

CULTIVATING COMMUNITY:
SOCIAL NETWORKS, GARDENING, AND COMMUNITY RESILIENCE
IN THE SONORAN DESERT
BY
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peace, love, and anthropology

Abstract

This research seeks to identify, describe, and understand community as it is expressed in the local and urban gardening sphere of Tucson, Arizona. Underlying this effort is the ethnographic intent to qualitatively document and explore whether, and ultimately how, members or components of the social network interact. The relevance of this research lies not only in better understanding how people experience community in specific contexts, but also in its aim to demonstrate that both physical and virtual relationships—virtual referring to a conceptualized essence or effect not manifest in concrete appearance or form—contribute to the development, manifestation, and common ownership of communities. Gardening-related and support-oriented resources and spaces in Tucson—namely the Seed Library of the Pima County Public Library and Las Milpitas de Cottonwood Community Farm—served as field sites for this research and represent vertices which link subgroups physically and virtually within the social network itself. Importantly, examining the synergy characterizing relations between members and components of the network aids efforts to qualitative describe the community's resilience.

Introduction

I first took interest in the gardening community of Tucson, Arizona as a subject of anthropological research focusing on social networks, community building, and community resilience as a result of a research internship with the University of Arizona's Bureau of Applied Research in Anthropology (BARA). During the first half of 2012, I participated in a visual ethnography project in partnership with the Seed Library of the Pima County Public Library (PCPL) which sought to document the opening and use of a democratically accessible seed lending library. I will describe the Seed Library and its role as a common space which creates ties between members of Tucson's gardening community in further detail later, but for now, all that need be said is that over the course of the project, I met numerous members of the Tucson community—as well as representatives of community organizations—who seemed to value gardening not just as a hobby, but as a means of reckoning independence from an overwhelming reliance on non-locally-sourced food and as an exercise in community building.

Many of the outreach events I attended during the course of the project brought me into contact with community members and organizations that seek to foster a sense of self-efficacy in the collective psyche of the greater Tucson community by exchanging information on sustainable practices, gardening and food security, and community building efforts. As I spent more time in this environment, I began to catch glimpses of a distinct community of like-minded actors who appeared to share the common goal of participating in community building and community engagement projects by sharing their gardening knowledge and support-oriented resource bases in order to spur discourses centered on sustainability, community resilience, and local identity.

Through my participation in the visual ethnography project and the subsequent experiences of meeting community members engaged in community building through gardening-related activities—as well as ongoing conversations with librarians managing the Seed Library

concerning the demographics of the patrons using the Seed Library—I became interested in learning more about the urban gardening sphere in Tucson.

It was my interactions with gardeners who often expressed myriad motivations for participating in urban gardening—and who also came from diverse socioeconomic backgrounds—that led me to ponder whether there exists a distinct social network of gardeners and gardening-related support resources in Tucson. This question, in turn, led to yet another question: what, if anything, could be uncovered concerning how a gardening community might manifest itself given that Tucson is a sprawling city, and that members may be dispersed or may not even interact physically? Furthermore, my experiences and observations led me to question how the discourse concerning sustainability and community self-reliance—a discourse that often undergirds many of the outreach efforts undertaken by gardening-related organizations in and around Tucson—has guided interactions between components of Tucson’s urban gardening community; I define the components of the community as individual gardeners themselves and the gardening-related spaces or support-oriented resources they use. Determining if, how, and why components of the community interact is relevant for understanding whether social networking and community development in common spaces contributes to community resilience, not just for the gardening community, but for the Tucson community as well.

In order to develop a research study that would relevantly answer these questions, it was necessary to first conduct a review of literature to increase my understanding of social networks and community expression, development, and resilience to guide my decision as to what types of data I would seek to collect. Thus, the opening section of this paper details a review of literature concerning Social Network Analysis, community building in the urban garden setting, and the positive effects that result from network ties in gardening communities—in terms of their

contributions to community resilience.

For the purposes of this qualitative description of Tucson's gardening community, I have reviewed literature from the quantitative science of Social Network Analysis (SNA) and have used its fundamental assertions as guidance in my examination of the Tucson gardening community. By applying SNA in this research, I have come to understand that interactions and affiliations between community components—in addition to common motivations or values—may be indicators of participation in the community, and yet, cannot solely be considered critical criteria for membership. As we shall see, the assumption that there exists a broad and interconnected community of gardeners in Tucson leads to questions regarding how one can practically define the community, how to identify membership in the community, and how to relevantly discuss relations between components of the community. Coming to terms with these questions serves my intent to understand how Tucson's gardening community is expressed and maintained. Thus, I have used the theoretical framework of SNA in this research as it provides useful insight for answering these complex questions.

I have also reviewed anthropological literature that focuses on community development in urban garden settings and the positive outcomes experienced by community members. This literature has provided insight into my hypothesis that community gardens and gardening-related support resources are hubs of social interaction and community development that can nurture the sense of communal ownership of public spaces and resources while also connecting people who share geographic proximity, motivations for gardening, and the desire to share the benefits of gardening with fellow community members. This literature has provided unique perspectives that demonstrate how urban gardeners think about community in general, and gardening communities in specific, and have proven useful in directing my approach to this research and the

development of my interview protocol.

The literature review concludes with an examination of literature explicitly discussing the positive impacts of gardening—especially in the community garden setting—on the social lives of gardeners and on the resilience of the communities to which they belong. This literature has contextualized my understanding of how the ties between people—as expressed through participation in gardening communities—can foster positive outcomes in the lives of community members at neighborhood levels and broader levels, and can thus create circumstances of community engagement and ownership, as well as independence and self-efficacy; both of which can contribute to community resilience.

Following my placement of this research within a framework drawing on literature from SNA and community development and resilience, I will proceed to describe the methodological structuring of this research. In essence, this study is founded on my desire to qualitatively describe and analyze the experiences of a segment of the larger gardening community in Tucson—time and scalar limitations prohibited the representative sampling that would have been necessary to draw conclusions about the nature of the entire gardening community. Through this research, I intend to gain insight into how subsets of gardeners in Tucson perceive and experience the greater gardening community. In this section I focus on the selection of field sites and informants for this study and will also describe the development of my approaches to the data collection processes undertaken in this research—i.e. participant observation, semi-structured interviews, and convenience sampling survey—and my analysis of the data gathered.

I then present the findings gleaned from the data collected during my fieldwork and will include my discussion of these findings. I will focus on addressing how members of the Tucson gardening community perceive and experience the community and how they view their place

within it. I also include my own observations regarding the ways gardeners interact amongst themselves and with gardening-related support organizations and the resources they provide. Additionally, I will discuss information obtained during interviews with staff members of gardening-related support organizations to highlight how such organizations see their own roles as components of Tucson's gardening community. I will qualitatively describe the social network formed by gardeners and gardening-related support organizations in Tucson's urban gardening sphere, and will elaborate upon the data collected from surveys I placed in library branches housing Seed Library catalogs to obtain general information on public use of the resource.

I conclude this paper with comments reiterating the relevance and importance of my research as it pertains to understanding community development as the product of physical and virtual connectedness established between individuals who share common interests, motivations, and values. My comments will offer insight into how Tucson's gardeners and gardening-related support organizations have developed a qualitatively describable community—despite the absence of interpersonal relationships between all members—through the establishment and use of common “green” and “non-green” spaces and resources. I will also discuss how the availability and use of such spaces and resources promote self-efficacy and common ownership of the gardening community and have created circumstances of increased social support and well-being which, in turn, have implications for understanding the resilience of the community.

