during the covid-19 pandemic. Due to pandemic restriction, garden clean-ups are no longer organized. This contraction in the garden's organizational capacity to mobilize manpower means that the large size and high yield of the old cherry tree is no longer a communal asset, but rather a logistics burden. The gardeners' relationship with the cherry tree quickly began to sour, and the longstanding undercurrent complaints against its large shade and difficult upkeep began to surface. Once a unifying beacon of community collaboration and festive celebration, the community reception of the cherry tree became more polarized as the utilization of one of its main benefits became inaccessibly difficult. In the end, the tree was cut down after a vote among community members during a zoom meeting. As unfortunate as it is, this turn of event really shows how the ease of utilization influences how communal plots are interpreted and received, which in turn determines the impact of communal plots may have over the gardener community. The easier a plot is to be appreciated, the more accessible it is as a social venue and an interaction channel, the more inclusive and unifying it would be.

It is important to note, however, that while some communal plots are indeed more challenging than others, the difference in their respective "technical barrier" does not mean these communal plots are truly inaccessibly difficult for average gardeners to properly take care of, or the fruits so

utterly exotic for their taste. While the maintenance of certain communal assets, such as the beehives at Stanford Bridge and Doyle Square, do indeed require specific knowledge and experience to maintain, most communal plots are still growing relatively common plants widely available on the market. Given their experience with gardening through their personal plot, most gardeners are perfectly capable of making positive labor input to these plots, even if they may need a little help and guidance from their more experienced and knowledgeable peers. Ultimately, community gardens should, and often are, a space of learning. Not all gardeners took up their community garden membership as experienced gardeners – many are beginners who improve their gardening skills through practice, and eagerly approach more experienced gardeners for advice. This process of learning, as proven in the previous chapter, is one of the most important venues for gardens to socialize. It is therefore foundational to social cohesion and communal solidarity in these gardens. Thus, the exclusivity of these more difficult communal plots is by no mean the result of garden meritocracy, where individuals with the most experience carry the most responsibility. Instead, the responsibility over communal plot maintenance is often the product of purposeful organizational and personal monopolization, and a reflection of the value and power dynamic in the respective gardens.

Sometimes the monopolization of a communal plot can be used intentionally as a way to assert oneself, and with greater communal contribution comes greater respect and authority, granting the individual a greater say in the gardener's decision-making process. Yet this is certainly not universal. As mentioned earlier, the gardeners who work most extensively on communal plots are not always in leadership positions, nor are they necessarily the most knowledgeable gardener. In the most dramatic cases, in Old Chapel Field, one garden coordinator is infamous for paying another gardener to fulfill his communal plot maintenance duties. Yet such inconvenient truth does

not seem to impede his bidding for garden leadership. This chapter will not go deeply into the multitude of personal feuds and complex garden politics that are often specific to each garden, which tends to manifest itself in the most dramatic ways during garden meetings, but such variation highlights the importance of social context in defining the nature of social interactions that happen in and around community gardens in general and communal plots in particular.

5.5 Discussion: the Landscape of Inclusion

The great variation observed in the social impact of communal plot highlights the communicative power of garden design, while the complexity of outcome once again underscores the importance of context in social interactions. The three main factors that dictate communal plots' impact over communal unity and membership participation are the inclusivity of communal plot design, the ease of caretaking and enjoyment of the plot and its produce, and the alignment (or misalignment) between plot function and the shared general ideology of community gardening. The horticultural design of a communal plot, both in its layout and in its plant selection, often sets the tone of the social interaction that revolves around it. Just like how the temple-like architecture of many museums commands a sense of respect and worship, and how streets with busy traffic discourage social interaction among neighbors, these architectural arrangements and plant selection of communal plots carry a meaningful message that may have a significant impact on the social aspect of the community gardening experience, whether they are intentional or not. Communal plots with a welcoming architectural design that encourage social interaction, planted with species that are easy to take care of and easy to enjoy can have a significant positive contribution to the communal solidarity of garden members. Combined, these two factors build a *landscape of inclusion*, where the physical space encourages positive social interactions that build solidarity within the community. In contrast, an exclusive landscape that is difficult for members

to participate, enjoy or utilize will be seen as an insignificant if not a divisive presence in the garden. And since communal plots are the focal points of garden meetings, garden clean ups and other communal work, and are often sites for socialization among gardeners, this will have a profound impact over the general atmosphere of the garden.

The landscape of inclusion in community gardens applies beyond the communal plots alone. The design and visual appeal of the garden as a whole also influence how the garden may be perceived as an organization and utilized as an urban greenspace for socialization, both among garden members and in the local community at large. Again, the physical design of the garden and the ease of caretaking and enjoyment relative to the individual skill level plays a significant role. Gardeners who live further away from the community gardens, for instance, have reported that they have difficulties building the same level of interpersonal intimacy as those who live closer to the garden, as they cannot show up in the garden in slippers and pajamas as their peers – an attire that evokes familial intimacy and casualness. And while the large personal plots in Old Chapel Field are one of its key attractions for its many experienced gardeners, the daunting task of maintaining such a huge plot under the direct scrutiny and indirect peer pressure of these seasoned horticultural enthusiasts have arguably dissuaded many local community members from joining. This presumed "lack of community interest" was debunked during the covid pandemic, when the garden tentatively opened its largely vacant disabled garden to non-disabled applicants. These raised beds no bigger than a standard bathtub were designed to accommodate people with physical difficulties, but have since become an incubator for novice gardeners who would like to have a trial year in the allotment. The more manageable size of these raised beds lowers the technical barrier of community gardening, making the garden more accessible to people of different skill levels.

Both the architectural design and plant selection of communal plots are shadowed by the lack of freedom for interpretation on the side of the beholder, which is the source of ideological misalignment that is often observed in the social interactions revolving around communal gardens. Communal gardens are almost always dedicated to a specific purpose that is explicitly stated and well recognized by all gardeners. This unambiguous, discrete, and often highly specialized nature of their meanings puts communal plots in stark contrast with their personal plot counterpart, which as a medium for communication is characterized by the non-directional, conglomerate and open-endedness of its utterance. These values may sometimes accord with some important shared ideal such as sharing and the appreciation of nature, while in other cases – most notably in ornamental communal plots that grow expensive cultivars – may appear to many as contradicting. This often creates an "either-or" scenario, and is an important reason why some communal plots bring people together, while others tend to draw lines and pull people apart.

In addition, community gardens do not exist in a social vacuum, and the interpretation of communal plots and the garden as a whole is ultimately rooted in the greater social context where the community gardens are planted in. In some cases, the visual appeal of a community garden in general and communal plots in particular may highlight the socioeconomic status of their occupants, reaffirming deep-rooted social divides and preexisting assumptions. The predominantly white middle class garden of Stanford Bridge, for instance, have made many efforts to invite people from low-income housing across the street to join the community garden in various ways. This, however, has not seen any major success. While community gardens in low-income neighborhoods may also feature a great variety of ornamental flowers, the fancy roses along the front fence of the Stanford Bridge certainly conveys a sense of affluence. As some gardeners from Stanford Bridge have put it, people from low-income households across the street simply feel that

"this is not a space that they belong to".

In other instances, while the design of the communal plots may represent an intentional effort to promote communal inclusivity, the ideological difference among gardeners and the functional limitations of community gardening as a practical activity may render these efforts insufficient. For instance, in Newtown Heath, a community garden located in a gentrifying mixed-raced neighborhood, the garden design has many features that promote social inclusion not only among garden members, but also for the entire local community. It is among the very few community gardens in Philadelphia that are not gated. The garden is bounded by a low, vibrantly colored wooden fence, and can be easily accessed by all through a small wooden gate. The walls next to the garden are decorated with community garden related slogans, social equity and communal solidarity buzzwords, as well as the contact information for the garden coordinators, all painted in colorful friendly fonts. And with its communal berry patches and many flower beds located at the very front of the garden, the garden broadcasts its bounty to all passersby. Yet despite these efforts, the garden itself is simply not enough to mend the ideological division and difference in priorities between garden enthusiasts and community activists, let alone the deep suspicion of old residents towards newly moved-in young professionals.

A similar, yet more encouraging incident can be observed at Saint Mary's. The founding member of the garden intended to make Saint Mary's a hub for community organizing and outreach, and such vision is also reflected in its original design. It has many tables and benches for community events, occupying nearly a third of the garden's land use. In addition, at the time it was first founded, the garden coordinators were the only ones who have the key to the garden, as they intend to make every garden caretaking a communal activity where people may interact and cooperate. This centralized timetable arrangement of garden caretaking, however, was quickly

realized to be unrealistic. Every garden member has a different schedule, while different plants have different needs. The unpredictable weather also made organizing these communal caretaking events on a weekly basis incredibly difficult. The garden now has a combination lock, so gardeners may enter the garden whenever they feel comfortable.

Chapter 6 | Put on the Spot:

Disinterest and Conflicts in Community Garden Meetings

Abstract:

Garden meetings represent the only instances where a majority of the community garden membership are physically present in the garden site at the same time. Yet, the social impact of garden meetings on building membership solidarity is often complicated if not negative. There are many reasons behind the ineffectiveness of garden meetings in promoting communal solidarity, all to some extent tied to the structured, face-to-face format of garden meetings. The mundane, ritualistic nature of garden meetings makes them unappealing for young working gardeners, and highlights the division within the garden membership along generational lines. Garden meetings are also characterized by the occasional flagrant clashes, which often erupt around non-gardening social issues that are relevant to the greater community which the garden is located in. Due to their social relevance, during discussions of these issues, the shared identity of community gardeners can often become obscure, superseded by the individual demographic and ideological identity of the gardeners. As a result, these discussions can often be rather divisive. The direct face-to-face format of garden meetings also makes many gardeners more defensive, who have very limited time to contemplate their statements.

In all seven community gardens covered in this study, garden meetings and other communal activities represent the only instances where a majority of the community garden members are physically present in the garden site at the same time. While the informal and decentralized existence of many community gardens means that such organized communal events are not present in all community gardens covered in this study, they are nonetheless an important venue of direct social interactions in the community gardening context. In theory, this would mean that communal events like community meetings should be a crucial element in the construction of communal solidarity in community gardens, providing an important venue for direct social interaction that underpins the tone of indirect social interactions that have been extensively discussed in previous chapters. It would also be an irreplaceable opportunity for gardens to mobilize their resources and tackle important issues faced by the garden as a whole.

In practice, however, the social impact of these communal events is often more complicated. Overall, my research suggests that at least in the seven established community gardens with secure land ownership covered in this study, the influence of garden meetings on communal solidarity is, ironically perhaps, limited at best and even harmful in some of the worst scenarios. Sure, communal events in the established community garden covered in this study are often accompanied with cooperative labor, a lot of conversations, and great foods sourced right from the gardens. Yet at the same time, garden meetings are most often treated with indifferent ritualism, and can indeed be quite unproductive. In addition, when real social issues are at stake, community meetings can also often become the site of great contention, marred with heated exchanges and seemingly unnegotiable differences. Community gardens can often be filled with strong, fiery characters. Nevertheless, given their shared passion for gardening and the significant overlap

community gardeners often have over in their political ideals, this observation can be somewhat surprising. Indeed, a significant proportion of the social interactions that actually occur during these communal events can be characterized by intense disagreements and flagrant clashes between contradicting priorities, ideologies and stands on issues big and small. And while garden meetings are designed to provide a platform for gardeners to report and discuss garden-related matters, some of the most memorable episodes that happen during these meetings are not necessarily related to gardening itself. What are the main reasons behind these rare yet dramatic clashes? And why compared to the spontaneous and often indirect social interactions that sprout from garden activities itself, garden meetings and other organized community events can be inconsequential, or even harmful, towards the building of communal solidarity in community gardens?

