# The Importance of Participatory Planning for the Sustainability of Community Gardens

BY

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THESIS

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To Gustavo and Amora,

May our little family help make the world a better place.

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# SUMMARY

Community gardens are a powerful tool for improving the urban environment, and the benefits associated with them are well established in both popular publications and in academia. Unfortunately, we often see community gardens fail. Literature suggests that the considerable rate of failure may be brought upon by lack of community engagement. This thesis aims to identify ways to enhance participation in community gardens; and seeks to explore the proposition that community engagement may be fostered through participatory planning, which contributes to the long-term sustainability of the gardens. In order to explore this proposition, this thesis presents and analyzes the case study of a unique participatory planning process developed for a community garden in Chicago, *La Huerta Roots & Rays*.

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# 1. Introduction

Community gardens are a powerful tool for improving the urban environment (Ferris 2001; Lawson 2005; Shinew 2004; Yotti 2006; Twiss et al. 2003). They help revitalize communities by improving health (Alaimo, 2008; Lackey, 1998; Robinson-O'Brien, 2009), they increase food access (Lackey 1998; Bleasedale et al. 2011), they maintain green space, increase biodiversity and conserve wildlife habitat (Beran et al. 2012), they promote social justice (Lackey 1998), reduce crime rates (Herod 2013), increase property values (Been 2006), and they build social capital (Lawson 2005; Shinew 2005). Overall, community gardens are a great tool to help overcome some of our most pressing contemporary urban issues.

Unfortunately, many community gardens fail in their first few years. According to Beran et al. (2012), Kearney (2009) and Thomas (2008), lack of community engagement is one of the main reasons that community gardens fail. With this in mind, this thesis aims to identify ways to enhance participation in community gardens in an attempt to contribute to their longevity. The study questions whether participatory planning processes to plan the spaces may affect the level of community engagement with the sites, and explores practices used in planning processes that may increase the feeling of ownership and connection.

To answer these questions, this study analyzes the participatory planning process for *La Huerta Roots & Rays*, a community garden prized by the American Planning Association (APA-IL) for their successful community outreach initiative during the planning process and continued community involvement following implementation. We examine the collaborative nature of the planning techniques they used and detail the process from conception to implementation,

highlighting useful experiences that may be applicable to planning in general. Finally, we use this case study to assess our proposition that community engagement may be fostered through participatory planning, which contributes to long-term sustainability of community gardens.

The following chapter expounds the relevance of community gardens for urban planners and details the motivation for the current study. The next section includes a literature review that frames this thesis in community participation theory, establishes the importance of community engagement for the long-term sustainability of gardens and presents the proposition this thesis seeks to explore. A description of the methodology used comes next, and finally the case study itself, followed by an analysis of the findings and the conclusion.

# 2. Motivation and Relevance of this Study

## 2.1 Why Urban Gardens?

Community gardens are urban spaces that are publicly owned and managed by community groups. They benefit urban environments in multiple ways and are often praised for their positive effects on communities and on urban revitalization. At a time when so many cities struggle with urban decline, community gardens appear to the urban planner as a solution to revitalize neighborhoods by addressing issues of community building, racial tension, health and food access, and by encouraging community groups to take control of their environments. This section outlines some of the main benefits community gardens bring to urban environments.

### *2.1.1 Community Building*

Shared public spaces like community gardens are frequently cited as an effective tool for community development (Lawson 2005). By enabling social interactions and the exercise of shared interests, public spaces increase the potential of civic engagement thereby strengthening a sense of community.

Urban gardens can be a powerful tool for community building. Community gardens are neutral spaces that are not racially or religiously charged; they are generally inclusive and welcoming to all. They can serve as leisure locations where people are brought together because of similar interests. As Shinew (2004) argues, “leisure settings can be ideal environments for interracial interaction to occur due to qualities of free choice and self determination” (p. 336). Her

study examined whether community gardens were perceived as spaces in which people of different races could easily integrate; in particular, her research focused on African-American and white gardeners in St. Louis. Her findings suggest that community gardening is effective for promoting interracial contact, and both the white and the African American gardeners in her study agreed that community gardening brings people together who belong to different racial groups who would not normally socialize (Shinew 2004).