Literature Review

This section offers a review of literature concerning Social Network Analysis, community building in the urban garden setting, and community resilience as a product of interactions between gardeners themselves and their use of common “green” spaces. Review of

the literature produced by scholars working in these fields has proven pivotal in the design of this study, and has served my ability to interpret and make sense of the qualitative data I have collected.

Qualitative Social Network Analysis

The title of this subsection reflects the qualitative nature of this research and highlights my use of the principles of Social Network Analysis to make sense of how gardeners, common “green” and “non-green” spaces, and gardening-related support resources interact in the social network that is Tucson’s gardening community. I have appropriated this quantitative science to understand the essence of these interactions while limiting focus on their quantifiable characteristics. Much of the literature I have reviewed concerning SNA dates to the rise of the science some four decades ago. Though these references may seem outdated, they are, in fact, rich resources for understanding the basics of how networks of individuals are thought about theoretically. There are, however, limitations to using the foundations of SNA to contextualize my approach to understanding Tucson’s gardening community. These challenges arise mainly due to the fact that the majority of the literature concerning the basic theoretical framework of the field was produced prior to the advent of the internet, cell phones, and the Age of Informatics. I believe, however, that the fundamental and theoretical principles used to understand social networks can still be referenced and provide the relevant background necessary to describe the gardening community in Tucson.

According to Quatman and Chelladuria, the term *network* can broadly be conceived of as the webs of relationships in which people or entities are embedded and can often invoke rich and robust meanings and functions outside of the metaphorical senses usually attributed to its usage (Quatman & Chelladuria 2008, 339-340). This concept of the term—as applied to the

relationships between individual gardeners themselves and their use of gardening-related support resources in Tucson—is very much in line with my approach to qualitatively describing Tucson’s gardening community. Yet, unlike the work of scholars who sought to “translate the contextual metaphors of relational webs and networks to a more concrete and measurable area of study” (Quatman & Chelladuria 2008, 340), this research is centered on a qualitative approach that aims to understand how a social network—in this case a gardening community—can be defined from the perspective of a researcher actively participating in the community and how it expresses itself uniquely amidst the greater Tucson community.

To this end, I have adopted pieces of the social network analyst’s theoretical framework, and have incorporated aspects of Granovetter’s seminal work in which he asserts that, in the discussion of social networks, “emphasis on weak ties lends itself to discussion of relations *between* groups and to analysis of segments of social structure not easily defined in terms of primary groups” (Granovetter 1973, 1360). I have used this simple statement to guide my approach to describing Tucson’s gardening network because when I initially began to think about defining the community, it quickly became evident that there would be no practical way to identify every member and that many of the members simply do not personally interact with any regular frequency, if at all.

With this in mind, I designed this study to include two community resources—the Seed Library of the Pima County Public Library and Las Milpitas de Cottonwood Community Farm—as field sites for participatory observation and informant recruiting. I determined that by focusing on these sites, I would be able to examine weak ties between members of the community and could therefore understand how informants virtually interact with other community members in addition to understanding their interpersonal interactions. It is important to note, here, that I

consider virtual interactions between members of the community to be the common use of common “green” and “non-green” spaces and resources, and following Granovetter (1973) and Wellman (1982), maintain that such interactions be considered weak ties which can be examined to qualitatively determine the level of connectedness between members of Tucson’s gardening community.

Yet, contrary to the position I take regarding the existence of a distinct gardening community in Tucson composed of members who may never actually interact, the notion that a social network can exist in the absence of face-to-face or interpersonal connectedness is one that seems to be an afterthought in much of the literature on social networks. Indeed, Granovetter maintains that in quantitatively analyzing social networks, the so-called strength of a tie between two actors—i.e. the interpersonal relationships between two or more members of a community—is defined as a combination of the amount of time, emotional intensity, mutual confidence, and the reciprocal services that characterize the relationship (Granovetter 1973, 1361). It would necessarily seem, then, that the definition of a relationship in a network is contingent on the existence of a truly interpersonal relationship between two or more actors. This assumption has also been reiterated by Wellman who asserts that communities are founded on personal connections—on networks of ties—and are not simply products of local areas containing sets of potential relations (Wellman 1982).

These points can be practically validated when one considers that Granovetter’s criteria for quantitatively examining ties between individuals and entities necessitate that so-called negligible ties—such as the “nodding” relationship between two people who live on the same street or the “tie” between a vendor and the man who ordinarily buys a newspaper each morning—be considered to inherently lack substantial significance and can therefore offer little

relevance when building a model of a social network (Granovetter 1973, 1361). I suggest a different view of these seemingly inconsequential interactions between individuals—especially given the findings which I present later—and argue that in a situation such as the exchange of a silent nod between two gardeners at a community garden, that the very act of pursuing similar activities—in addition to the varying motives for gardening that may exist—creates and maintains the type of weak ties that are crucial to understanding an individual’s place in a social network or community.

This assertion is partially guided by Heckathorn’s understanding of the role network analysis plays in attempts to describe the linkages between components of a social network as he views the endeavor as “a new way of comprehending individuals—not as the compulsive conformists of structural functionalism, not as the illusory free spirits of individualistic psychology—but as controllers who are also controlled, actors who are also acted upon, determiners who are also determined” (Heckathorn 1979, 222). From this perspective, the seemingly negligible interactions between people should be assumed to have relevance—an assertion I make in this research—and therefore contribute to my effort to describe the social network that is Tucson’s gardening community. Thus, I acknowledge the theoretical relevance of SNA as a means of gaining insight into the types of connection formed between components of Tucson’s gardening community, but also recognize that in participatory and ethnographic studies, huge volumes of qualitative data can be collected which often cannot be accommodated within existing formal models upon which quantitative analyses of social networks depend (Heckathorn 1979, 223).

Community Building in the Gardening Setting

In this section I review literature which addresses how the creation and use of “green” spaces in urban environments—such as Las Milpitas de Cottonwood Community Farm—can bring individuals together and foster the development of community as individuals undertake collective actions to establish community resources. Ruth H. Landman has pondered the meaning of community as it is internalized and expressed by members of community gardens and other organizations that explicitly refer to the term “community” in their titles and mission statements (Landman 1993). She contextualizes this discussion by generically defining community as the sense of sharing knowledge of one another through a relatively dense set of interconnected paths, and recognizes the implications of this definition for discussing community in the urban setting as she states that “urban life offers special challenges because our paths are not ordinarily interconnected” (Landman 1993, 2). To be sure, this last point is of consequence to my effort to describe Tucson’s gardening community as it would be irrational to assume that all members of the community are in some way personally interconnected. Thus, Leigh Holland’s assertion that “a community may not be physically or geographically defined, but may be a community of interest or shared philosophy” is particularly relevant to my classification of Tucson’s urban gardening sphere as a distinct community despite the disparate quality of its membership (Holland 2004, 288).