Among the seven gardens covered in this study, five of them adopt a relatively formal organizational structure and host communal meetings and other structured community events such as organized garden clean-ups and community dinners on a regular basis: Stanford Bridge, Old Chapel Field, Doyle Square, Entfield Row, and Saint Mary's. The other two gardens, namely Raven Cottage and Newtown Heath, are less rigid in their structures, but still organize garden meetings and community work days from time to time upon notice. Perhaps under the influence of their umbrella organizations such as PHS, their communal meetings all follow a similar format. The garden meetings in these gardens are mainly constituted by garden coordinators going through a laundry list of procedural garden affairs, including personal plot upkeep, maintenance duties of communal plots, budgeting, and water management. It is often very structured. In Old Chapel Field, it even includes an opening remark by the garden's secretary and a printed-out timetable of the meeting that is handed out to all garden members before the meeting. These meetings sometimes

also include an open discussion session, where both coordinators and individual gardeners may raise particular topics of interest for discussion.

My research suggests that there are many reasons behind the general ineffectiveness of garden meetings in promoting communal solidarity, and all these are to some extent tied to the structured, face-to-face format garden meetings often assume. This is especially true for gardens with a formal organizational structure. On one hand, the mundane, trivial, and ritualistic nature that garden meetings often assume makes them unappealing for young working gardeners, who often prefer to have garden matters handled through emails. This creates an unenthusiastic atmosphere with minimal membership participation, and also highlights the division within the garden membership – often along generational lines. On the other hand, these meetings are also characterized by the occasional flagrant clashes. These conflicts often erupt around non-gardening social issues that are relevant not only to the gardens, but also the greater community which the garden is located in. Due to their social and often contentious nature, during discussions of these social issues, the shared identity of being a community gardener can often be replaced by the individual demographic and ideological identity of the gardeners. As a result, these discussions can often be rather divisive. The direct face-to-face format of garden meetings, which gives gardeners little time to contemplate, also makes many gardeners more defensive. In addition, my observations suggest that garden coordinators, despite their passion and expertise with gardening, are often inexperienced in tackling complex social issues or leading meetings. Thus, they can often be ill-prepared when conflicts between opposing camps of gardeners erupt during these meetings.

6.1 The Ritualism of Gardening Affairs

Given the rigidly structured format and routine matters usually covered in garden meetings, it is unsurprising that most garden meetings are often uneventful. While subjects like funding,

electric and water management are foundational to the healthy and sustainable operation of the community gardens as institutions from the top down, these logistic issues have little apparent impact over the actual gardening experience of an average community gardener. In addition, given the highly centralized top-down nature in the management of these matters (and in many cases the management of the communal plots as well), most gardeners assume that these are not problems that they should be concerned about or even meddle with. Thus, although most community gardens run on a democratic system, the actual participation in garden governing affairs is often relatively low.

As a result, it is not uncommon for gardeners to find gardening meetings uninteresting, overly bureaucratic and even a waste of time. Throughout my research (especially before the Covid-19 pandemic where online meetings became the norm), multiple gardeners from different community gardens have expressed their frustration with the existing garden meeting format. Quite a few gardens complained that most of the issues covered in these meetings are utterly trivial, and can be easily covered by email circulations, with some suggesting that it should be done within the exclusive circle of coordinators who actually work with these matters on the ground. One gardener from Old Chapel Field, a middle-aged Black woman working in the healthcare sector, even stated that she left Stanford Bridge to join another community garden on the other side of the city partly to avoid the rigid, inefficient bureaucratism in these meetings, stating that the meetings at Stanford Bridge during her tenure were always filled with endless discussions that lead to no constructive outcome[22]. This indifferent and often impatient attitude towards regular garden meetings is particularly common among young gardeners, who, with their busy working schedule and familial

[22] This sentiment is perhaps a bit ironic given how rigid and bureaucratic Old Chapel Field itself can be, as we will go into in greater details., but one should take into consideration the different racial dynamics in both these gardens. For this gardener, a middle-aged Black woman, it is totally reasonable for her to feel that her specific concerns over race-related topics are not handled with the urgency they deserve.

duties, find the lack of substance and importance in regular garden meetings especially frustrating. Many propose replacing regular meetings with emails and newsletters, and believe garden meetings should only be held for important organizational decisions and emergencies. And because they usually join these gardens at a later date and have shorter membership tenures, they also rarely share the traditionalist sentiment founding garden members have towards garden meetings, who often uphold it as an important institutional process that marks the formal establishment of the garden. One young gardener from Stanford Bridge made the following remarks[23]:

> *"I think the monthly meetings are total bullshit. They're absolute waste of time. And I recognize that the intention of it is probably to bring people together and build community. But when you're just reading all sorts of things that could easily be shared via email, it doesn't seem really relevant. Now, I also recognize the idea that we want to also engage people that might not have internet and pieces like that. But for those few gardeners, I'm sure there's somebody that would be willing to involve, you know, the notes from their computer and drop it under their door."*

Another gardener from Old Chapel Field expressed a similar sentiment[24]:

> *"Why do we have to talk about these things? Why can't we just talk about the beautiful castor bean we have over there? I don't know a thing about it or what you can do with it. Why can't we talk about that?"*

This lack of interest towards garden meetings among busy young working members is a significant source of tension in community gardens where a rigid organizational structure is in place, most notably in Stanford Bridge and Old Chapel Field. In the by-law of these gardens, in

[23] Interview 8
[24] Interview 35

addition to personal plot and communal plot workloads, members are expected to attend at least a certain number of garden meetings every year for them to retain their membership status. In Stanford Bridge for instance, gardeners are expected to attend at least 4 monthly garden meetings every year. In Old Chapel Field, a gardener is allowed to miss a maximum of three monthly garden meetings without any reason and/or pre-notice. Along with personal plot maintenance, garden meeting attendance is one of the primary rules that gardeners are expected to follow – though in practice they are not nearly as strictly enforced as the former. Nevertheless, some older, highly dedicated and more aggressive gardeners feel strongly about garden meeting attendance. These gardeners often see the attendance of garden meetings – despite their lack of substance – as a display of personal commitment, and often accuse some young gardeners' poor meeting participation rate as a testament to their lack of dedication. These gardeners are often ridiculed as "garden police" by their peers. This conflation between rule-following and dedication mirrors their discussion in regard to personal plot maintenance. One gardener describes her observation as following[25]:

> *"There are some people in the garden who think that we have these rules, like cleanups and meetings for the functioning of the garden. And if you don't participate in those and don't take care of your plot, you should get kicked out because you're not doing what the garden needs and not doing what your neighbors need. And you're not showing the level of interest. And then there is a group of people who say, who think this is a community and once you're in now, it's your plot and you shouldn't get kicked out unless there's something extreme."*

Many, of course, detested such characterization. One older gardener makes the following

[25] Interview 11

statement[26]:

> *"Young people are just as committed. They love to garden, but they also ask questions like, why do we have a meeting every month when there's no agenda? And why isn't the meeting at the same time as the clean up? Wouldn't that make more sense? So what happens is, the older people are all retired, so they can like… screw around with 10 meetings, but the younger people work, and they have children. And it's like they want to be part of the garden, but they don't have endless amounts of time to stick with these meetings with no agenda. So I just don't agree. I don't think it's about commitment. I think it's about where people are in their kind of lifespan, younger people."*

The sentiment of disinterest and impatience towards garden meetings is not uncommon among community garden members. As a result, few gardeners actually actively engage in socialization with other participants during these meetings. In most cases, gardeners do not actively participate in the meetings at all. Most are content with being a mere spectator, and few ever raise their hands for additional questions. Based on my observation, the only significant form of socialization garden meetings actually helps to facilitate happens before and after the meetings. Garden meetings are a structured opportunity for gardeners to visit the garden. Many gardeners choose to work in their plots either before or after the meeting, and they may decide to approach other gardeners of interest during this special window of opportunity where a majority of gardeners are physically present in the garden at the same time. These interactions, however, are usually either the fruit of pre-established friendships, or driven by a pre-existing interest towards a certain gardener fostered by the communicative capability of their personal plots as illustrated in the previous chapter. While the garden meetings undoubtedly provide the important circumstantial

[26] Interview 3

prerequisite for these face-to-face interactions to happen, the seeds of these inquiries have been planted long before, waiting to germinate when opportunity arises. The gatherings for these meetings are a convenient conduit for these conversations to take place. The substantive content of these garden meetings themselves are also usually irrelevant to these interactions. Thus, these interactions should be treated as an extension of the spontaneous social interactions that sprung from daily garden activities, rather than the fruit of garden meetings themselves. A former president of the Stanford Bridge Community Garden, the garden with one of the most formal organizational structures, described his experience as following[27]:

> *"There is very little social interaction at garden meetings. Nobody really talks. Everyone wants to leave as soon as possible. For me, the most fruitful and rewarding social interactions I have at the garden are the spontaneous conversations I have with other gardeners while we are working, chatting about the weather."*

Interestingly, although this almost universal lack of substance and functionality of garden meetings is widely recognized as problematic by garden members across different initiatives, and many have expressed vocally about their frustration for this arrangement, there is also very little organizational incentives towards making garden meetings more productive and relevant for the average gardeners. Such organizational inertia is observed in all community gardens covered in this study, regardless of their size, membership dynamics, and organizational formality. In gardens with leadership rotation or term limits, newly elected garden coordinators – especially those from a younger generation and a shorter membership tenure – sometimes seek to revolutionize the garden meeting format after assuming their coordinator roles. Some have proposed organizing workshops during meetings where more experienced gardeners may impart their knowledge to

[27] Interview 41

new inexperienced members. Others have tried organizing community building events that lean into the social goals of the community garden movement. Yet few ever succeed.

This stubbornness has its roots both on the organizational and social level. On one hand, on the organizational level, the bureaucratic structure of some community gardens can make reforming the garden meetings a slow and inaccessibly difficult process. After all, in community gardens with a formal organizational structure, in order to reform the garden meeting, the only route to accomplish that is through a garden meeting itself. For gardens with a large membership and a rigid leadership (most notably Stanford Bridge), this might take multiple meetings and many long, heated debates to accomplish. These proposals also often face strong resistance from older, more "conservative" gardeners who champion the formal organizational procedure. Thus, for those gardeners who have grievances over the long duration and unproductiveness of these meetings, engaging with these problems head-on within the garden meeting platform itself, only to once again experience these very bureaucratic problems firsthand, becomes an oxymoron endeavor. Afterall, community gardening is only a small part of many gardeners' life – an important pastime sure, but rarely an endeavor with great priority. The strong, sometimes abrasive character of many proponents of the garden establishment can sometimes make this process even more challenging. One young gardener from Stanford Bridge vents her frustration as follows[28]:

> *"There are these people that are nasty. They always bring up something, you know, that has something negative to say, doesn't bring in all the other people from full house that weren't part of this kind of founding group. It's… it's not the most inviting setting. And then when I raised the issue, the first meeting about the meeting requirements, you know, I was told, well, you'd have to redo the bylaws and introduce it. And it becomes a whole labor to*

[28] Interview 23

try to get them to change the meeting requirements. And it hasn't been at the top of my priority list to take that on. I'd rather just try to find a way to get to the meetings, get to my five and be done, okay?"

On the other hand, on the social level, while organizing informative talks and other group activities during meetings could make garden meetings more substantive and thereby more meaningful, it may not be the most effective way to accomplish these goals. Many gardeners argue, with some, that the spontaneous social interactions facilitated by personal plots and other channels of informal associations are so effective as a means of disseminating horticultural knowledge, that they undermine the need of having such a purposeful, top-down alternative. Given the wide disparity in gardening knowledge among gardeners, many members from different gardens have proposed independently – in fact several times during the span of my fieldwork – that more experienced gardeners should give talks and host workshops during garden meetings, sharing their wealth of knowledge and experience with their peers. At Saint Mary's, where education and community building are central to its organizational mission, the founding members of the garden even tried to make information sessions and gardening workshops an integral part of their regular garden meetings.