By working towards the construction and maintenance of a community garden, residents who belong to different racial or ethnic groups, or are in any way different (rich and poor, young and old) work together to address issues that are of collective concern (ibid). Not only does this increase the bonds between participants, it also builds social capital and encourages civic engagement as people strive to address greater neighborhood issues like crime, health and urban decline together.

### *2.1.2 Health*

Multiple studies demonstrate a significant relationship between gardening and healthy food intake. Alaimo (2008) found that adults with a household member who participated in a community garden consumed fruits and vegetables 1.4 more times per day than those who did not participate, and they were 3.5 times more likely to consume fruits and vegetables at least 5 times daily. Lackey et al. (1998) corroborated this. They found that gardeners reported engaging in more physical exercise in the previous week than comparison participants and maintained nutritious diets, with gardeners reporting consuming a mean of 11.9 vegetable helpings during the previous 24 hours, while the comparison group reported 4.55 helpings in the same period (p. 35).

With regards to youth in particular, Robinson-O'Brien (2009) found that garden-based nutrition-education programs for youth are a promising strategy for increasing preferences and improving dietary intake of fruits and vegetables. She concluded that participation in community gardens had a significant positive impact on childhood obesity and health. This idea is reiterated by Lackey et al. (1998) who quote stakeholders in their survey discussing that the children had increased their nutrition awareness since participating in the (gardening) program: "He doesn't want to play at the park. He wants to go to the garden to pick vegetables" (p. 43).

### *2.1.3 Food access*

The relationship between community gardens and food is particularly noteworthy. Even though the general perception is that community gardens produce very little food, recent studies like Vitiello's Harvest Reports of community gardens completed in Camden, Trenton, Philadelphia and Chicago, have demonstrated that urban gardens are making a great impact on food access (Vitiello, 2008, 2009, 2011 and NeighborSpace, *forthcoming*).

Gardening can make a big difference on household income, and is commonly used as a coping strategy particularly by the urban poor. Lackey et al. (1998) reported that the garden program they studied had "eased the gardener's food budgets", with 86% of respondents confirming they saved money on groceries (p. 44).

Food donations that come from community gardens are also considerable. In Chicago alone, there are 4 pantry gardens that grow specifically for food banks (like Ginkgo Organics in Irving Park), and another 33 gardens that partner in food donation programs with local organizations. In

Seattle, it was estimated that 26,248 pounds of food grown in community gardens were donated in 2012, an amount valued at $55,383 (Solid Ground, 2013).

### *2.1.4 Urban Revitalization*

Deindustrialization and depopulation from suburbanization have led to urban decay, poverty and blight. Experiences from Detroit and Chicago have taught us that it is unrealistic and unsustainable for city governments to maintain all city services and to revitalize whole neighborhoods by their effort alone; community participation – usually "hands-on" participation – is essential for this deep revitalization to occur.

Urban gardens are a very real example of how communities are redesigning their own surroundings and taking control of their environments. In Chicago alone, there are over 600 community gardens (*NeighborSpace, forthcoming*); that is, 600 otherwise empty lots that neighbors are taking care of, and that city services do not have to worry about maintaining.

Furthermore, community gardens are less expensive to maintain than other green areas like parks. A study conducted by Mark Francis found that a park in Sacramento, California cost twenty times more to develop and was twenty seven times more expensive to maintain than a community garden that was adjacent to it, yet received less than one quarter of the use the garden did (Francis, 1987 cited in Lawson 2005, 265).

# 3. Literature Review and Proposition

## 3.1 Community Participation

For many different reasons, community participation is essential for long-term success of urban projects[1]. First, there is an ethical aspect to participation; because we live in a democracy, there is a moral obligation to include people in planning processes. As Brenman and Sanchez (2012) state, "public involvement provides the conduit for communications and information exchange, which is the foundation for a democratic process" (p. 95). They also argue that "the level of public participation and involvement are commonly the first issues to be examined when evaluating the openness of a democratic society and its institutions" (p. 95-96). In sum, "inclusiveness is the basis of democracy" (p. 96).

Second, participation is necessary because it shows respect for the people affected by a certain intervention, and therefore manages to gather support for the project from these people. As Sanoff (1999) states, "the environment works better if the people affected by its changes are actively involved in its creation and management instead of being treated as passive consumers" (p. x).

Third, participation is relevant because it provokes new, unexpected collaborations. Participatory projects bring together people with similar objectives, which promotes trust and foster partnerships among neighbors and other participants in the process.