My review of literature concerning community development as a positive outcome of the use of green spaces has led me to question how non-green spaces—such as the Seed Library—can also foster community development. Kuo and colleagues address this question as they state that the formation of neighborhood social ties—and thus the beginnings of community development—depend greatly on informal social contact that occurs in common spaces, in general, and that the presence of vegetation in common spaces has been shown to support their

use, in specific (Kuo et al. 1998, 823). Clearly, community gardens fit the criteria of vegetated common spaces, but as I shall demonstrate, non-green spaces such as the Seed Library similarly serve as loci for the development of community as they provide common space for informal—often virtual interaction—and so function much like common green spaces as people are brought together and interact in ways which they may not have otherwise done so.

In light of this, the assertion by Kuo and colleagues that social ties between people do not form solely as a function of the individuals involved, but also as a function of the setting in which people are brought together—which also inherently influences the quantity and quality of the informal social contact between people who share spaces or resources—is particularly significant for my work to understand how community is developed and expressed in Tucson's urban gardening sphere (Kuo et al. 1998, 825). This is of significant interest for this research as the literature on community development as the result of gardening-related activities often focuses on green spaces, yet I will demonstrate that gardening-related non-green spaces—i.e. the Seed Library—also foster community development. Furthermore, through informal social contact—whether physical or virtual—in common green and non-green spaces or the expression of similar motivations for gardening, social capital can be conceptually reckoned as networks formed via associations of individuals who are bound together by their pursuit of a common interest or activity; e.g. gardening for various reasons, the use of community garden space, or the use of gardening-related support structures (Glover 2004, 144). Informed by these points, I argue that community and the positive outcomes of its development, manifestation, and maintenance are not necessarily dependent upon the recognition by individuals within the network that they are somehow active players in its expression or that community members form deeply rooted interpersonal relationships.

My conceptualization of common green and non-green spaces—i.e. Las Milpitas and the Seed Library as well as the gardening-related support they offer—as settings for the development of community, refers, in the case of Las Milpitas, to the work of Saldivar-Tanaka and Krasny, who in their own research on common green spaces, found that community garden members often view gardens more as social and cultural gathering hubs than as agricultural production sites (Saldivar-Tanaka and Krasny 2004, 407). However, and importantly, this generalization is not guaranteed to hold the same truth in Tucson’s gardening sphere. Yet, Glover adds further insight by concluding that in the community garden setting, whether the benefit is individual or collective, gardeners must share resources, such as space, tools, and water, and that cooperation is, therefore, a necessary component as the participants’ willingness to share resources is enhanced by the social connections they make during their participation in the shared act of gardening and related activities (Glover et al. 2005, 79). Again, the literature on community development as an explicit goal of urban gardening inherently focuses on the use of common green spaces. Though I applaud Glover’s point, I will demonstrate that the use of non-green spaces that seek to nurture community development in the context of urban gardening is also characterized by the necessity of beneficiaries to share resources and—even if only virtually—to cooperate in their efforts to achieve similar goals.

Following Sun and Jiang (2000), Holland maintains that shared acts such as gardening and gardening-related activities lend themselves to community development as the values which undergird the sense of community are embodied in the individuals who comprise the community, and that individual and community values interact synergistically and so sustain and allow development that circularly benefits the community itself (Holland 2004, 289). I have found this point to be clearly applicable to my position that both Las Milpitas and the Seed Library

encourage gardening-related activities which draw upon the values of their members and patrons to further develop and realize the effort to instill the sense of community and common ownership of that community in the psyches of individual community members. Additionally—and with regard to the notion that interpersonal ties are the foundations of understanding and reckoning communities as networks of individuals and the resources they use—I argue in light of the literature referenced here, that community development results firstly as an outcome of virtual ties between individuals based on their awareness and acknowledgement that they engage in common pursuits while also accepting the peculiarities of individual motivation and values, and secondly as the product of sustained and quantitatively measurable emotional or reciprocal interpersonal relationships. Under this presumption, I maintain that the development of the greater Tucson gardening community is much the same as community development within subgroups of gardeners—such as those who garden at Las Milpitas—as the development and successful functioning of communities depends simply on the fact that “people feel part of the community and want to belong to it” even if they may not interact with other members (Holland 2004, 288).

The Resilience of Gardening Communities

In addition to understanding the connectedness of members of Tucson’s gardening community and addressing the development of community in the physical and virtual urban garden setting, this research also aims to offer qualitative insight into the resilience of the city’s broader gardening community. Thus, the conceptualization of resilience as applied in research is based on the theoretical framework underlying our understanding of social-ecological systems and adaptive capacity. My understanding of resilience in the Tucson gardening community draws on the work of scholars (Ernstson et al.; King 2008; and Tidball & Krasny 2007) who have

applied C. S. Holling's (2009) original model of resilience—which he used to address the management of dynamic and complex ecosystems characterized as non-equilibrium systems (King 2008, 114)—to gardening communities as social-ecological systems. Holling himself offers the following definition: “Resilience determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables, driving variables, and parameters, and still persist” (Holling, 2009, 41).

Many of the characteristics that allow resilient systems to absorb changes and still retain form and function—such as diversity, self-organization, adaptive learning and feedback—can often be observed in urban common green and non-green spaces and communities of gardeners (Okvat & Zautra 2011, 376). As I demonstrate in the “Discussion of Findings” section of this paper, these characteristics can be observed within Tucson's urban gardening sphere and their existence informs my comments on the capability of the broader community of gardeners and gardening-related support structures to mobilize knowledge and resources to support the maintenance of the community itself and gardeners whose food security depends partially upon their gardening success. Following King (2008), Okvat and Zautra maintain that “gardens contribute to community resilience by enhancing space for communication, information-sharing, and deliberate co-learning—especially among diverse garden members—and contribute to ecological resilience by decreasing demand for less sustainable food production options via a dual emphasis on self-sufficiency and produce exchange” (Okvat and Zautra 2011, 376).

Additionally, Okvat and Zautra, in their discussion of community greening and civic ecology in urban centers, cite the interdisciplinary efforts of Tidball and Krasny to combine ecological and social science and systems thinking to address resilience in social-ecological systems, and conclude that within the urban context, community gardens foster the development

of resilient communities and can even aid in a city's recovery in light of sudden-onset disasters or economic downturn (Okvat and Zautra 2011, 376). Berkowitz furthers this point by suggesting that "in times of economic downturn or worse, community organization can stimulate cooperation and local self-reliance, at little or no cost, thus cushioning and protecting the community from outside adversity" (Berkowitz 2000, 332); Okvat and Zautra refer apply Berkowitz's assertion to community gardens as salient community resources that can encourage community such community organization (Okvat and Zautra 2011, 279). The relevance of these points is that they demonstrate that the positive effects resultant from the development of functional garden communities not only benefit their members, but can also have positive impacts for the general well-being of the larger community in which they exists.

Okvat and Zautra, who have conducted extensive literature review regarding the positive effects of community gardens on community and social well-being (Glover 2003; Saldivar-Tanaka & Krasny 2004; and Wakefield et al. 2007), maintain that community gardens bring members into denser networks than their usual urban circumstances allow, decrease isolation through the sharing of knowledge and resources, and encourage participatory approaches to community development (Okvat and Zautra 2011, 378). Through these processes, I have determined that the resilience of gardening communities is closely tied to the development of community because the incorporation of individual gardeners into the community makes available benefits that contribute positively to psychological, physical, and social health or well-being of members (Wakefield et al. 2007, 92-93). Ernston et al. propose that the answer to increasing the resilience of our urban centers should be based on shifting focus from the ecological foundations of the concept's origin to the social underpinnings inherent in its conceptualization in social-ecological systems theory, and assert that "to build resilience and

face uncertainty and change means to harness the interactions between stakeholders (Ernstson et al. 2010, 538). I suggest that the interactions between and examples of community development set by members of Tucson's gardening community are exactly the type resource Ernstson his colleagues and are referring to.