Unfortunately, such pushes have never gained much steam, mainly due to the lack of community interests. When asked why such is the case, many garden coordinators often cite that while there are definitely gardeners who wish to see a more substantive and meaningful garden meeting, there is also a strong and well-founded desire shared among many gardeners to have the meetings to end as quickly as possible. This is especially true among young working parents who have other priorities, who are also the supposed target audience of such workshops. In addition, many coordinators rationalized that the community garden already has a solid informal structure

of knowledge exchange through the spontaneous, informal social interactions facilitated by the personal plot gardening. With this bottom-up network of knowledge already in place, many argue, perhaps rightfully so, that having information sessions in a top-down manner would be unnecessary. In the case of Saint Mary's, the garden coordinators soon realized that organizing these workshops for its own members, who have the support of their peers through informal channels and plenty of opportunities for hands-on experience, may not be the most productive way to achieve their community building objectives. Today, Saint Mary's hold open-house gardening workshops not for their own members, but rather for children from the community, teaching them about plants, gardening and nutrition. One of its communal plots, planted with small herbaceous flowers that are hardy and forgiving, is designated for these children.

It is also worth noting that despite the almost universal distaste for garden meetings, these mundane rituals may still have an important role in maintaining the sense of community among gardeners, especially within certain demographic groups. It is no secret that young, working gardeners with a busy work schedule (as well as older gardeners who sympathize with their grievance) have a strong dislike for garden meetings. Such shared sentiment seems to be an important topic where these gardeners may bond over, especially in gardens with a rigid, formal organizational structure, such as Stanford Bridge and Old Chapel Field. During the course of this research, many young working interviewees have recommended their friends for snowball sampling interviews over the subject of garden meetings – people who share their distaste and impatience towards the rigid organizational ritual. Some even admitted that the common resentment towards garden meetings, at least in its current form, have become a catalyst for their friendships. In this sense, the indifference towards garden meetings still serves a latent function in building a sense of solidarity within a certain section of the garden member demographics.

6.2 Conflicts and Challenges on Non-gardening Issues

However, outside the almost ritualistic part of where routine garden management agendas are addressed, garden meetings are not always uneventful. On the contrary, many community gardeners recall explosive episodes of dramatic clashes and heated exchanges between gardeners. Ironically perhaps, most of these conflicts during garden meetings are unrelated to gardening. Rather, they are usually centered around topics and events that are relevant to the larger community outside the sanctuary of the garden. Thus, these conflicts can be seen as the reflections of social struggles in the community at large, and they often reflect the demographic and ideological divisions among garden members and the greater community which the garden is situated in.

For instance, in the predominantly White middle class community garden of Stanford Bridge, conflicts during garden meetings often stem from the divide between age groups and their different views over the issue of race and socioeconomic status. These divisions reflect the demographic structure and social inequality of the neighborhood which Stanford Bridge is located in. One topic of great contention involves children's access to the garden, which reflects demographic changes in its neighborhood. The recent influx of younger families in the neighborhood is reflected in the garden membership demographics. The difference in age and as a result the difference in lifestyle and priorities among garden members has sprouted heated debates about whether children should be allowed in the garden. Many young families saw the garden as the perfect playground for children to learn about food, gardening and nature, while some older gardeners feared that their childish recklessness would damage their plants. This, of course, is also a symptomatic eruption of the long existing divide between young and old gardeners at Stanford Bridge. As mentioned in earlier, younger gardeners are often scrutinized for their perceived lack of dedication due to the casual style of their personal plot upkeep and their low meeting participation rate. These debates

surrounding the garden access of children highlight the existing fault lines between garden members of different demographic groups, where their personal priority and by extension their demographic identities are pushed to the foreground. Gardeners no longer address each other as fellow gardeners, but rather as different factions divided by opposing priorities, tattered with garden identity politics. The parallel between such garden debates and the identity centric political debates in the contemporary United States is uncanny. As a result, it is unsurprising (and perhaps unfortunately) that gardeners sometimes incorporate the often highly divisive lexicon of contemporary American political discourse. In the case of Stanford Bridge, this is manifested through the resentful and derogatory remarks being lobbed between different age groups, where each is prescribed with a buddled, highly stereotypical package of both gardening and political alignment.

But more profoundly, the racial segregation and economic inequality that is so visible in the neighborhood have been the source of many conflicts during garden meetings at Stanford Bridge. The neighborhood of Stanford Bridge is an exemplary snapshot of the profound racial and socioeconomic divides of Philadelphia. With low-income housing mainly occupied by Blacks and Southeast Asian immigrants built right across the street, the wealthy, predominantly White gardeners of Stanford Bridge have to confront the harsh reality and consider their own roles in this systematic problem. Trying to make a stand on this issue, Stanford Bridge have had multiple highly charged and profoundly political debates on whether the garden should make an active effort inviting them to join the garden, as well as how to execute it. Supporters for introducing more diversity, equality and inclusion programs often cite the garden's very own heritage as a radical garden founded with an explicit political agenda. After all, Stanford Bridge was founded by left-wing activists in the 1970s on the very principle of food justice and socioeconomic inclusion, and

had for a long time been a garden with a very diverse membership in race and class. As a result, these gardeners argue that Stanford Bridge has a moral obligation to uphold its own historic legacy – especially as both the garden membership and its surrounding neighborhood has gradually become more White and more effluent as the neighborhood gentrifies over the years. The proponents of greater racial diversity at this garden have proposed that Stanford Bridge should designate some personal plots for Black and Asian communities, not unlike the affirmative action of education institutions. Others have suggested that the garden should host community events and education programs catered towards their minority neighbors, thereby promoting their interest in community gardening. Some also lean into the divisive reception of some communal plots, as covered in the previous chapter, and argue that some ornamental communal plots should be converted to personal plots for these racial inclusion programs.

Oppositions to these proposals, on the other hand, usually argue that the garden is currently operating at full occupancy and already has an extremely long waiting list of new applicants. Thus due to this shortness of space, it would not have the organization capacity to quickly accommodate a program that promotes the garden's diversity, equity and inclusion. Many members at Stanford Bridge are retired gardeners with long tenures. Because they are unlikely to move out of the neighborhood and have deep social and emotional ties with the garden, the membership turnover rate of Stanford Bridge is extremely low. As a result, according to these gardeners, Stanford Bridge simply does not have the physical or organizational capacity for new members. Thus, while they do not oppose having more members from marginalized backgrounds, introducing them immediately into the garden would be unfair for those applicants who have been on the waiting list for years.

Stanford Bridge also allows multiple gardeners to claim ownership to a single personal plot,

and older gardeners who are experienced yet physically challenged may enlist novice gardeners as helpers who work under their mentorship. Some proponents of greater diversity have thus suggested that as an alternative, the garden may invite low-income minorities to join the garden as helpers, thereby circumventing the waitlist. But many opponents for such arrangement have rightly point out that, given the racist (and very much ongoing) history of agriculture in the United States and the collective trauma it has inflicted on Black and Latine communities, it would be really tone-deaf to ask a minority helper to work in a personal plot under the ownership of a White gardener. In addition, opponents of these diversity, equity and inclusion programs suggest that the garden has made many similar attempts in the past, but these community outreach have seen very little success. With the presumably low interest towards community gardening among these low-income residents, opponents to such proposals often argue having such "affirmative action" in their community garden may be counterproductive. Some argued that the garden should instead focus on existing social justice programs with tangible results, such as the City Harvest.

These excuses are somewhat understandable, especially considering the fact that most community gardeners are horticultural hobbyists with little experience in social work. Yet, it is still disheartening to see community gardens like Stanford Bridge, many founded on an explicit progressive political agenda, gradually lose their radical edge as they become more established, focusing more on organizational stability and ease of operation rather than actively trying to bring positive social changes. It also constitutes a stark reminder that, despite their progressive image and the social benefits they can bring, these community gardens are still rooted in the social reality of Philadelphia, a postindustrial city characterized by deep social division along the line of class and race as well as aggressive waves of gentrification in the recent decades. Nevertheless, many gardeners join the community garden partly due to social reasons, and believe that the betterment

of the local community should be an organizational priority. As a result, the disappointment towards the lack of effort by the garden is shared by many members of Stanford Bridge (and rightly so), especially among many younger members. The discussion eventually became very heated indeed, and the parallel between garden politics and city politics is clearly not lost on both sides of the debate. The main talking points of the program's opposition also strongly resonate with the anti-immigration stance found in the right wing parties of many developed countries that stresses assimilation and carrying capacity, and was promptly picked up by the program's supporters. As a result, although the garden membership is overwhelmingly Democrat, many gardeners often used national bipartisan political lexicon in these discussions, which are unfortunately often characterized by its divisive and belligerent flavor. For instance, in one particularly explosive episode, one proponent for greater having diversity and inclusion at the garden accused those who opposed her proposal as "Karens," and claimed that she was utterly tired of talking with these "White women" for their convenient and selfish inaction against racial inequality, despite the fact that she is a middle-aged White lady herself. Even though such accusation is definitely legitimate in some ways, such hostility through reference with the national political discourse essentially killed the proposal for the time being. Such conflict during meetings also reflects the lack of experience and expertise in tackling sensitive social issues class and race on by the garden coordinators, who, despite their horticultural prowess, failed to steer the discussion towards a productive direction.

Similarly, the challenges of disconnection between different age groups, as well as the deeply rooted systematic problem of race, class and gender that permeates the greater community where the garden is located in, also sprouts many conflicts during meetings at Old Chapel Field, a predominantly Black community garden in a Black, working-class neighborhood. In this case

though, the main point of contention occurs along the line of age and gender. Most notably, many female gardeners find the self-interested, condescending and often misogynistic demeanor of some male gardeners during meetings distasteful. Such sentiment is by no means unfounded. While many male gardeners are often very vocal and assertive during garden meetings, with a few notable exceptions, their contribution to the communal plot maintenance and other communal duties is often lower compared to their female counterparts[29]. One of them, who also holds a leadership position in the garden committee, even pays another gardener to help him fulfill his monthly community chores – though the helper he "hires" is another male gardener and is indeed one of the hardest working gardeners in terms of his community labor output.

It is also worth considering that some male gardeners in Old Chapel Field are of Caribbean heritage, and the cultural difference between them and their American-born peers can also be a point of contention. Some of them, despite being very knowledgeable gardeners, can be more socially conservative than those who are born and raised in the United States – especially on the issue of gender. These few male gardeners, though surely not representative of the entire gender and ethnic group, can be rather abrasive and chauvinistic towards their female peers when confronted during garden meetings, often raising their voice and making disproportional threats when confronted. One has threatened to sue the garden leadership for taking disciplinary measures on his unruly use of synthetic fertilizer. Another male former member of the garden – a talented painter who created the garden's idyllic murals – threatened to vandalize his own work when criticized for his lack of work ethics in communal plot maintenance during meetings. Thus, just like in Stanford Bridge, the conflicts during garden meetings in Old Chapel Field are very much a reflection of the social reality in the larger community which the garden is situated in. This again

[29]Unlike many other community gardens covered in this study, most of the communal plots in Old Chapel Field are not assigned to any dedicated caretaker.

proves that, despite being an urban oasis that brings a wide range of social, economic and ecological benefits, community gardens are not completely sheltered spaces that exist in a social vacuum, and are often influenced by the social discourse that troubles the society at large.

The most explosive of conflicts during the course of my research in Old Chapel Field, however, occur between older gardeners who have been with the garden for a long time, and younger gardeners who only recently joined. Intergenerational divide is a significant problem faced by the local community, and tackling it is one of the principal organization objectives for many community gardens, including Old Chapel Field. Despite their effort however, inter-generational divide remains significant in the Old Chapel Field membership, and is deeply intertwined with other socioeconomic divisions – such as race, gender and socioeconomic status. Due to their long personal history at the garden, many of the older gardeners have known each other for a very long time. Many were founding members of the garden, and have deep emotional attachment to both the garden as a physical space and their old-timer peers. These bonds are further strengthened by the fact that, during the early phase of its establishment, Old Chapel Field was under the management of a charismatic yet draconian former leader. Reorganizing and replanning the garden together after the end of his "dictatorship," both on the physical and organizational levels, has cultivated a strong sense of camaraderie between these old gardeners despite their drastically different characters. When the old garden gazebo was renovated, a plaque that commemorates his tenure installed in the original structure was also removed. Many old gardeners bonded over this highly symbolic event, both expressing their joyful relief yet at the same time acknowledging his contribution to the garden. In addition, these older gardeners are also over-represented in the garden committee, assuming important leadership positions that, partly due to Old Chapel Field's relatively small membership size, do not rotate among garden members.