[1] By success we mean that a project is sustainable throughout time because the community is empowered, comes to relate to it with a sense of "ownership", and as such is engaged in taking care of it.

Not every participatory project is alike, though, and community participation theory asserts that there are different levels of participation. In her classic study on levels of citizen participation, Arnstein (1969) identified eight levels of participation, from manipulation (where there is actually no participation) to full citizen control. Other authors have proposed different theories on participation – such Wulz (1986), Burns et al (1994) and Wilcox (1999). For the purposes of this thesis, though, Arnstein's model is still valid and more comprehensive, and as such will be used as our framework.

One of the basic premises of Arnstein's framework is that "there is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process" (p. 216). The ladder of participation she proposes crosses this span between meaningless ritual and full citizen control.

At the lower rungs of the ladder are "manipulation" and "therapy", which refer to the empty rituals of participation and, as such, would be better described as "nonparticipation"; their goal is not to enable actual participation, but rather "to enable powerholders to 'educate' or 'cure' the participants" (p. 217). Next, are "informing", "consultation" and "placation". Arnstein calls these three rungs "tokenism", because even though there is some actual conversation and participation happening, participants lack any power to have their opinions be taken into account. Finally, in the upper part of the ladder, are "partnership", "delegated power" and "citizen control". In these rungs, citizens have the opportunity to negotiate, or to decide autonomously regarding the project at hand.

For the purposes of this thesis, only the levels of "delegated power" and "citizen control" are considered full participatory processes. As will be explained later, these were the kinds of processes encountered at La Huerta Roots & Rays.

## 3.2 Community Gardens

The notion that community gardens bring great benefits to urban areas is widely accepted (Ferris 2001; Lackey 1998; Lawson 2005; Shinew 2004; Yotti 2006; Malakoff 1995; Hancock 2001; Carney et al. 2012, Twiss et al. 2003). As a result, many individuals, community-based organizations and governments have come together to establish community gardens in the expectation that their neighborhoods would be revitalized, their food security increased, and their eating habits and health improved (Ferris, 2001; Twiss et al 2003; Bleasedale et al. 2011). Because of these expectations and the investments being made in community gardens, it is crucial to understand the dynamics behind a successful garden.

Even though the physical and logistical aspects of community gardens may seem to be a priority, - such as securing land, funding and other material resources -, a community garden is in fact, above all, more about the community that grows around it than about gardening itself (Glover et al. 2004). There are two main reasons for this. First, the motivation to establish a community garden often comes from a community's willingness to address a common problem, "notably urban decline and the criminal activity often associated with it" (Glover 2004, 143). Second, because a community garden is a relatively complex project that requires constant management and tending; it "cannot succeed with the enthusiasm of just one or two people" (Thomas 2008, 10). It needs strong community engagement, which will bring the resources the garden needs to succeed. In fact, having people committed to the garden project is the first step for a successful implementation (ibid).

Glover et al. (2005) provide a clear explanation of why community gardens need this involvement. As their argument starts, any organization needs "to mobilize necessary resources to

forward its own purposes" (Glover et al. 2005, 1). Organizations that are immersed in institutionalized contexts - such as established companies or government organizations - have many institutional means to guarantee the necessary resources; on the other hand, grassroots organizations need stakeholder buy-in, community engagement and a sense of ownership in order to survive. As they state, "The preservation of GAs [grassroots associations] often depends upon their ability to leverage a variety of resources situated within themselves, that is, among their membership and outsiders whom they can convince to support their cause" (ibid.). According to their argument, community gardens cannot survive without a network of committed members who will work and guarantee the resources to sustain them.

In the same way that the presence of community involvement is fundamental for the success of a garden, the lack of community involvement usually leads to a garden's demise. As a study on community gardening in New Hampshire states, the failure of a community garden is usually caused by a failure of human relationships (Beran et al. 2012). As the authors state, "rarely was failure based on mechanical problems, lack of money, or issues concerning soil, property, or irrigation" (Beran et al. 2012, 11).