Research Methods

This section details the processes of site and participant selection as well as the data collection and analysis methods implemented in this research. I will provide background information on the sites chosen for field work and explain why I have considered them as relevant locations for my research efforts to draw conclusions about the nature of the gardening community in Tucson. I will also discuss the criteria I used to select research participants from these field sites. I will then turn my attention to describing the data collection methods I used in this research and the types of data I sought gather through their implementation. The section will conclude with a description of my approach to analyzing the data gathered.

Site and Research Participant Selection

Two gardening-related support resources served as field sites for this research. They were selected not only for their distinct qualities as hubs where gardeners in Tucson could possibly converge or interact and their ethea of democratic access, but also because of my ongoing and newfound collaborative partnerships with each resource as a researcher working for the Bureau of Applied Research in Anthropology (BARA). Additionally, these sites represent the two types common spaces I discussed in my review of literature on community development in common spaces. Las Milpitas is the typical common green space to which many of the scholars I cite refer, and the setting is that of a prototypical common green space due to its park-like openness, the presence of vegetation, and variety of areas appropriate for public gathering. The Seed

Library is what I refer to as a common non-green space, and shares none of the park-like features that characterize Las Milpitas: physical seed catalogues are kept in drawers that once held now out-dated Dewey Decimal System card catalogues housed within library branches and there is no dedicated open air space in which patrons can gather and interact.

In the case of the Seed Library of the Pima County Public Library (PCPL)—as I have already mentioned—I previously worked closely with managing librarians to document the use of the resource for a visual ethnography project. In many ways, the undertaking of this study of Tucson’s gardening community represents a continuation of that project as throughout this research I have sought to gather data concerning the general use of the resource—through survey—by community members and will present that information to the PCPL upon completion of the survey period.

In the case of Las Milpitas Community Farm, I was offered the opportunity to manage a garden plot at the farm in order to help the Community Food Bank of Southern Arizona (CFB)—the organization which established and manages the farm—measure the amount of produce generated by plots at the farm. Though BARA and the CFB have collaborated on various projects in the past, the management of a plot at Las Milpitas for data collection purposes represented a new endeavor in a continuing partnership.

The following subsections will provide detail regarding the characteristics of the Seed Library and Las Milpitas and how each operates as a community resource for gardeners in Tucson. I will also address why—based on my prior familiarity with these gardening-related resources—I determined that each would offer unique opportunities for me to observe, contact, and interact with Tucson’s gardeners, and will discuss the criteria I used to select participants in this study.

Seed Library of the Pima County Public Library

The Seed Library of the PCPL was opened in January of 2012 as a gardening-related community resource and, as stated on the website of the Seed Library, its mission is simply to “help nurture a thriving community of gardeners and seed savers” in Pima County in southern Arizona. The Seed Library offers seeds and seed saving and gardening-related educational information to the public. Though founded on a modest mission statement, the Seed Library represents a significant and concerted effort to address a wide range of issues including democratic access to open pollinated heirloom fruit, flower, and vegetable varieties, community development, sustainability and resilience, food security, and local identity.

In essence, the Seed Library operates much like the public library in which it is housed, and in fact, is not a single catalog of seeds, but is a collection of seeds housed in multiple library branches across Tucson and Pima County. Any resident of Pima County with a PCPL library card can access the resource and can check out up to six packets of seeds per month without any financial cost. The Seed Library provides access to seeds to patrons with the hope that they will plant the seeds in their home or community gardens and after harvesting the desired amounts of produce for consumption or enjoying the aesthetic beauty of blossoming wildflowers, will save seeds from their strongest plants and return them to the library. Librarians and volunteers sort the seeds donated to the Seed Library and reintroduce them into the collection as a second, third, fourth, etc. generation seed which will then be checked out by another Seed Library patron. Not all PCPL branches house physical seed catalogues, but Seed Library patrons can access the Seed Library website and browse the selection of seeds available in the collection and reserve seeds for pick up at the most convenient branch to do so.

Seeds available for check out are organized into three categories—easy, medium, and hard—according to the level of skill needed to save seed from a given variety. Importantly, there

is never any penalty—in terms of late fees or discontinued use of the Seed Library—levied against “borrowers” of seeds from the collection or due dates for the “return” of seeds back to the collection. The Seed Library accepts donations of seeds not originally checked out from the Seed Library but grown by gardeners who may have originally acquired their seeds from a different source but still wish to contribute to the development of the resource—I have noted interesting issues that have arisen with regard to the “purity” of seeds returned or donated to the Seed Library, and though this discourse is certainly a significant matter for the development and maintenance of the collection, it will only briefly be discussed in the conclusion of this paper.

I have found that engendered in the conceptual ethos of the Seed library is the value-laden assertion that the commitment to growing plants from seeds is a gift to oneself and that saving and returning seeds is a gift to one’s community and a significant commitment to preserving biodiversity and cultural knowledge (SL website). Librarians who manage the Seed Library recognize the practical benefits engendered in their efforts to make seeds available to the public such as decreasing the need for patrons to spend money on produce from markets and grocery stores and developing seed stock that is well suited—through adaptation—to the semi-arid climate of the Sonoran Desert.

My decision to conduct field work at PCPL branches housing physical seed catalogs was driven by its status as a one-of-a-kind gardening-related resource in Pima County and non-green space. Though there is an extensive collection of heirloom seeds sold in the retail environment in Tucson—a collection maintained by the non-profit organization Native Seed/S.E.A.R.C.H. which promotes the conservation of regionally adapted and traditionally grown vegetable, fruit, flower, and herb varieties—the Seed Library is unique in that it strives to make seeds and seed saving information available to the public free of charge, and is generally dependent on

donations and public involvement to maintain its seed stock. This fact highlights the community engagement and development-oriented nature of the Seed Library as a resource for gardeners in Tucson.

Librarians managing the Seed Library state that the inherent mission of the resource is to provide democratic access to the collection and invite gardeners from a variety of socioeconomic backgrounds and who possess varying motivations for gardening to use the resource. Furthermore, the consistent outreach efforts by Seed Library librarians—many of which occur at farmers markets, large community events, and through social media—to inform the public of and engage the public with the resource offer opportunities to observe and gauge public interest in and interaction with gardening-related discourses.

Las Milpitas de Cottonwood Community Farm

Las Milpitas de Cottonwood Community Farm is situated on an approximately three acre plot of land owned by Pima County and is located along the west bank of the Santa Cruz River in southern Tucson. According to the Farm Community Engagement Coordinator of the farm, the site has been under cultivation for the last twenty-five hundred years beginning with the prehistoric peoples who practiced irrigation farming as a means of subsistence. More recently, in the 1980s, the site was used for the commercial production of alfalfa, and in the 1990s was used for a project known as Pharmacy Gardens in which a small group of volunteers grew medicinal herbs and instituted a work-trade program in which community members volunteered in exchange for diagnoses of their ailments and medicinal herbs. After the end of the Pharmacy Gardens project—which was disbanded for reasons I have been unable to determine—a local high school entered into a lease with the Pima County to use the land for a school garden sometime between the years 2000 and 2005. In 2010 the CFB began conversations with the high school regarding the development of a partnership to turn the land into a community farm and

increase the viability of the site as a community green and food production space.