This is in strong contrast with the younger members of the garden. Though many of these younger gardeners have been living in the neighborhood for a long time, the slow turnover rate of the garden and the general uncertainty at the stage of their lives mean that they have much shorter tenures. For those who do not share their plots with older family members, their membership status can often be a transient one. As newcomers entering a community with a tight knit group of core members, it is unsurprising that their approach to the community garden can sometimes be a lot more formal and less familial. In addition, the extremely large personal plot size of Old Chapel Field, as mentioned in the previous chapter, also creates a curious self-selection mechanism. Thus unlike the case in many other community gardens, the new members of Old Chapel Field are often very knowledgeable and passionate gardeners, having the expertise to take on the daunting tasks of managing their large plots. The horticultural proficiency of these young gardeners, as well as their underrepresentation in both the garden leadership and the garden social network in general, creates a rather interesting power dynamic in the garden. The generational divide in the community seems to be significant, and the sentiment towards key issues such race, gender and mental health, as well as specific concerns such as how the garden should be managed, can be quite different across the generations.

One of the most explosive episodes of conflicts in Old Chapel Field during my research erupted around a racist remark made by one of the older gardeners against a younger gardener and her daughter due to the daughter's lighter complexion. The older gardener involved in the incident was an elderly Black woman well into her eighties. Unfortunately, she was also a person with significant mental health issues, and many gardeners with long tenures have described her as unstable, overtly religious or at least eccentric. The victim of her aggression is a young Black gardener, a single mother who was in her late twenties during the incident. Her child – who was

less than 10 years old at the time – is not of mixed-race heritage, and the fact that both of them are survivors of domestic abuse make the incident even more traumatic. The younger gardener reported the incident to the garden committee during a garden meeting session where the older woman was not present, and urged the garden leadership to expel the older gardener for her racist and sexist behavior. Yet to her surprise, the garden leadership declined to take immediate action. They stated that the gardener has been with the garden for a long time, and it would be "cruel" to expel her. In another meeting where the older woman was present, while the garden coordinators stressed that racism, sexism and other forms of bigotry behavior have no place in the garden, they also highlighted the importance of compromise and garden camaraderie. As a result, despite being a garden with a formal leadership structure, Old Chapel Field rarely enforces its by-laws over violations.

For some younger garden members however, the garden is an institution that should be operated with efficiency, transparency and professionalism. In this case, the young gardener in question interpreted this lack of action as proof of nepotism, and believed that the garden leadership committee were more concerned over maintaining order and old relationships than upholding justice. She (as well as a handful of young and middle-aged gardeners sympathetic to her position) believes that rather than advocating for tolerance towards the hateful racist behavior of the old woman, the garden committee should take a stand and enforce the garden by-law regardless of the age and tenure length of the rule-breaking individual. She also points out that Black communities, especially the older generations, often do not give psychological disorders the attention they deserve. Understating her apparent mental health issues as eccentricity without taking any proactive action is harmful to both the garden community and herself. Frustrated and disheartened by the inaction of the garden coordinators, she chose to circumvent the garden

leadership and reported the incident to PHS and NGT, the two main umbrella organizations that sponsor the garden. The young gardener explained her experience and her frustration as following[30]:

> *"There in the by-laws, it says, any disrespect and discrimination and harassment, all these things are under no tolerance. But there's a lot of tolerance for it, depending on who the person is. (...) Because she's been there for a long time, and because she's older, and because they are used to just ignoring her, they wanted me to just ignore her too. However, have a small child who her verbal assault was directed at. Being younger, I understand the perception that older people have of younger people. So, I really tried to handle things in a professional way that has integrity in a way that gives people a chance to call to action. Because I was that person, and would not let someone make derogatory remarks about my child's skin color."*

Many older gardeners at Old Chapel Field, however, have a very different perspective of this unfortunate event. While they unequivocally condemned the racist and sexist remarks made by the older woman as unacceptable, many also agreed that it would be cruel to expel the old gardener as it would "ruin her life," some even going as far as to say that such disciplinary decision would "kill her" due to her long membership tenure, old age and poor mental health. Thus, these gardeners believe the garden should be extra cautious in handling this sensitive matter, and the by-law should not be enforced without any consideration of the greater context. They also often rationalized the inaction by the garden committee by stating that this old woman had always been mentally unstable for a long time, often uttering weird semi-religious gibberish to herself or flailing nonsensical insults without provocation at others while gardening. As unsavory as it is, many

[30] Interview 25

suggest that her behavior is just an unfortunate reality of life, and other gardeners have to learn to adapt and accommodate such behavior. Many stated that they themselves have learnt to avoid interaction with her, and believed the young gardener should also learn to "just ignore her" or "does her gardening at a different time".

But perhaps more importantly, many older gardeners were uncomfortable with how the young gardener approached the incident in a cold and almost businesslike manner. For them, accusing the garden committee of nepotism was an oxymoron, as the community garden is designed to resemble an extended family, albeit perhaps a slightly dysfunctional one with all its contrasting characters and constant bickering. They stressed that the community garden itself is a community first and foremost, and any conflicts within the garden should be handled internally with care, tolerance and compromises. Some also reflected upon the garden's own "dictatorial" past, when the garden's draconian founder arguably did a lot of harm with his cold handling of human relationships. Thus according to these gardeners, despite having a by-law and a rather formal organizational structure, the garden for the most part is operated based on warm yet obscure interpersonal relations and reciprocity, rather than cold rules and hard enforcements. In their view, the young gardener, despite being highly praised for her knowledge with gardening and her experience with aquaponics, did not try to "understand who they are" and "how things are done". Raising the issue to PHS and NGT damaged the trust between gardeners, as well as between the garden and its sponsoring organizations. Thus, in an ironic self-fulfilling prophecy, by framing the garden committee's response as nepotism, the young gardener alienated herself with these older gardeners who make up Old Chapel Field's core membership. One of the garden leaders described their negotiation with the younger gardener as following[31]:

[31] Interview 26

"We tried to compromise and work with the person. We're pretty much into the garden season, we'll say: 'Okay, well, we don't agree. But sometimes you have to have a few sacrifices so the garden itself as a whole can benefit.' So we'll put up with it for now. (…) In our bylaws, it's clearly stated that if you have a dispute, if you have an issue going on in the garden, there's a procedure to follow, which is to make your issue known to the leadership so that we can address it. If we can't address it, then we have someone that we can go to. This is the first year we've ever had anybody go outside of that."

The contrasting positions taken by the garden coordinators and the young gardener reflects a significant difference in their ideal of the community garden. While the young gardener sees it as primarily a communal space for gardening, many older gardeners at Old Chapel Field see it as a community that gardens. While the young gardener saw the garden coordinators as positions of authority, many garden coordinators see themselves merely as mediators in the positions of responsibility. The difference in their perspectives also reflect the lack of understanding between these two demographic groups. While many older gardeners with long tenures may be right in accusing the young gardener for not understanding the conventional customs and nuanced human relations in the garden, they also fail to recognize that due to its tight knit circle of core members, it is very difficult for new members to break into. And although the young gardener was probably correct in calling out the garden committee for their lack of consistency in by-law enforcement, she failed to realize that reporting this internal incident to PHS and NGT, two external organizations with a predominantly White staff, can be perceived as insensitive and unwise. The differences in their ideals make successful communication between these groups challenging. Ultimately, this unfortunate episode ended with the younger gardener leaving the garden in the following year, while the old gardener who insulted her and her daughter died not long after during

the covid-19 pandemic.

In both Old Chapel Field and Stanford Bridge, some of the most intense conflicts between garden members erupt during garden meetings over events that strongly resonate with important and contentious social issues in their respective community at large, such as racial tension, socioeconomic inequality and generational divisions. While some are triggered by disputes over gardening related matters, the majority of these conflicts are not related to the actual activity of gardening. Rather, they usually concern the social aspect of the community gardening experience, especially on race, gender, and age divisions. Unfortunately, these conflicts during garden meetings are also usually not productive, and rarely move the gardening community forward in addressing these pressing social concerns. In some cases, they may also sow the seeds of long-lasting feuds between individuals or even factions on a more personal level, fracturing social cohesion within the garden membership that is central to the organizational mission and proper function of community gardens.

The eruption of these intense conflicts is facilitated both by the form and the content of these garden meetings. On one hand, the in-person, verbal and often formal format of these garden meetings brings a unique set of challenges and characteristics, often making confrontations more likely to occur and escalate. Different from the activity of gardening itself as a medium of communication, garden meetings are a form of direct social interaction, and hence require the temporal co-presence of the participating parties. Before the covid-19 pandemic, the meeting participants are also expected to be present in the same physical space. During a discussion, any statement demands a timely response with limited time for contemplation. As a result, unlike the disagreements that arise through gardening practices, during garden meetings, the different ideas are pitted directly against one another on the very spot. Without the mediation of gardening as a

slower indirect form of social interaction that warrants rooms for ambiguity and contemplation, gardeners can often feel cornered and become defensive when they are confronted with competing ideas, thereby escalating the conflict. This is especially true on non-gardening issues, where garden members no longer have their shared passion for gardening as a mutual ground to rally around. Indeed, garden meetings themselves are often presented as a platform to settle disagreements, often assuming a debate-like structure. And when the garden leadership fails to maintain a civil, inclusive discussion atmosphere, the eruption of conflicts can be difficult to avoid.

This feeling of being cornered may also be either diffused or exacerbated by how the physical space where these garden meetings take place are organized. All community gardens covered in this study have open space(s) where gardeners may meet and socialize, sometimes featuring a gazebo at the center of the garden. These community spaces are also where garden meetings usually take place. However, the architectures of these spaces are not the same. This, coupled with the various degrees of organizational formality of these gardens, can set the tone of these meetings in very different ways. In Doyle Square and Raven Cottage, members gather around in an open gazebo during garden meetings. The boundary between inside and outside of the meeting space is not very well defined. In Doyle Square, garden meetings are held in an "gazebo" that is functionally a grape trellis which does not even have a true roof that could shield its members in rainy weather. Similarly, at Entfield Row, garden meetings are held in an open lawn with a few tables and benches. These open architectural arrangements unintentionally created a relatively inclusive and egalitarian atmosphere where everybody felt they could have a say. And at the Saint Mary's Community Garden, its small membership would simply gather under one of the garden's portable parasols, and discuss garden affairs in the setting of a small roundtable. This arrangement evokes the image of a casual conversation among close friends, highlighting the communal and

egalitarian nature of the garden. This in turn seems to have influenced the atmosphere of meetings at Saint Mary's in a positive way. Rather than presenting themselves as figures of authority, the garden committee of Saint Mary's often address their peers in a truly humble manner, almost as if they are asking for favors and suggestions from their friends. This humility really helped to unite the membership of this young garden.

In contrast, although Stanford Bridge does have a spacious gazebo in the center of the garden, it's extremely large membership could not fit inside the gazebo, and the garden meetings have to be held in the open area near the shed instead. During meetings, the garden coordinators sit at the presenter's table with the garden's shed as its backdrop, while the rest of the garden membership sit on benches in the position of the audience. This lecture-like arrangement undoubtedly implies a sense of formality, and the physical space draws a clear distinction between the central and the periphery. The garden coordinators are put into seats of authority even though their organizational titles are by no mean a position of power, and the normal garden meeting procedures characterized by uneventful ritualism are given the gravity of the "normal order". The garden members, on the contrary, sit in the audience where the spatial arrangement expects them to perform as the passive listeners. The act of standing up and voicing concerns over garden affairs at Stanford Bridge, consequently, may be seen by some as a gesture of defiance, or at least something outside of the ordinary. And when the garden coordinators failed to steer the conversation in a civil, productive direction, heated exchange among the audience often erupts.