When addressing the lack of community engagement as a failure factor, the literature points to different mechanisms through which failure happens. In the aforementioned report, Beran et al. refer to specific problems of human relationship that may cause community garden failure, such as "breakdown of communication, unclear expectations, and the lack of respect for others" (p. 11). In a study of community gardens in Hampden County, Kearney (2009) identified partnerships as an important characteristic of community gardens, and thus found that the lack of it "can limit the reach of a community garden organization" (p. 69). Thomas (2008) found that many community

gardens fail because members did not emphasize "the design of internal governance and communications structures" (p. 26). Citing Devorah Ketai (2006), Thomas (2008) refers to six elements of garden management that are crucial for their success: "attracting new members; orienting and educating new members; internal organization; internal communication; governance; and community partnerships" (ibid.).

### 3.3 Proposition

As established above, community involvement is a crucial factor for the long-term sustainability of community gardens. But how can we enhance community participation and engagement?

A participatory planning process may be a powerful tool to foster community engagement. As Thomas argues, one way to avoid community garden failure is to foster a sense of ownership from the beginning of the project (Thomas 2008), and having community members plan the project together may be the ideal way to do this.

This is the specific premise that this thesis seeks to explore. More formally, we will address the following proposition:

*Community engagement may be fostered through participatory planning, which contributes to the long-term sustainability of community gardens.*

To evaluate this proposition, this study will present and analyze the participatory planning process for *La Huerta Roots & Rays*, a community garden in Chicago. The next section will explain the methodology used in this research.

# 4. Methodology: Case Study through Participant Observation

## 4.1 Methodology

There are different research strategies in the social sciences. Yin (1994) identifies five of them: experiment, survey, archival analysis, history and case study. Each has its own appropriate use, depending on the nature of the research question, on whether the events are contemporary or not, and on the need of doing behavioral interventions (experiments) or not (p. 6).

For this thesis, the case study strategy was found to be the most appropriate. As Yin (1994) states, "in general, case studies are the preferred strategy when 'how' and 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (p. 1). This methodology suits both the research aspects and the context of this thesis, which seeks to explain how the practices involved in a participatory planning process may affect the success of a community garden. This thesis presents and analyzes a case study of the planning process for a community garden in Chicago in an attempt to answer this question.

## 4.2 Data

The data for this case study was collected primarily through participant observation. I had been an active member of *La Huerta Roots & Rays* since March of 2012 and acted as project manager for the remediation and redevelopment of the garden since the conception of the project through to May 2014 when we completed the basic reconstruction. This intensive participation gave

me an insider's perspective of the dynamics between the garden organization and the wider community.

As Yin (1994) states, one of the strengths of participant observation is that it "covers events in real time", "covers context of event" and allows for insights into "interpersonal behavior and motives" (p. 80). This last strength is particularly relevant in a thesis that seeks to uncover aspects of community building and engagement, which is ultimately based on human connections.

I recognize, however, some of the perils of participant observation – Yin (1994) states that, beyond the usual weaknesses of direct observation, participant observation may introduce "bias due to investigator's manipulation of events" (p. 80). I understand that I have written this thesis playing a dual role of researcher and agent of change, and I have tried to remain objective and impartial by being reflexive about where I stand. In order to maintain objectivity, I have tried to support my arguments with evidence from what was seen on the ground.

# 5. The Case

## 5.1 Background of the Garden

*La Huerta Roots & Rays* is a community garden in Chicago that was founded in 2008 by a group of urban gardeners. What started out slowly with a couple of planters and some odd shaped containers slowly grew into a modest yet well-maintained community garden. The garden was founded and run by a small group of white, middle class, young American students, even though the site is located in Pilsen, an overwhelmingly Latino neighborhood. There had never been significant participation in management or membership by any of the long-term Latino residents of the neighborhood, even though families who have lived in Pilsen for several decades surround the garden. By 2013, the garden had been all but abandoned, with few members still involved.

At this time, new leadership emerged with a desire to revitalize the space and broaden the membership base. They recognized that wider participation in the garden would be a good strategy for community building through placemaking. Their intention was to expand and diversify the membership base by engaging long-term residents and involving residents of different age groups and cultural backgrounds.

Around the same time, a critical issue came to light. After completing extensive environmental tests, gardeners discovered that the soil at the site was contaminated and had extremely high levels of chromium and lead. Even though they followed gardening best practices - only grew food in raised beds, and had the whole area covered thickly with woodchips - levels of

contaminants were so high in a few areas of the garden that these precautions were simply not enough and the area still posed a risk to the children in the neighborhood.