The mission of Las Milpitas is to provide educational opportunities, capacity building, and a place for area residents to grow their own food and to also serve as a working demonstration site for desert food production, composting, ecological restoration, and permaculture for the greater Tucson community (CFB website). There are eighty-five “community growing plots,” most of which are under production and managed mainly by families. The average dimension of these plots is approximately four feet wide by ten to twenty feet long. There are a number of demonstration beds at the farm which are managed by CFB staff to show community members what can be grown and how as well as to produce food for farmers’ markets run by the CFB. The farm has its own compost production area which is supplied with organic waste from local breweries, landscaping firms, and the garden plots themselves—this compost is used to amend the soil in the community growing plots at the beginning of each growing season. There are also chickens that are cared for by a local family and two bee hives on the grounds of the farm.

Selection of Participants

The criteria used to select participants for this research was general and simply necessitated that potential participants be gardeners living in Tucson who used private or community gardens or staff members or volunteers from the Seed Library or Las Milpitas. I limited the participant population to adults and to English speakers because I lacked the resources to use interpreters in my research; I will address the implications of this in my findings. Additionally, I recruited members of the Tucson community who were planning to use, continually use, or have used the Seed Library or who seek gardening-related educational or resource support from the CFB. I also recruited administrators from the PCPL in order to better understand the processes involved in developing and opening the Seed Library as a public

resource situated within the greater PCPL structure. I recruited participants for this using the convenience sampling method. Following Bernard, I reasoned that convenience sampling will allow me to develop an understanding of what is going on in the gardening community and aid the development of an applicable approach to future qualitative *and* quantitative research on this subject.

My recruitment efforts required my presence at Las Milpitas and three PCPL branches housing physical seed catalogues. When I first began managing a plot at Las Milpitas, I spoke with the Farm Community Engagement Coordinator about how to best ensure transparency with regard to the fact that not only would I be managing a plot as a member of the farm, but that I would also be conducting research for academic purposes. We agreed that I introduce myself at one of the monthly community farm meetings as a new plot manager who, as a university student, was also interested in understanding the gardening community of Tucson. At one such meeting in the winter of 2012, we did just this and asked all plot managers present—a total of about twenty individuals from the some sixty-five families and individuals managing plots at the farm—if they would allow me to take notes on my observations of the happenings at the farm and to approach plot managers and ask if they would like to tell me about their experiences as gardeners and community farm members. All in attendance of the meeting agreed that it was acceptable for me to conduct participant observation and recruit interviewees as research participants, and expressed interest in the study.

Thus, during the time I spent working my plot at Las Milpitas I would intermittently take breaks and approach other plot managers who were also at the farm and engage them in friendly and general conversations regarding how their plot was doing and what their experiences gardening at Las Milpitas were like. I also introduced myself as a university student conducting

research for a project concerning Tucson's gardening community and asked if they would be interested in spending some time talking to me about their use of the farm and their opinions concerning community development through gardening. Many of the plot managers at Las Milpitas are predominantly Spanish speakers. For future research involving plot managers at Las Milpitas, it would be prudent to either increase my own Spanish proficiency or to interview Spanish speaking plot managers through an interpreter as the perspectives offered by these community members would have likely enriched the dataset I eventually compiled.

Over the course of the recruitment process at PCPL branches, I attended public outreach events hosted or attended by librarians from the Seed Library and often approached members of the community who displayed interest in the resource, introduced this study, and asked if they would be willing to talk to me about their gardening experiences and use of or thoughts on the Seed Library as a resource for gardeners. I also spent time in three PCPL branches and engaged in conversations with community members who perused the catalogues of seeds. During these conversations, I would ask generally friendly questions regarding what potential participants thought of the resource, and if appropriate, I would segue into a description of this research and ask if potential participants would be interested in being interviewed.

Additionally, in light of conversations I had with librarians from the Seed Library during my previous work on the visual ethnography project—conversations that focused on the development of ways to learn whom in the Tucson community was using the Seed Library and for what reasons—I decided to implement a survey to collect general use information for submission to the PCPL and to recruit Seed Library patrons to share their experiences as beneficiaries of the resource for my research. I placed surveys in three library branches next to seed catalogues alongside educational literature describing how to use the Seed Library and save

seeds. I included a line in the surveys asking respondents to contribute further by participating in formal interviews and share their experiences as gardeners in Tucson and patrons of the Seed Library. I will detail the aim of the surveys from the data collection perspective in the following section.

Data Collection

In this section, I briefly detail the data collection methods implemented in this research. I selected these methods to gather qualitative data that I sought to use to describe Tucson's gardening community and increase my understanding of the level of interconnectedness between components of the community. My data collection methods included participant observation, semi-structured interviewing, and surveying. The data collection period extended from October 2012 to April 2013. I collected data in private and community gardens, at public events, and in PCPL branches.

Engagement through Participation

Participant observation accounted for the majority of data I collected at Las Milpitas Community Farm, and was also a factor in my efforts to understand how members of the community used the Seed Library. As H. Russell Bernard writes in his handbook for anthropological research methods, "participant observation involves establishing rapport in a new community; learning to act so that people go about their business as usual when you show up; and removing yourself everyday from cultural immersion so you can intellectualize what you've learned, put it into perspective, and write about it convincingly" (Bernard 1994, 137). Indeed, throughout this research, I followed this methodological pattern in order to obtain nuanced data which provided insight into the everyday happenings around the farm.

Thus, I immersed myself in the Las Milpitas experience by becoming a plot manager and farm community member. To be sure, my background as an avid home gardener aided my

attempts to interact with other gardeners as I was easily able to strike up conversations by identifying and commenting on the plants growing in other gardeners' plots and sharing my own gardening advice or soliciting advice from others. Because of this, many of the gardeners I contacted seemed to regard me as a member of the community first, and an anthropologist second, even though they were aware of the research-oriented nature of my presence. In light of this, I was able to establish rapport with my fellow plot managers and unobtrusively observe the ways in which gardeners interacted with each other and interact with gardeners as a member of the community myself. I recorded field notes from these experiences, and collected data which could not have been collected by way of interviewing or surveying because of the inherent internalization of the community experience that resulted from my immersion within it. My involvement in the farm community also enabled me to recruit participants for formal semi-structured interviews as many plot managers became comfortable with my presence and incessant questioning with regard to their gardening experiences and perspectives on the community development effects of the farm.

Through participant observation I experienced and gained understanding of the organizational structure and decision making processes underlying the farm's operation and observed how plot managers and CFB staff and volunteers interacted. I attended monthly community meetings and community workdays and received community newsletters via email which provided information related to gardening techniques and biosketches of certain plot managers. I gained critical insight concerning how the CFB—as the administrative operator of the farm and committed provider of gardening-related educational and resource support to plot managers—seeks to develop the capacity of gardeners to successfully produce food from their plots and reckon self-efficacy as a community.