This tension between the central and the periphery created by the architectural layout of garden meetings is even more apparent at Old Chapel Field, where there is already a tight and distinctive circle of core members. Like many other community gardens covered in this study, Old Chapel Field holds its meetings around its central gazebo. However, the capacity of the gazebo, at least

before its remodeling in 2023, was rather small and cannot fit all its members sitting inside. And unlike the gazebo in other gardens, the one in Old Chapel Field has tall side panels made of solid wooden boards about 1 meter (3 feet) high, creating a clear physical boundary between the inside and the outside. Such dichotomy is often manifested quite literally during garden meetings. While garden coordinators and some of the more central figures of the garden often sit around the table inside the gazebo with pens and papers, the garden's more marginalized members have to contend with standing on the outside, leaning over the gazebo's solid side panels in order to be part of the conversation. Breaching this boundary can be quite theatrical indeed. During one explosive episode, the garden coordinators dismissed the accusations made by a gardener, who claimed that she saw another gardener and her mother "messing around" with one of the garden's communal plots, arguing that their lack of care effectively sabotaged the garden. After a heated exchange, and unsatisfied with their vindication, the accusing member, who was standing outside the gazebo, hurdled a deck of printed photographic evidence as a performative action of blatant defiance. This action unsurprisingly further escalated the conflict, and left a lasting scar on the relationship among Old Chapel Field's members. It also partially contributed to the later departure of one of its long-serving coordinators, who in her departing statement said that chairing the garden "was no longer fun anymore". In both Stanford Bridge and Old Chapel Field, the spatial and architectural arrangement of the garden meeting venues implies hierarchy, which makes the open, mutual exchange of thoughts and opinions more difficult. As a result, when gardeners do disagree in these settings, fiery arguments are more likely to erupt, and these arguments may have a lasting negative impact over the sense of communal solidarity among garden members.

The in-person, physical form of these meetings may even set the tone of garden meetings discussions, quite literally, through acoustics – an element that is totally absent from the indirect

social interactions of gardenscapes, and often taken for granted in other face-to-face conversations. As obvious as it may be, the volume which the garden coordinators speak during garden meetings can have a major impact over the meeting atmosphere. Garden meetings are usually held outdoors, and having loudspeakers is often not a real option. The community garden coordinators who usually moderate these meetings come from every walks of life, and they often do not necessarily have the experience of chairing meetings, leading discussions or projecting their voice to a large outdoor audience. Therefore, many garden coordinators may not be familiar with the many important skills and know-how of coordinating a formal meeting. As a result, when garden coordinators speak with a soft voice, it can often be easily overwhelmed by the sound of nature. And when competing ideas emerge during meetings, soft-speaking coordinators often find it more difficult to steer these conversations towards a civil, productive direction[32]. Without effective moderation, intense arguments can easily escalate. This is most notable when garden meetings shift back from online to in-person after the covid-19 pandemic restrictions were lifted, and garden coordinators have to lead meetings and project their voices without digital aid. One gardener at Stanford Bridge, a professor at a local university, explains her observation as following[33]:

> *"The more recent president is a very, very lovely person, but she's very soft spoken. So as meetings went back to in person, nobody could really hear her. And so they would try to give her a microphone. And then what would happen when she didn't, that didn't really work to project her voice, people would just have all these side conversations. So when somebody is a president who can project their voice, there, they control the conversation, people aren't gonna have side conversations, but when you can't hear what the person*

[32] Interestingly, gardeners who work as teachers and college professors have, at least according to some, a distinct advantage working as garden coordinators. Their experience in giving lectures and organizing classes can be a useful asset in facilitating good conversations during meetings.
[33] Interview 13

speaking is saying, you know, you're more likely to have a side conversation. So that was happening. (…) If the President is more soft-spoken, he or she's not going to have control of that meeting."

On the other hand, the content of the issues raised during meetings also significantly influences the conversation discourse, and non-garden related topics are a lot more likely to trigger heated arguments among garden members. These contentious social issues include racial and class inequality, gentrification, gender tensions, and age groups contentions. When non-gardening related social issues are raised during garden meetings, the collective identity as gardeners and the communal solidarity associated with it can become less relevant. Instead, the identity of a community gardener is often displaced by the gardeners' individual identities that are relevant outside the garden context. They no longer address each other as fellow garden members, but as individuals with different walks of life, and people have different opinions on issues that have little to do with gardening. In some cases, gardeners address each other as friends who they have bonded outside the garden context, but in many other cases, they are seen through the fractured lens of their other social attributes – their ethnicity, their age, their gender and sexuality, their political alignment – which ever attributes that resonate the most with the social issue in discussion. In addition, these contentious social issues are often important social issues that are not only relevant for the garden, but to the greater community at large. Due to their political relevance, it is almost inevitable for the national political discourse to seep into these conversations. Consequently, these garden meeting confrontations can sometimes escalate quickly when the parties involved adopt belligerent language that is characteristic of the contemporary American political lexicon. It is in these scenarios where we see gardeners flailing politically charged insults against one another over disagreements, even when the issues are not political in nature.

As a result, and perhaps rather ironically, despite their physical copresence and the fact that they may see each other's faces, gardeners during these meetings are more likely to address each other as broad categories of people who are to be either allied or confronted. When conflicts between gardeners erupt during garden meetings, the confronting parties sometimes address each other not by names, but rather by broad demographic categories that are used as signifiers with easily identifiable social political implications. As illustrated in the previous cases, phrases such as "White women", "Caribbean men", "gentrifiers" and "young people" are often flailed at one another with a not-so-subtle attitude of disapproval, with well recognized connotations within its intended audience. In one of the most extreme, and perhaps comical instances, one gardener, a male retired blue-collar worker, accused the female socialist founder of a community garden with an overwhelmingly progressive membership for "acting like a Republican", unsurprisingly escalated the situation. By addressing other gardeners using broad demographic categories and other sweeping descriptions, these gardeners may also distinguish themselves by highlighting their own identity, and thereby implying their own political allegiance. They often position themselves in the polar opposite of their "opponents", even if they themselves belong to the very same demographic category which they used to describe others. In some instances, these identity categories are even explicitly pronounced. In the conflict between the young woman and the old lady at Old Chapel Field, for instance, the young woman often addresses herself as a "young Black woman" in the third person, and is very consciously aware what connotation this demographic identity might imply among the older, presumably more conservative Black leadership of the garden.

This pattern of both aligning oneself and categorizing others using broad demographic categories is consistent with the act of stance taking, where the interaction participants not only

evaluate the issues of interest, but also position themselves (as well as others in many cases). Through this process, they also align themselves with potential allies also involved in the interaction (Du Bois 1984). While stance taking is practically inevitable in direct social interactions with multiple parties like these, where the diverse nuance of opinions and the plethora of colorful characters involved would otherwise make the interaction utterly chaotic and impossible to progress in any sustainable way, it also functionally polarizes the garden membership into opposing camps despite their overlapping interests. Under these conditions, their shared identity as community gardeners and their common passion for horticulture can often be suspended and obscured, while the differences in demography, socioeconomic backgrounds and ideologies between different fractions are accentuated. This undermines the sense of community within the garden membership.

6.3 Outlying Cases and Their Lessons

These fiery confrontations often seen in garden meetings over non-garden related topics is the product of its verbal, in-person platform, and how these discussions can tap into greater social issues where other identities may overwrite their collective identity as community gardeners. This may explain why in Newtown Heath Community Garden, heated debates during garden meetings are not only the most common, but also more threatening to the proper functioning of the garden on a fundamental level. Located in a fast-gentrifying neighborhood in western South Philadelphia, and with a mixed membership of working-class Black residents and young, mainly White professional gentrifiers, the heavy issue of gentrification and inequality has always loomed over Newtown Heath. Newtown Heath is also unique among community gardens in Philadelphia because it is a “top-down garden”. Instead of being founded spontaneously and voluntarily by passionate gardeners within the local community who took over a vacant lot, growing organically

according to the horticultural demands and organizational capacity of the initiative, Newtown Heath was founded by a city-wide non-profit organization in collaboration with the city government and private donors as part of a neighborhood revitalization project. The main objectives of the project are communal safety, cross-generational connection and vacant lot removal, and the community garden as part of the project is seen as a means to achieve these objectives.

The top-down nature of Newtown Heath creates some unique challenges for the garden. First, unlike other community gardens, in Newtown Heath, the level of community interest towards community gardening in the neighborhood is significantly lower than the carrying capacity of the garden. This means that it can often see itself under-staffed in keeping up with gardening chores. The founding and operation of a community garden requires its own unique set of dedication, knowledge and quirkiness. After all, it is a rather laborious, time-consuming endeavor that does not have an apparent material reward that is worth the trouble. Just like what the founder of Raven Cottage Community Garden had said in an interview, “gardening attracts weirdos”, and community gardens are full of a rather specific type of character. As a result, community gardens as a form of solidarity economy have a rather niche appeal, and this is part of the reason why many other gardens covered in this study have faced difficulty attracting more people from their neighboring community.

For gardens that sprung up spontaneously, this lack of broad public appeal is not a problem, since in its early phase of development the number of plots planned for the garden will only match the number of its founding members. But unlike other gardens, the planning of the Newtown Heath was done not by the founding gardeners, but by the main sponsors who spearheaded the neighborhood revitalization program. With a strong mission-driven mindset and a centralized

planning, Newtown Heath is undoubtedly very well designed compared to other gardens. It has its communal patches located at the front of the garden, growing berry bushes that broadcast the vibrancy and bountifulness of the garden as well as the human labor that went into it. And with its colorful murals, high raised beds that increase accessibility for the elderly, as well as its low, friendly-looking wooden fences with an unlocked gate, Newtown Heath has an extremely inviting architecture. But with more than twenty personal plots spread out in two disconnected patches separated by multiple residential buildings, the number of personal plots planned for Newtown Heath far exceeds the amount of community interest seen in its neighborhood, creating a mismatch. As a result, despite the fact that Newtown Heath has a contact email painted with huge inviting fonts with vibrant colors on the wall of a building next to the garden, nearly half of all the personal plots in the garden remain unoccupied. They are also often short-handed when it comes to community plot maintenance. How these unoccupied personal plots should be utilized, and who should be responsible for the maintenance of the grassy aisles and communal plots, are often the source of debate during garden meetings.

Second, the top-down nature of the garden weakens the shared identity as community gardeners among garden members. Thanks to its generous patrons, the gardeners of Newtown Heath did not have to build the garden – either its physical form or its organizational structure – from scratch. This means that Newtown Heath did not go through the launching phase most community gardens had to experience. Although undoubtedly a difficult process, the challenge of building a community garden in its early stages can be an invaluable training that helps these aspiring community gardeners develop necessary gardening and organizational know-how, bolstering the organizational capacity of the garden on both horticultural and non-horticultural level. On the ideological level, the hardship of launching a new community garden also forges a

strong sense of camaraderie among the founding members. Because Newtown Heath did not experience a true launching phase, many of its founding members lacked the knowledge and experience with gardening – knowledge and experience they would have otherwise accumulated through trial and errors in the launching phase of the community garden. Many also do not have a good understanding of the labor aspect of gardening, often underestimating the amount of time and energy needed to maintain a garden. While other community gardens also face this challenge as new gardeners join in, having a core group of seasoned gardeners who carried the garden through its infancy functions both as an information hub. One Newtown Heath garden member explains the situation as following[34]:

> *"A lot of community gardens, they were very much grassroots ground up efforts. So, it really took an engaged group of people who decided this was going to happen and make it work. Whereas in this case, it was kind of an outside organization, as a part of a larger project said: "hey, let's do a community garden", and had funding in place kind of to make it happen, and then kind of handed it over to neighbors. So, there wasn't kind of an initial buy in that needed to happen to make it happen. I think that's part of the challenge the garden has faced is that while it's a great idea, you've never really gone through the organizational formation stage. (...) I think there were a lot of people who my understanding was when we first started, there were people who were very interested in the concept, but had no gardening experience, and there was no support for them. So it's, I think, that's partly a function of how it was formed. Destiny plays a role in kind of the situation we're in and then we just haven't really thought about how to work with that and kind of restart. And in a way, it's almost like we need to go back to the beginning and figure*

[34] Interview 30

out how to build a ground grassroots group to get those issues addressed."