I also actively participated in the gardening community as a patron of the Seed Library by checking out seeds using my PCPL library card and planting them in my plot at Las Milpitas as well as in my home garden. By doing so I made use of the Seed Library as a resource for members of the Tucson gardening community and contributed to the goal of producing seeds adapted to the climate of the Sonoran Desert for reintroduction to the collection. Furthermore, I was experienced the benefits of cultivating produce—mainly greens such as lettuce, chard, kale, and endive and root vegetables such as carrots, turnips, and beets—for my own consumption and avoided expenditure of capital on produce from grocery stores.

I also experienced the challenges of gardening with the intention of saving seeds as the extended period of time required to let certain varieties produce viable seeds necessitated that I commit a certain amount of my garden to growing plants which I would not be able to consume. Librarians managing the Seed Library have explicitly asserted that one of the principal purposes of the creation of the resource is to make healthy and locally produced food available to those who might not otherwise be able to afford it. Indeed, by checking out seeds, I produced my own food, but also experienced the dilemma of doing so while also attempting to contribute to the development of the Seed Library as a resource that benefits others through my return of seeds.

Participant observation was critical to understanding of how members of Tucson's gardening community are tied to one another and how these ties express themselves. Additionally, I gained an understanding of the ways community development is fostered through participation in gardening and gardening-related activities or the use of gardening-related support resources. Through the interpersonal interactions I had with fellow gardeners and my use of common green and non-green spaces in Tucson, I identified qualities of the gardening community that have ramifications for understanding the resilience of Tucson's gardening

community. In sum, participant observation served me as I gained an emic perspective which I feel will legitimize the qualitative findings I present.

Semi-structured Interviews

I conducted and recorded semi-structured interviews to gather in depth information from gardeners, librarians from the Seed Library, and staff from Las Milpitas. I used semi-structured interviews to gather reliable and comparable data from research participants from each of the aforementioned groups and developed an interview protocol designed to address my questions and topics of interest in a logical order. I used the semi-structured interview protocol to maintain discretion to follow leads offered by participants and, in turn, pursue lines of questions iteratively if an informant offered a particularly interesting opinion. Thus, I intended that informants open up, express themselves, and relate their experiences and perspectives on their own terms and at their own pace (Bernard 1994, 209-210).

I conducted a total of nineteen interviews with gardeners living in Tucson. Twelve of these informants used community gardens, six gardened at home, and one gardened in both a community garden and in their home garden. Six of the thirteen community gardeners interviewed were plot managers at Las Milpitas—two of these interviewees stated that they, their spouse, and their children tended the plot; two stated that they and their significant other used the plot; and the last two stated that they were the only managers of the plot. The remainder of the participants I interviewed that were members of community gardens managed plots at four separate community gardens in their own Tucson neighborhoods.

During the interviews I conducted, I solicited insight into several aspects of participation in Tucson's gardening community. I began with a line of questions addressing how informants became interested in gardening and their perspectives on and experiences in communities, in general, and whether they believed that Tucson had a distinct gardening community, in specific.

I included a line of questions with regard to informants' motivations for gardening, and also asked informants to share some of their experiences gardening at home or in community gardens and probed them to tell stories about their proudest gardening moments and most difficult challenges. I did this to solicit narrative data that could aid my efforts to understand whether community members viewed gardening as a metaphor for thinking about other aspects of life and to understand how gardeners deal with adversity.

I also asked questions concerning whether gardeners save seed from their plants to understand what opinions people had on the importance of preservation of biological diversity in the types of plants they grew—an important indicator as to how participants conceptualized or displayed resilient behavior. Additionally, I asked about the degree to which informants interacted with other gardeners, under what types of circumstances they did so, and whether relationships formed in common green or non-green spaces extended beyond the gates of their gardens. I concluded interviews with questions regarding informants' knowledge and use of gardening-related educational or support resources. I conducted interviews with three librarians who manage the Seed Library's operation at three separate PCPL branches, and one PCPL administrator who helped with the logistical processes involved in opening the resource. I interviewed these informants in order to better understand how the idea of housing a seed library in the PCPL came about and what the library hoped would result from the advent of the resource. My interview protocol for these informants focused first on the same questions I asked gardeners in terms of their conceptualizations of community, in general, and if they thought that Tucson had a gardening community, in specific. I also wanted to know what exactly the Seed Library is and what services it provides to members of Tucson's gardening community. I asked all three librarians what outcomes—in terms of challenges and rewards—developed as the result of the

opening of the Seed Library.

To better understand the role the Seed Library plays in Tucson's gardening community as a common non-green space and gardening-related support resource, I asked about specific educational services the Seed Library provides and to what degree members of the gardening community seek out these services or whether gardeners have asked the Seed Library to provide additional services. To address the community building potential of the resource, I asked how librarians valued the services they offered, what role they saw the Seed Library playing as a component of Tucson's gardening community into the future, and to what degree they were able to observe an increase in the interaction between library patrons resultant from their common use of the Seed Library.

The final subset of informants that I interviewed for this research were CFB staff members and one volunteer who work at Las Milpitas and oversee the daily operations of the farm while providing hands-on support to plot managers when they need it. I conducted two interviews with CFB staff and one interview with a volunteer. I asked all three CFB the same questions posed to my other informants regarding their opinions on community in general and Tucson's gardening community in specific. I also asked the two staff members to tell me about the origins of Las Milpitas as a community gardening space and its mission. I asked all three participants to explain how the farm operates on a day-to-day basis, what types of interactions they have with plot managers, and what kinds of interactions they usually observe between plot managers. All three informants provided detailed and rich information with regard to the last two questions as their daily presence at the farm for extended periods allows them to interact with and observe the interactions between people who visit the farm throughout the course of the day. This information bolstered the data I collected during participant observation and filled in the

gaps, so to speak, when I was not at the farm.

I also asked these informants to describe the types of educational or informational services and support the CFB provides to plot managers at Las Milpitas, how often community farm members seek those services out, and to what degree those services improve the gardening success of plot managers. I followed up by asking CFB informants to describe any challenges they have experienced in providing relevant information or support to plot managers and how the CFB approached the mitigation of these challenges if they did indeed exist. I also asked the CFB staff and volunteer what they believed the role of Las Milpitas was in Tucson's gardening community and how they saw that role contributing positively to the evolution of the community into the future.

Survey

I implemented surveys in this research in order to gauge the degree to which the public uses the Seed Library and gain information concerning how the availability of gardening-related resources and support is disseminated throughout Tucson's gardening community. I used these surveys as recruitment material and aimed to solicit participants for interviews. I placed surveys in three PCPL branches next to physical seed catalogues. I divided approximately one hundred and twenty surveys between the three branches and placed them in the branches from January 2013 to April 2013. The sample of Seed Library patrons obtained through surveys would be a convenience sample and was contingent upon self-selection by Seed Library patrons. This was due to the fact that only those who visited library branches to select seeds for checkout would see the surveys; only certain patrons would invest the time to complete the survey; and only those who were willing would complete and return the survey.