Therefore, due to the mismatch between garden carrying capacity and community interests, as well as the lack of knowledge, experience and even proper expectation toned through an arduous yet essential launching phase, being a top-down garden means that Newtown Heath lacks the organizational capacity both as a garden and as a grassroot community project. Its members also did not experience the ideological transformative element of building a garden from scratch, which ushers in a collective communal identity forged by cooperation and collective hardship. As a result, Newtown Heath lacks a unified and unifying vision of the garden among garden members, and their sense of communal solidarity as community gardeners is relatively weak. To make it even more difficult, Newtown Heath is located in gentrifying neighborhood, and the socioeconomic challenges faced by the community, overlapping with the diverse demographic profile of the members, means that in Newtown Heath, it is really easy to replace the shared identity of community gardeners with other demographic and socioeconomic markers when members are engaging with these difficult and profoundly political issues.

Community garden is not just a garden made of plants and dirt. It is also a community project with humans involved. Like many other community gardens and perhaps even more so, Newtown Heath has to strike a balance between the "community" part and the "garden" part in its namesake, maintaining its horticultural foundation while keeping a healthy level of community outreach. But due to the reasons mentioned above, no other gardens covered in this study have the same level of divergence between these two priorities. While the majority of gardeners, both young and old, Black and White, are truly passionate about gardening, there is also a significant minority of garden members who join the garden solely due to its community building potential. These garden members, despite having great passion for the initiative as a whole, do not have much interest in

gardening itself. Their vision of the garden is to provide a valuable greenspace for the community to socialize and have cross-generation, cross-race engagements, yet many often overlook the labor and commitment required to maintain such greenspace. These garden members often fall short in their personal plot maintenance and community labor contribution. Some have even proposed during garden meetings that if gardeners cannot meet their requirements by the garden by-law, they should instead pay a small fine as compensation. This position totally ignores the fact that for established gardens with protected land ownership status like Newtown Heath, it is labor, not money that is of dire need.

Unsurprisingly, due to their ideological differences, the sense of solidarity between these two clades of garden members is low. And because many of the community-oriented garden members are Black residents who are the most deeply affected by onslaught of gentrification, a process which many of the horticulture-oriented gardeners are functionally part of, these competing ideologies often becomes easily interwoven with people's demographic and socioeconomic identities relevant outside the garden context, as well as the greater social forces which they embody. Instead of seeing each other as fellow gardeners, members of Newtown Heath often address one another through the language of sweeping demographic categories that imply a competing interest. A neighbor dispute over squash and weed can quickly escalate into an argument of Black and White. As a reaction to the threat of gentrification, a few garden members even developed a deep sense of distrust towards umbrella organizations such as PHS and NGT due to their predominantly White staff and their organizational emphasis on horticulture. Rather than accepting NGT's help in conflict mediation and by-law consulting, they feared that the growing influence of these organizations over the garden compromises its own sovereignty and may even accelerate the gentrification of the neighborhood. While this suspicion is totally understandable

given the precarity of Black working-class residence in the neighborhood, it nonetheless makes open, constructive conversations in garden meetings more difficult. On top of that, because the initiative is still relatively new, Newtown Heath does not yet have a core group of founding members who have developed a strong sense of camaraderie whose fellowship would set the tone of a compassionate, inclusive and respectful discussion platform. All these factors culminate into a perfect storm, making the negotiation process of these differences even more complicated, and make civil discussion of these challenging topics all but more difficult.

These challenges are also perhaps some of the main reasons why through the course of this research, Newtown Heath has seen multiple changes in its leadership over its short history of less than 10 years. Since the beginning of this research, the garden has seen the departure of two leading coordinators, mainly due to burnout and internal conflicts. For many garden leaders at Newtown Heath, balancing between the two priorities have proven to be excessively difficult. Today, Newtown Heath is still facing many challenges on the organizational level, with many of the issues mentioned earlier remain unresolved. Examples like this highlight the fact that, while community gardens have the potential of bringing positive social changes, these gardens themselves are also subjected to these social problems which they seek to resolve in the first place.

Yet despite the indifference, ritualism and distaste that characterizes many garden meetings under normal circumstances, as well as the divisive heated exchanges that often mar garden meetings over non-gardening social issues, garden meetings can still, sometimes, be really constructive in ushering in positive social changes. One prime example of this can be found at the small community garden of Raven Cottage. Located only a few blocks away from Stanford Bridge, Raven Cottage is also a garden with a predominantly White, middle class membership. And just like Stanford Bridge, gardeners at Raven Cottage also have to face the harsh reality of racial

segregation in their neighborhood and contemplate their involvement in this system. This simmering problem boiled over during the covid-19 pandemic. As lockdowns were being emplaced, many children from the low-income housing next to the garden had nothing to do during the day. Raven Cottage, though fenced, has an open-gate policy driven by ideological reasons, and many children and teenagers in the neighborhood found their way to the garden and began using it as their daytime playground. Most were just hanging out in the garden, but there was also extensive vandalism by a notable few, trampling over plants and throwing vegetables as they played. This created a lot of tension between the gardeners and the children, which culminated into a physical conflict when one of the children threw a brick at a gardener, injuring her. It was truly a difficult situation, but unlike the tricky situations seen in other community gardens, the incident was diffused masterfully with minimal conflicts during meetings. Using this as an opportunity to address the garden's own lack of diversity and community engagement, the gardeners of Raven Cottage rallied around an innovative project that aimed to promote inclusivity across racial and socioeconomic divides in the greater community. The chairperson of Raven Cottage who oversees the program described the whole process as following[35]:

> *"The building next to the garden became vacant, and a nonprofit organization was moving into that building. And their whole purpose is to do programming for the kids. So, we ran into them, and we became friends with them, and what we wound up doing was doing something like a garden Kids Club. We happen to have a vacant plot open up and so we gave the kids a plot, then we did like formal programming. And we had all the parents sign waivers and stuff. And so like, you know, the kids got to legit like, be a part of the garden. And we did classes, and you know, they had to be in there with a grown up. So like, if you're*

[35] Interview 45

able to, like, you know, have kids give kids access, but they had to be there with, you know, a gardener or a parent or you know, the nonprofit organization people and it just… it was great. So, it's a really crappy situation turned into a great situation.

Therefore, the advisory and support of an organization dedicated to projects of equality and inclusion has been key to how successful Raven Cottage is in addressing these difficult socioeconomic concerns. This is in stark contrast compared to the neighboring Stanford Bridge, which, despite its much higher organizational capacity, has largely failed to build a diverse, inclusive environment where low-income minorities feel welcomed to join. In fact, having a determined, experienced, and socially conscious leadership has been central to the success of other community gardens in addressing large-scale socioeconomic concerns faced not only by the garden, but also by the broader community at large. This includes Stanford Bridge in its earlier years, which as a project of social justice, racial integration and food security saw a much more diverse membership in its earlier years. This, however, is the anomaly rather than the norm. Indeed, it would be reasonable to assume that as a rule of thumb, the organizational capacity of most community gardens' leadership is expected to only be sufficient in sustaining its normal operation, and often lack the experience, energy and the myriad of skills when confronted with difficult socioeconomic problems. After all, for most garden members, community gardening is only a piece of their lives. One gardener explains[36]:

"It was kind of a strange thing to be president of the garden. Your qualification is you're a member of the garden. It's not like you know… how to facilitate discussion or project. It's not like your teacher, right? Like, it's, as a teacher, you have to know how to project your voice and run a discussion. So I feel for these people that are in these positions."

[36] Interview 20

In addition, the small, demographically and ideologically homogeneous membership constituted by overwhelmingly progressive middle aged women, as well as the informal organizational structure of Raven Cottage has surely made the process a lot easier. Despite the physical conflict between gardeners and the local youth, the garden membership quickly rallied behind the cause. The unpleasant incident was quickly put aside, and the gardeners feel strongly committed to the social mission. This level of passion, unfortunately, is rare in some of the larger, more established gardens. Unlike Raven Cottage, well-established gardens with a formal organizational structure, such as Stanford Bridge and Old Chapel Field, are often more conservative in their organizational decision making. Their leadership often abandons their community outreach attempts prematurely, citing a perceived lack of interest from the community. The chairperson of Raven Cottage explains[37]:

> *"I mean, we're so small and we don't have a lot of rules, or a nonprofit or a board or any kind of organization almost at all. So we're just like, here's what we're doing. And everybody was into it. You know, like people came to the first workshop that we had. And you know, people have gotten to know the kids better and some of the gardeners were like… actually donated, you know, for the pay of the teachers and for supplies and stuff. And then during our big festival… like, people also donated pumpkins and donated like food and so people, nobody resisted. Nobody was against it at all."*

[37] Interview 45

Conclusion

Community gardens do not exist in a social vacuum. Despite bearing the word community in their names, many community gardens can be rather individualistic spaces that mirror the greater urban community which they belong to. The gardens can often appear quiet and empty, and the amount of face-to-face social interaction gardeners have with their peers can often be very limited. In addition, while addressing social issues such as loneliness and social divisions are central to many community gardens, these initiatives themselves are also subjected to these social forces. Most notably, the membership demographics of many community gardens do not necessarily reflect the general population of the community they are located in, often with a bias towards older, and in many cases, Whiter individuals. Thus, rather than addressing the problem of social inequality through gardening, community gardens can sometimes fractally replicate the existing social divisions in their respective communities, unintentionally contributing to green gentrification. It is also worth noting that, as in the case with Stanford Bridge, gardens with radical roots may lose their revolutionary potency overtime.

Against this backdrop, it is important to consider how community gardens may be able to build a sense of community despite limited face-to-face social interaction, and truly help to bridge the gap between different sectors of their membership. Based on my research, it is clear that indirect social interactions through the channel of the gardening itself play a central role in shaping the sense of communal solidarity in these gardens. Social interaction through personal plots is particularly important. By attracting the attention of like-minded individuals through garden innovation, personal plots can help to foster new friendships between like-minded individuals. And by signally dedication and neighborliness through personal plot upkeep, personal plots can maintain a thinner, yet broader sense of solidarity across the entire garden membership. In contrast,

communal plots and garden meetings, despite their communal name and collective platform, often have a polarized reception among garden members, and their impact on the community building can be rather controversial This deficiency, I argue, is due to the lack of accessibility and general inclusivity of these interaction channels, both in terms of their form and their content. Unlike personal plots, communal plots have a clearly defined function that evokes a certain specific aspect of the community garden's mission that may not appeal to all garden members, and can sometimes be substantially more difficult for an average gardener to attend or utilize. Similarly, some garden meeting discussions can be particularly divisive due to the social relevance of their agenda, while the face-to-face format of garden meetings can create a debate-like format that encourages a more confrontation and divisive discourse.

On the practical level, the main findings of this dissertation may help community gardens as well as other alternative economy initiatives and collective actions in realizing their social objectives. One of the main problems faced by many alternative economy initiatives is their lack of reach and accessibility, especially among marginalized populations who may often feel uncomfortable joining these initiatives. And while many initiatives are increasingly aware of their limitations and make an active effort in promoting the equity and social inclusivity of their message, this alone may not be enough. Indirect social interactions can often play a key role in shaping a community, and as this dissertation has shown that the medium of these non-verbal interactions may also carry a message of their own. Some mediums can make an interaction less inclusive and accessible, and can undermine the sense of solidarity within a community or a movement.

As illustrated earlier in the dissertation, compared to other channels of indirect social interactions, those that take place in community gardens are arguably easier to study. A garden takes a long time and a lot of labor input to fledge into form, and is constantly evolving with the

change of the seasons. Therefore, using it as a channel for social interaction demands a lot of patience from both the initiating creator and the spectating uptaker. Within the context of a well-established community garden, the temporal and labor aspect of gardening are something that most practicing gardeners are consciously aware of. Umbrella organizations such as PHS and NGT also play a key role in building the foundational context of community gardens in Philadelphia, making interactions between gardeners more feasible. But several episodes mentioned in this dissertation have shown that this shared contextual awareness should not be taken for granted, and the negotiation of a shared context may become a more significant factor in indirect social interaction under other social contexts. And while this dissertation has shown a community dominated by isolation and individualism could still build a sense of solidarity through indirect social interaction in a non-verbal form, would non-verbal channels be sufficient in laying the groundwork for interaction to be feasible in the first place? Understanding the negotiation process would be an interesting project for the future.