The surveys called for Seed Library patrons to indicate how they had become familiar with the resource and whether they had used it previously. If patrons had, in fact, used the Seed

Library before, they were asked what their reasons for using the Seed Library are; how often they check out seeds from or return seeds to the Seed Library; who in their own social network they have told about the Seed Library; and what they value most about the Seed Library as a community resource. I intended that the surveys would determine to what degree the Seed Library—as a public gardening-related resource or non-green space—is used by members of Tucson’s gardening community. At the end of the survey, respondents were given the option of participating further—regardless of how many times they had used the Seed Library—by being interviewed for this study. Space was left for respondents to leave contact information if they were interested in being interviewed. Respondents were asked to leave completed surveys in locked drop boxes adjacent to the seed catalogues.

Data Analysis

My analysis of the qualitative data collected in this research entailed the transcription and topic coding of audio recorded during interviews and the review and topic coding of notes taken in light of participant observation. I sought to identify and make sense of the patterns that arose in the interview transcripts by noting the frequency with which themes concerning motivations for gardening, the interconnectedness between gardeners, how often gardeners used gardening-related support resources or common green and non-green spaces, and community development occurred. I identified statements of similarity and difference made by informants concerning the definition of community and the qualities of its manifestation to determine if participants in the research held common understandings of the meaning of community and to determine if participants believe that a distinct gardening community exists in Tucson. In my attempts to identify patterns of connectedness and community development in my field notes, I reviewed comments on these subjects that were made to me by gardeners as volunteered statements. By

noting the frequency with which plot managers from Las Milpitas discussed their relationships with others at the farm, their motivations for gardening, and their use of gardening-related support structures—as part of their own description of their gardening experiences—I was able to better understand how gardeners prioritized the different aspects of being part of a community gardens and how these priorities differed from those of gardeners who used home gardens and those who used the Seed Library.

Due to a low response rate to the surveys placed in PCPL branches by patrons who had actually used the Seed Library, the data collected from surveys was not sufficient for any relevant quantitative analysis to be undertaken. Though, as I will note in the following section, some of the responses given regarding respondents' reasons for using the Seed Library, who they have told about the resource, and what value they give the resource, indicate that conclusions can be drawn about the community development outcomes of their use of the Seed Library.

Discussion of Findings

This section details the findings of this research and incorporates my discussion of these findings as they relate to the intent of this study to answer the question of whether there exists a distinct gardening community in Tucson, to qualitatively describe its expression, and to comment on its resilience.

Comments on Tucson's Gardening Community

In light of the research I have conducted, it can be said that organizations and institutions that provide gardening-related support, services, and resources serve as hubs at which people can converge. I have determined that such hubs can be common spaces traditionally referred to as green spaces or they can be non-green spaces such as the Seed Library. In addition to common values and common motivations for gardening, the use of these resources by community

members contributes to the formation of a distinct social network. The following subsections will offer insight into this fact by detailing how gardeners and those who provide them support and resources view their gardening community and how they interact with one another to maintain and develop the community by establishing network ties and thus creating social capital that reinforces the ability of the community to support itself and its members.

I will begin by presenting the perspectives offered by community members and will discuss how their worldviews contribute to the development of the sense of community despite the fact that many members of the community rarely participate in interpersonal relationships. I will then discuss the roles that gardening-related support organizations play in serving as loci which function to create weak ties between individual community members. I will also comment on how the synergy between people and resources provides snapshots of the wider gardening community of Tucson, and will close with comments on how this synergy may contribute to the resilience of the community in terms of its ability to buffer individuals from stresses which would otherwise decrease the food security and social well-being of members.

Community Members' Perspectives

When asked to explain what words and phrases come to mind when one hears the word “community,” many of the informants I interviewed stated that there were many ways to think of community, but that generally it meant their families, neighborhoods, work places, and the people with which they shared interests and values. Some informants voluntarily offered that communities can also be made up of groups of people who interact interpersonally amongst themselves, but are joined in a sense of community with other such groups based on geographic situation or nationality. One informant stated that “communities can be based on race or politics,” but continued that “even those communities aren’t homogenous.” The recognition that defining a community is not a cut and dry endeavor was expressed by several informants Yet,

when I asked gardeners if they thought there was a distinct gardening community in Tucson, every gardener—as well as librarian from the Seed Library and CFB staff member/volunteer—unequivocally answered yes, and also stated that they considered themselves to be part of the community.

The fact that informants acknowledged the existence of a gardening community in Tucson did little to answer the question as to what makes Tucson's gardening community a community aside from the conceptual notion that it exists. One informant noted his feeling that “the more you define yourself as part of one community, the less, maybe, you are part of another. I don't like that.” When pressed to explain why this made him uncomfortable, he answered, “We are all in this together.” However, many people referred to their membership in multiple communities at differing scales and were generally accepting of the notion that this is how people organize themselves within our society.

When asked how she reckons membership in Tucson's gardening community, one informant suggested that simply eating at a café that is supplied by a local farmers' market was an indication that a person was part of the community: “Even if you just go to the one café and get a plate of greens from up the street once a season, you helped a little bit, or you're part of it a little bit.” The notion that people need not be gardeners to actually be considered members of the community caused me to realize that the weak ties that connect gardeners to one another also connect gardeners to those who do not garden and—in the rationale of my informant—meant that people who do not garden are also members of the gardening community if they in some way support the values underlying certain motivations for gardening.

One informant suggested that people who simply take an interest in how plants grow and where their food comes from help to support the idea of gardening as a counterpoint to industrial

agriculture and the loss of biodiversity. This, he said “helps people see that what they are doing is worth it and encourages more people to become gardeners.” It is worth noting that this statement was offered during a discussion of motivations for gardening, and that throughout the course of this research, it became clear that many people saw their gardening activities as a way to reject what one informant—a wild haired man of about twenty—referred to as “agricultural imperialism.” These points give some insight into how people conceptualize their participation in the gardening community as means of creating a sense of self-efficacy for themselves and for people they care about. Indeed, I found that most informants viewed the gardening community as an agglomeration of people that shared values entrenched in notions of displaying some degree of independence from non-locally sourced food.

This, however, was only one of many motivations expressed for gardening, and though rooted in the same vein, many informants—especially plot managers from Las Milpitas—stated that they were able to save money by gardening. This point is of major significance when we consider that Las Milpitas is operated by a community food bank. During a community work day in late February of 2013, I became engaged in a conversation with a middle-aged woman and her senior mother who managed a plot adjacent to mine. As we discussed how prolifically their greens—chard and collards—were growing, the daughter stated that how happy she was to be gardening at Las Milpitas because she would not otherwise be able to afford to buy produce from the grocery store. She continued that the cost of food was such, that on their fixed income, they would not be able to eat fresh produce most days of the week.

I asked how often they ate produce from the plot and both women smiled then laughed as they answered that they are able to eat fresh greens every day, and that the mother had actually taken to making vegetable broths and freezing them because they had a surplus of food. That

same day, I myself left the farm with more greens and root vegetables from my plot than I and my own family could have eaten, and as luck would have it, was able to share several pounds of produce with members of the Somali refugee community in Tucson. The experience of sharing that surplus led me to think about how—as already discussed—the gardening community of Tucson included people who enjoy the benefits of gardening, not necessarily because they themselves garden, but because their lives are in some way touched positively by those that do. In light of this, I maintain that Tucson’s gardening community can be considered to be amorphous with no definite criteria for membership as gardening often instills values of sharing that reverberate well beyond the garden gate.