In addition, the exclusive membership of community gardens means that the interaction participants are relatively fixed. This contained nature makes it easier for researchers to follow up with their observations, and observe the social consequences of these interactions over an extended period of time. But how can the results of this project be applied to a more transient social interaction in everyday lives, where the initiating performer may never get the chance to hear anything back from the spectating uptaker? What methodology should be used in studying these situations? And how do these more transient forms of indirect social interaction impact the interaction participants and the communities they belong to?

Appendix: Archival Materials

Bonham, J. Blaine Jr.. PHS Land Trust Letter, February 20, 1981. Pennsylvania Horticultural Society Archive.

Bonham, J. Blaine Jr.. Urban Vacant Land: Slide Presentation at ACGA Conference. Pennsylvania Horticultural Society Archive.

Bonham, J. Blaine Jr.. Testimony for H.R. 3476: "The National Gardening Act of 1977". Pennsylvania Horticultural Society Archive.

Clarke, Herbe. City Gardens Contest Newsletter Vol. 1, No. 2 – July 1983 Pennsylvania Horticultural Society. Pennsylvania Horticultural Society Archive.

Clarke, Herbe. City Gardens Contest Newsletter Vol. 2, No. 2 – June 1984 Pennsylvania Horticultural Society. Pennsylvania Horticultural Society Archive.

Decker and Borowsky. A Report on the Community Gardens Program: Prepared for the Pennsylvania Horticultural Society, November 1976. Pennsylvania Horticultural Society Archive.

Drinker Ballard, Ernesta, J. Blaine Bonham Jr., Douglas E. Blackman, and Andrew Johnson. Agreement between the Pennsylvania Horticultural Society and the Philadelphia Conservationists, inc.: Establishing the Garden Preservation Project 1980. Pennsylvania Horticultural Society Archive.

Kaplan, Barbara J.. Open Space Resolution, City Planning Commission June 18, 1985. Pennsylvania Horticultural Society Archive.

Land Trust Committee. Land Trust Formation 1980-86. Pennsylvania Horticultural Society Archive.

Multiple authors. NGT Member Gardens Combined By-laws. Pennsylvania Horticultural Society

Archive.

Neighborhood Gardens Association & Pennsylvania Horticultural Society. Agreement between the Pennsylvania Horticultural Society and the Neighborhood Gardens Association, 1978. Pennsylvania Horticultural Society Archive.

Neighborhood Gardens Association of Philadelphia. “Flower Power in the City”… Neighborhood Gardens Association of Philadelphia’s Effort to Restore William Penn’s “Green Countrie Towne”. Pennsylvania Horticultural Society Archive.

Neighborhood Gardens Association. Well Preserved: Updates from the Neighborhood Gardens Association, a land trust dedicated to preserving Philadelphia’s community gardens Volume 1 Number 1 Summer 1993. Pennsylvania Horticultural Society Archive.

Neighborhood Gardens Association. Neighborhood Gardens Association Annual Report, July 1, 1998 – June 30, 1999. Pennsylvania Horticultural Society Archive.

Neighborhood Gardens Association. Neighborhood Gardens Association of Philadelphia, Inc. BY-LAWS. Pennsylvania Horticultural Society Archive.

Neighborhood Gardens Trust. History, 2024. Neighborhood Gardens Trust Website, About, History. https://www.ngtrust.org/about/

Pennsylvania Horticultural Society. The PHS Community Garden Program’s Community Gardens Program for the Greening of Philadelphia. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Community Garden Newsletter 1975-76. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Community Vegetable Gardens Newsletter, March 1976. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Pilafarmers: a Newsletter for the Community Vegetable Gardens, January 1977. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Center City Greening Study, 1980. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Philadelphia Green Advisory Board Meeting, January 28, 1980. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Greening – an Initiative for Philadelphia, October 24, 1985. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Philadelphia Green Report on Lot Beautification, 1989. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Philadelphia Green 20th Anniversary: Transcripts from Taped Interviews, 1994. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Urban Vacant Land – Issues and Recommendations, 1995. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Parks in Progress: Management Plans for Norris Square, Vernon Park and Wharton Square, June 1997. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. The Feasibility of Urban Agriculture with Recommendations for Philadelphia: a Summary Report, March 2000. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. History, 2014. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. Gardening for the Greater Good: A 10-Year Vision for the Pennsylvania Horticultural Society, PHS Vision 2027, 2019. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society. 2020 PHS Gardening Contest Judging Criteria, 2020. PHS official website. https://phsonline.org/uploads/attachments/cka79rwgd0t3bjwra2i7dtqkm-202-phs-gardening-contest-judging-criteria.pdf

Pennsylvania Horticultural Society. Our Story, 2024. PHS official website. https://phsonline.org/our-story

Pennsylvania Horticultural Society & Neighborhood Gardens Association. The Window Box: NGA-PHS News Letter, June 6, 1978. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardens Contest Newsletter Vol. 3, No. 1 – February 1985 Pennsylvania Horticultural Society. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardens Contest Newsletter Vol. 3, No. 2 – Summer 1985 Pennsylvania Horticultural Society. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardens Contest Newsletter Vol. 4, No. 1 – 1986 Pennsylvania Horticultural Society. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 5, No. 1 – February 1987. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 6, No. 1 – February 1988. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 7, No. 1 – February 1989. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 8, No. 1 –

February 1990. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 9, No. 1 – February 1991. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 10, No. 1 – February 1992. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 11, No. 1 – June 1993. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 13, No. 3 – November 1994. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society Coordinator's Desk. City Gardeners Gazette Vol. 14, No. 1 – November 1995. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society, Philadelphia Green. From Vacant Land to Open Space: An Evaluation of the New Kensington Neighborhood Open Space Management Project Executive Summary, October 1999. Pennsylvania Horticultural Society Archive.

Pennsylvania Horticultural Society, Philadelphia Green. Reclaiming Vacant Lots: a Philadelphia Green Guide, 2002. Pennsylvania Horticultural Society Archive.

Philadelphia Housing Authority. Philadelphia Housing Authority Letter to the Neighborhood Gardens Association of Philadelphia, May 23, 1977. Pennsylvania Horticultural Society Archive.

Stokes, Charlotte C.. Early Memories of the Neighborhood Gardens Association under Louise Bush-Brown. Pennsylvania Horticultural Society Archive.

Wachter, Susan. The Determinants of Neighborhood Transformation in Philadelphia, Identification and Analysis: the New Kensington Pilot Study, Spring 2005. Pennsylvania

Horticultural Society Archive.

Wright, Minturn T., III. Agreement between Neighborhood Gardens Association, Inc. and the Pennsylvania Horticultural Society, Inc. 1976. Pennsylvania Horticultural Society Archive.

Bibliography

Action, Lesley. 2011. "Allotment Gardens: A Reflection of History, Heritage, Community and Self." *Papers for the Institute of Archeology.* 21: 46-58.

Agustina, Imas, and Ruth Beilin. 2012. "Community gardens: Space for interactions and adaptations." *Procedia - Social and Behavioral Sciences.* 36: 439–448.

Alaimo, Katherine, Thomas M. Reischl, and Julie Ober Allen. 2010. "Community Gardening, Neighborhood Meetings, and Social Capital." *Journal of Community Psychology.* 38(4): 497-514.

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

Barthes, Roland. 1977a. "The Photographic Message." Pp. 15-31 in *Image, Music, Text,* Translated by Stephen Heath. New York: Hill and Wang.

Barthes, Roland. 1977b. "Rhetoric of the Image." Pp. 32-51 in *Image, Music, Text,* Translated by Stephen Heath. New York: Hill and Wang.

Barthes, Roland. 1977c. "The Death of the Author." Pp. 142-8 in *Image, Music, Text,* Translated by Stephen Heath. New York: Hill and Wang.

Bernstein, Robin. 2009. "Dances with Things: Material Culture and the Performance of Race." *Social Text*. 27(4): 67-94.

Blair, Dorothy, Carol C. Giesecke, and Sandra Sherman. 1991. "A Dietary, Social and Economic Evaluation of the Philadelphia Urban Gardening Project." *Journal of Nutrition Education.* 23(4): 161–67.

Bleasdale, Tommy, Carolyn Crouch, and Sharon Harlan. 2011. "Community Gardening in Disadvantaged Neighborhoods in Phoenix, Arizona: Aligning Programs with Perceptions."

Journal of Agriculture, Food Systems, and Community Development. 1(3): 1-16.

Block, Daniel, Noel Chávez, Erika Allen, and Dinah Ramirez. 2011. "Food Sovereignty, Urban Food Access, and Food Activism: Contemplating the Connections through Examples from Chicago." *Agriculture and Human Values.* 29(2): 203-15.

Blumer, Herbert. 1986. *Symbolic Interactionism: Perspective and Method.* Berkeley: University of California Press.

Borowiak, Craig. 2015. "Mapping social and solidarity economy: the local and translocal evolution of a concept." 17-40. *Social Economy in China and the World*, edited by Ngai Pun, Ben Hok-bun Ku, Hairong Yan and Anita Koo. New York: Routledge.

Borowiak, Craig, Maliha Safri, Stephen Healy, and Marianna Pavlovskaya. 2018. "Navigating the Fault Lines: Race and Class in Philadelphia's Solidarity Economy." *Antipode.* 50(3): 577-603.

Bourque, Nicole. 2001. "Eating Your Words: Communicating with Food in the Ecuadorian Andes." 85-100. *An Anthropology of Indirect Communication*, edited by Joy Hendry and C. W. Watson. New York: Routledge.

Brown-Saracino, Japonica. 2009. *A Neighborhood that Never Changes: Gentrification, Social Preservation, and the Search for Authenticity*. Chicago: University of Chicago Press.

Carney, Patricia A., Janet L. Hamada, Rebecca Rdesinski, Lorena Sprager, Katelyn R. Nichols, Betty Y. Liu, Joel Pelayo, Maria Antonia Sanchez, and Jacklien Shannon. 2012. "Impact of a Community Gardening Project on Vegetable Intake, Food Security and Family Relationships: A Community-based Participatory Research Study." *Community Health.* 37:874–881.

Christensen, Søren, Pernille Malberg Dyg, and Kurt Allenberg. 2019. "Urban community

gardening, social capital, and "integration" – a mixed method exploration of urban "integration-gardening" in Copenhagen, Denmark." *Local Environment.* 24 (3) 231–48.

Clarke, Lorraine Weller, and G. Darrel Jenerette. 2015. "Biodiversity and Direct Ecosystem Service Regulation in the Community Gardens of Los Angeles." *Landscape Ecol*. 30:637-653.

Cohen, Nevin, and Kristin Reynolds. 2014. "Resource Needs for a Socially Just and Sustainable Urban Agriculture System: Lessons from New York City." R*enewable Agriculture and Food Systems*. 30(1): 103-14.

Conzen, Michael P.. 2014. "How Cities Internalize Their Former Urban Fringe: A Cross Cultural Comparison." Pp. 20-55 in *Urban Morphology, Architectural Typology and Cities in Transition,* edited by Tian Yinsheng, Gu Kai and Tao Wei. Beijing: Science Press.

Defourny, Jacques, and Patrick Develtere. 2009. "The Social Economy: The Worldwide Making of a Third Sector." Pp. 3-35 in *L'économie sociale au Nord et au Sud*. Edited by Jacques Defourny, Patrick Develtere, and Benedicte Fonteneau. De Boeck.

Dimaggio, Paul. 1982. "Cultural Entrepreneurship in Nineteenth-Century Boston: The Creation of an Organizational Base for High Culture in America." *Media, Culture and Society*. 4(1): 33–50.

Douglas, Gordon C.C.. 2018. *The Help-Yourself City: Legitimacy & Inequality in DIY Urbanism.* New York: Oxford University Press.

Draper, Carrie, and Darcy Freedman. 2010. "Review and Analysis of the Benefits, Purposes, and Motivations Associated with Community Gardening in the United States." *Journal of Community Practice*. 18: 458–92.