Gardening-Related Support Organizations

I have come to understand the place of gardening-related support resources such as the Seed Library—and community gardens themselves—in Tucson’s gardening community as hubs of convergence at which members of the community are able to share with each other the experience of belonging to the community. I use the phrase “hubs of convergence” not in the literal sense that groups of gardeners often meet or interact while sharing stories of gardening successes and failures, but in the metaphorical sense that their presence demonstrates the commitment of Tucson’s gardening community to itself. The fact that the Seed Library was opened with the hopes of contributing to the community a democratically accessible resource for public use speaks to this idea. As one librarian stated, “the Seed library speaks to the faith and optimism inherent in planting for the future.” Indeed, much as the success of a garden is not guaranteed, the successful development of Tucson’s gardening community is no sure fire thing. I believe that is through the continued dedication of gardeners to the optimism that their plants will grow and the help of people who provide them resources and spaces along the way that the community can continue to develop.

Though the surveys implemented in this research have, as of yet, failed to provide quantifiable data concerning the use of the resource—of the one hundred and twenty surveys placed in PCPL branches, only approximately thirty were completed and returned, and of those twenty were completed by individuals stating it was their first time using the Seed Library—the surveys I have received do indicate that many people in the Tucson community are becoming aware of the Seed Library and are beginning to check seeds out from it. Additionally, though most respondents indicated that they had not yet used the Seed Library, many still responded that through friends and family they were encouraged to make use of it. Many respondents also left comments under the question “what do you value most about the Seed Library?” stating that they were drawn to the fact that the resource engaged citizens and allowed for people to share their seeds for the benefit of others. The significance of this point should not be missed as it was stated in the review of literature on community development that through sharing processes, individuals begin to recognize themselves as members of communities and therefore build the willingness of people to work together toward common goals.

Not only does the Seed Library advocate the importance of sharing with the underlying intention of bringing together people who would otherwise not interact—even in a virtual sense—it also fosters the sense in people that whatever they can contribute is of value. This point was made clear when I participated in sorting donated seeds with several librarians and volunteers. As we sorted Tepary beans and packaged them for placement in the catalogue, a volunteer—a middle-aged woman—stated that she was sorry that she was so new to gardening that she had not been able to produce any beans for return to the library the previous summer. Because of this, she determined that the next best thing would be to lend a hand and help the librarians sort seeds. Not only was her motivation for volunteering based on a sincere desire to

contribute what she could to the development of the resource, but her personality was delightful and as she happily went about the business of sorting seeds, the spirits of everyone around the table were all the more bright. The sense of community we all shared in that day had nothing to do with our motivations for gardening or the values undergirding them. I personally felt that I was experiencing membership in a community—a smaller subset of many larger communities—because I had gathered with amiable people and was helping to do the work necessary to make seeds available for others in the community. The relevance of this point is also founded in the fact that we were sitting in the lobby of a PCPL branch and not in a garden. Clearly, then, there is a role for common non-green spaces in the discourse on community development as a result of gardening-related activities.

During my fieldwork at Las Milpitas I also discovered that the simple presence of the farm in the neighborhood was enough to get people to come out of their houses and interact with their neighbors. During one of our conversations, the Farm Manager of the farm told me that he frequently meets and chats with people who live in the neighborhood but do not manage plots at the farm. He stated: “There are people who come through here every day on their morning walks. They like to make the rounds and look at the plots and just enjoy being outside. Sometimes they’ll start up a conversation or sometimes they’ll sit down and just be here.” This statement—and the prior example—reinforce the idea that the availability of community spaces for public use—be they green or non-green—foster interactions between people and connects them to their communities.

The majority of the time I spent at Las Milpitas tending my own plot, there were often no more than one or two other people also tending their plots. Despite this—and the ease with which we could have ignored the presence of each other—there was seldom a time when the

only other person at the farm failed to come by and look in my plot and ask me how my garden was doing or when I felt uncomfortable approaching another plot manager to do the same. Often, on community workdays and Saturday mornings Las Milpitas would sporadically bustle with activity as plot managers tended their gardens, shared advice and produce, and admired the success of their fellow plot managers. The sense of community created in these moments was not possible before Las Milpitas opened as one plot managers told me: “now we have a place to spend time getting to know our neighbors.”

Community Resilience

The resilience of Tucson’s garden community has only been partially examined in this research. A more representative sampling of those in the Tucson community who garden and rely on the support of resources such as the CFB and Seed Library is needed to arrive at any significant assessment of the community’s resilience. I have, however, drawn some conclusions regarding the ability of members of the community to seek support from gardening-related support resources and argue that—in the cases of Las Milpitas and the Seed Library—these resources provide the basic support needed for community members to pursue gardening and decrease their reliance on supermarkets for produce without necessitating significant capital expenditure.

The answer to question of whether this alone can lead to increases in the resilience of the community is uncertain—and may even simply be no. There are, however, other benefits expressed by participants that indicate that their involvement in urban gardening in Tucson has enhanced their abilities to deal with the uncertainties of life. One informant spoke of how his experiences gardening in Tucson during the summer have helped him to become a better boyfriend: “When people ask me how we’re doing, I just say we’re working on the garden. That’s because no matter how green it is or how much it dries up, you have to just go out and

keep working at it.” This comment does not address the informant’s ability absorb changes in food prices and provides little insight into his ability to call upon ties formed with other gardeners in times of need, but it does shed light on the fact that his experiences gardening have given him a new way of viewing the problems of everyday life.

Caring for a garden requires significant investments of time, energy and patience, and several informants indicated that learning how to care for a garden has had practical applications for their learning how to care for themselves and those around them. This theme of applying lessons learned in the garden to other parts of their lives recurred frequently during my conversations with informants, and though this may be an immeasurable outcome of participation in gardening and gardening-related activities, the point reiterates my assertion that gardening bolsters social well-being.

Other informants shared that since they have been gardening at Las Milpitas, they have been able to eat healthier food and generally experience more physical activity because of the demands of caring for a garden or by simply walking from the house to the garden every day. One woman stated: “I had no idea how much work [gardening] was. Next time I’m not going to plant so many seeds because when I went to thin the lettuce, I worked up a sweat bending over and picking out all those little ones.” Increases in physical activity may decrease the likelihood that gardeners will experience health problems related to sedentary lifestyles, and this, in turn, may confer benefits such as decreased spending on healthcare.

Conclusion

In this paper I have demonstrated that through their pursuit of gardening-related activities, dispersed and disparate individuals within the greater Tucson community create ties between themselves—whether they are aware of it or not—that thus contribute to the

development of a distinct gardening community in Tucson. Additionally, these ties—as formed through physical or virtual interactions and fostered by the availability and use of gardening-related common spaces—allow community members to seek support from each other and community resources and so increase the resilience of the community. I also maintain that the sense of unity created through participation in gardening-related activities that occur outside the garden setting, demonstrate that not only are common “green” spaces such as community gardens and parks important in community development, but that common “non-green” spaces like the Seed Library also play significant roles in community development and maintenance as they embody and nurture many of the values expressed by gardeners. Thus, this research contributes significantly to the discourse regarding community development as a positive outcome of participation in gardening and gardening-related activities—as well as the availability and use of gardening-related support resources—as it examines community development in both “green” and “non-green” common spaces and provides new ways of examining community development as a product of the pursuit of gardening and related activities.

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