Duncan, Carol, and Alan Wallach. 2019. "The Museum of Modern Art as Late Capitalist Ritual:

An Iconographic Analysis." *Grasping the World*, 483–499.

Eizenberg, Efrat. 2011. "Actually Existing Commons: Three Moments of Space of Community Gardens in New York City." *Antipode.* 44(3): 764–82.

Elliott, Richard, and Kritsadarat Wattanasuwan. 1998. "Brands as symbolic resources for the construction of identity." *International Journal of Advertising*. 17(2): 131-144.

Ernwein, Marion. 2014. "Framing Urban Gardening and Agriculture: On Space, Scale and the Public." *Geoforum.* 56: 77–86.

Exner, Andreas, and Isabelle Schützenberger. "Creative Natures. Community Gardening, Social Class and City Development in Vienna." *Geoforum* 92 (2018): 181–95.

Filkobski, Ina, Yodan Rofè, and Alon Tal. 2016. "Community gardens in Israel: Characteristics and Perceived Functions." *Urban Forestry and Urban Greening.* 17:148-157.

Firth, Chris, Damian Maye, and David Pearson. 2011. "Developing "Community" in Community Gardens." *Local Environment: The International Journal of Justice and Sustainability*. 16(6): 555-68.

Gal, Susan, and Judith T. Irvine. 2019. *Signs of Difference: Language and Ideology in Social Life*. New York: Cambridge University Press.

Garcia Martinez, Alenjandro Nestor. 2012. "The Proliferation of Fashion and the Decline of its Code of Meanings." Pp. 94-108 In *Identities through Fashion: a Multidisciplinary Approach*, edited by González Ana Marta and Laura Bovone. London: Berg.

Garvin, Eugenia, Charles Branas, Shimrit Keddem, Jeffrey Sellman, and Carolyn Cannuscio. 2012. "More than Just an Eyesore: Local Insights and Solutions on Vacant Land and Urban Health." *Journal of Urban Health.* 90(3): 412-26.

Ghose, Rina, and Margaret Pettygrove. 2014. "Actors and Networks in Urban

Community Garden Development." *Geoforum.* 53: 93–103.

Glover, Troy, Diana Parry, and Kimberly Shinew. 2005. "Building Relationships, Accessing Resources: Mobilizing Social Capital in Community Garden Contexts." *Journal of Leisure Research.* 37(4): 450-74.

Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. New York: Doubleday.

Goffman, Erving. 1967. *Interaction Ritual: Essays on Face-to-Face Behavior.* New York: Pantheon.

Goffman, Erving. 1981. *Forms of Talk*. Philadelphia: University of Pennsylvania Press.

Greenberg, Laurie S. Z.. 2003. "Women in the Garden and Kitchen: The Role of Cuisine in the Conservation of Traditional House Lot Crops among Yucatec Mayan Immigrants." Pp. 51-65 in *Women and Plants: Gender Relations in Biodiversity Management and Conservation*, edited by P. L. Howard. Oxon: Routledge.

Guitart, Daniela, Catherine Pickering, and Jason Byrne. 2012. "Past Results and Future Directions in Urban Community Gardens Research." *Urban Forestry & Urban Greening.* 11(4): 364–73.

Guthman, Julie. 2008. "'If They Only Knew': Color Blindness and Universalism in California Alternative Food Institutions." *The Professional Geographer.* 60(3): 387–97.

Hart, Lynn. 1992. "The Role of Cultural Context in Multicultural Aesthetics". *Journal of Multi-Cultural and Cross-Cultural Research in Art Education.* 10: 5-20.

Hebdige, Dick. 1979. "Subculture: The Meaning of Style." Pp. 121-31 in *The Subculture Reader*, Edited by Ken Gelder. Chicago: University of Chicago Press.

Hirschman, Albert O.. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States.* Cambridge, Massachusetts: Harvard University Press.

Hodge, Robert and Gunther Kress. 1988. *Social Semiotics*. Ithaca, New York: Cornell University Press.

Hoover, Elizabeth. 2017. ""You Can't Say You're Sovereign if You Can't Feed Yourself": Defining and Enacting Food Sovereignty in American Indian Community Gardening." *American Indian Culture and Research Journal*. 41:3.

Hynes, H. Patricia. 1996. *A Patch of Eden: Americas Inner City Gardeners*. White River Junction, Vermont: Chelsea Green Pub.,

Keane, Webb. 2004. "Things are not the Garb of Meaning: on the Social Analysis of Material Things." Pp. 182-205 in *Materiality,* Edited by Donald Miller. Lexington: Duke University Press.

King, Christine A. 2008. "Community Resilience and Contemporary Agri-Ecological Systems: Reconnecting People and Food, and People with People." *Systems Research and Behavioral Science.* 25(1): 111-24.

Kingsley, Jonathan 'Yotti', and Mardie Townsend. 2006. "'Dig In' to Social Capital: Community Gardens as Mechanisms for Growing Urban Social Connectedness." *Urban Policy and Research*. 24(4), 525-37.

Kirchberg, Volker. 1998. "Entrance Fees as a Subjective Barrier to Visiting Museums." *Journal of Cultural Economics.* 22(1), 1-13.

Koc, Mustafa, and Jennifer Welsh. 2001. "Food, Foodways and Immigrant Experience." *Multiculturalism Program, Department of Canadian Heritage at the Canadian Ethnic Studies Association Conference.*

Krones, Sarah, and Shari Edelson. 2011. "Building Gardens, Rebuilding a City: Baltimore's Community Greening Resource Network." *Journal of Agriculture, Food Systems, and*

Community Development. 1(3): 133-49.

Laville, Jean-Louis. 2010. "The Solidarity Economy: An International Movement." *RCCS Annual Review*.

Lawson, Laura. 2004. "The Planner in the Garden: A Historical View into the Relationship between Planning and Community Gardens." *Journal of Planning History.* 3(2): 151-76.

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

Leary, Mark R.. 1995. *Self Presentation: Impression Management and Interpersonal Behavior.* Boulder, Colorado: Westview.

Logan, John R. and Harvey L. Molotch. 2007. *Urban Fortunes: the Political Economy of Place.* Berkeley and Los Angeles: University of California Press.

López Sinatas, Jordi, Ercilia García Álvarez and Elena Pérez Rubiales. 2012. "The Unforgettable Aesthetic Experience: the Relationship between the Originality of Artworks and Local Culture". *Poetics.* 40: 337-358.

Luckerhoff, Jason, Stéphane Perreault, Rosaire Garon, Marie-Claude Lapointe, and Véronique Nguyên-Duy. 2008. "Visiting Art Museums: Adding Values and Constraints to Socio-Economic Status." *Loisir et Société / Society and Leisure*. 31(1), 69-85.

McClintock, Nathan, and Michael Simpson. 2017. "Stacking Functions: Identifying Motivational Frames Guiding Urban Agriculture Organizations and Businesses in the United States and Canada." *Agriculture and Human Values* 35(1): 19–39.

McLuhan, Marshall and Quentin Fiore. 1967. *The Medium is the Message: an Inventory of Effects*. Berkeley, CA: Gingko Press.

Mead, George Herbert. 1934. *Mind, Self, and Society: from the Standpoint of a Social*

Behaviorist. Chicago: University of Chicago Press.

Molm, Linda, Jessica Collett, and David Schaefer. 2007. "Building Solidarity through Generalized Exchange: A Theory of Reciprocity." *American Journal of Sociology.* 117(1):205-42.

Neo, Harvey, and C. Y. Chua. 2017 "Beyond Inclusion and Exclusion: Community Gardens as Spaces of Responsibility." *Annals of the American Association of Geographers* 107(3): 666–81.

Pearsall, Hamil, Sheila Gachuz, Marcel Rodriguez Sosa, Birgit Schmook, Hans van der Wal, and Maria Amalia Gracia. 2017. "Urban Community Garden Agrodiversity and Cultural Identity in Philadelphia." *Geographical Review*. 107(3): 476-95.

Pudup, Mary Beth. 2008. "It Takes a Garden: Cultivating Citizen-Subjects in Organized Garden Projects." *Geoforum.* 39(3): 1228–40.

Reynolds, Kristin. 2011. "Expanding Technical Assistance for Urban Agriculture: Best Practices for Extension Services in California and Beyond." *Journal of Agriculture, Food Systems, and Community Development.* 1(3): 1-20.

Reynolds, Kristin. 2014. "Disparity Despite Diversity: Social Injustice in New York City's Urban Agriculture System." *Antipode.* 47(1): 240–59.

Rosan, Christina, and Hamil Pearsal. 2017. *Growing a Sustainable City? The Question of Urban Agriculture*. Toronto: University of Toronto Press.

Rubino, Adalgisa. 2007. "The Allotment Gardens of the Ile de France: A Tool for Social Development." *Journal of Mediterranean Ecology*. 8: 67-75.

Saldivar-Tanaka, Laura, and Marianne E. Krasny. 2004. "Culturing Community Development, Neighborhood Open Space, and Civic Agriculture: The Case of Latino Community Gardens

in New York City." *Agriculture and Human Values*. 21: 399–412.

Scheromm, Pascale. 2015. "Motivations and Practices of Gardeners in Urban Collective Gardens." *Urban Forestry and Urban Greening*. 14:735-42.

Schmelzkopf, Karen. 1995. "Urban Community Gardens as Contested Space." *Geographical Review*. 85(3): 364-81.

Schofield, Kate, and Ruth Schmidt. 2005. "Fashion and Clothing: The Construction and Communication of Gay Identities." *International Journal of Retail & Distribution Management*, 33(4): 310-23.

Schutz, Alfred. 1970. *On Phenomenology and Social Relations: Selected Writings*. Chicago: University of Chicago Press.

Silva, Isabel Martinho da, Cláudia Oliveira Fernandes, Beatriz Castiglione and Leonardo Costa. 2016. "Characteristics and Motivations of Potential Users of Urban Allotment Gardens: The Case of Vila Nova de Gaia Municipal Network of Urban Allotment Gardens." *Urban Forestry and Urban Greening*. 20:56-64.

Silverstein, Michael. 2023. *Language in Culture: Lectures on the Social Semiotics of Language*. New York: Cambridge University Press.

Simmel, Georg. 1904. "Fashion." Pp. 294-323 in *On Individuality and Social Forms*, Edited by Donald Levine. Chicago: University of Chicago Press.

Simmel, Georg. 1903. "The Metropolis and Mental Life." Pp. 324-39 in *On Individuality and Social Forms*, Edited by Donald Levine. Chicago: University of Chicago Press.

Smith, Christopher, and HildaKurtz. 2010. "Community Gardens and Politics of Scale in New York City." *Geographical Review*. 93(2): 193-212.

Sousa Matos, Rute and Desidério Sales Batista. 2013. "Urban Agriculture: The Allotment

Gardens as Structures of Urban Sustainability." *Advances in Landscape Architecture*, edited by M. Özyavuz. Rijeka, Croatia: InTech.

Speak, A.F., A. Mizgajski, and J. Borysiak. 2015. "Allotment Gardens and Parks: Provision of Ecosystem Services with an Emphasis on Biodiversity." Pp. 457-512 in *Urban Forestry and Urban Greening*. 14:772-81.

Surls, Rachel, Gail Feenstra, Sheila Golden, Ryan Galt, Shermain Hardesty, Claire Napawan, and Cheryl Wilen. 2014. "Gearing up to Support Urban Farming in California: Preliminary Results of a Needs Assessment." *Renewable Agriculture and Food Systems*. 30 (1): 33-42. Web.

Talhelm, T., Zhang, X., Oishi, S., Shimin, C., Duan, D., Lan, X., & Kitayama, S. 2014. "Large-scale psychological differences within China explained by rice versus wheat agriculture." *Science*, 344(6184), 603-608.

Vitiello, Domenic, and Michael Nairn. 2009. "Community Gardening in Philadelphia 2008 Harvest Report." *Penn Planning and Urban Studies*. University of Pennsylvania.

Wright, Erik Olin. 2010. *Envisioning Real Utopia.* New York: Verso.

Zablocki, Benjamin. 1971. *The Joyful Community.* Baltimore: Penguin Books.