An opportunity emerged to remediate the site with support from NeighborSpace (a non-profit land trust dedicated to providing long-term protection for community gardens in Chicago). The process would involve removing 3 feet of soil from roughly 30% of the garden area (approximately 400 tons of soil) and replacing it with clean soil. This meant that in order to prepare for the remediation the garden would have to pull up all of its existing structures, essentially destroying what had been built over the past 5 years. It also meant that after the remediation the garden would have to be rebuilt from scratch. It was a huge task, both to remediate and to reconstruct the garden. The cost of the remediation alone was estimated at U$35,000.

NeighborSpace had been working towards acquiring the site for a few years and it looked like the paperwork would be complete by the fall of 2013. The opportunity to remediate the site and transform it into a clean, safe location served as a catalyst for garden leaders to jump into action and develop plans, ideas and projects for engaging with the community. The new leadership team recognized first off that if the site was to be transformed into something new, it should reflect the character of the residents who have deep roots in the neighborhood. And so, with this in mind, the team started to develop a community planning process to engage the residents and transform the space.

### 5.2 The Decision to Remediate and Redevelop

The garden leadership organized a meeting with the garden group in October 2013 to talk about the proposition to remediate the site. Their intention was to understand the members' feelings

regarding the remediation and necessary reconstruction of the space. After much discussion, garden members concluded that even though the remediation would come as a great inconvenience to everyone, it was their moral duty to move forward with it. Pilsen had very few green spaces, and because of the high levels of pollution all around, after remediation the garden would be one of the only clean and safe areas available for public use.

Garden members also talked about the possibility of redeveloping the site after it was remediated. The idea of tearing everything up and starting over was scary but exhilarating: they would have a blank slate to work with and would be able to plan the future of the garden with their neighbors. But members were extremely skeptical and disbelieving that they could pull off such a huge task. They settled on deciding that yes, they should remediate, and that they would do their best to rebuild the garden, but with very low expectations of what they would achieve (at that moment, it was utterly unfathomable that they would go on to complete a redevelopment project in the scale, budget and magnitude that they did). With this decision made, it was time to start planning how they were going to move forward.

# 6. The Planning Process

## 6.1 First steps

At the end of the meeting, a few people volunteered to be on the "planning team", including two garden members who were planning students at UIC. Over informal gatherings, the team matured the idea of organizing a series of planning meetings or "charrettes" that would be open to all members of the community. They prepared a rough outline and set dates for six meetings to take place over the winter. They knew where they needed to start and what they needed at the end: at the first meeting their intention was to establish community goals and objectives, and at the final meeting they wished to have a community-approved proposal for the site plan. Yet, they didn't know what the steps in between were.

With no funding, no venue, very little previous experience organizing public meetings, and no previous experience organizing a planning process, they were very nervous about how to proceed. Planning textbooks at this point eluded them; the best resource they found was the APA Charrette Handbook (Lennertz, et al. 2006), but even so their guidelines were for organizing larger, more complex planning processes, with costs ranging from USD$75,000 to USD$500,000 (ibid, p. 4). And so the planning team fumbled along. They talked things over and came to common sense conclusions. They contacted possible venues about letting them use their space, they reached out to local restaurants and stores about donating snacks and meals, art stores donated supplies; and after a while it seemed like they had a solid plan and all of the resources in place to set the date for the first meeting.

For ease of understanding, the planning process has been broken down into two sections: the planning sessions and the essential logistics involved with organizing the sessions.

## 6.2 The Planning Sessions

The planning process included six sessions, including an initial session, followed by four development sessions, and finally, an integration session, when they brought everything together and created the site plan.

### *6.2.1 Initial Planning Session*

The planning team decided that the first community meeting would be dedicated to understanding the goals and objectives of the community, and they would loosely base the following sessions on their findings from that day. At that first session then, they wanted to find out what people liked about the garden, what they would change about it and what would they like to see there in the future. The session was structured around three activities: envisioning the future; feedback from the community; and determining the goals and objectives for the plan.

About 35 people attended the meeting. The first activity was a visioning exercise that encouraged participants to close their eyes and "imagine the garden if...". They were asked to brainstorm and shout out words that came to mind. The predominant values to come out of this exercise were: welcoming, fun, friendly, healthy, beautiful, inclusive and green. These words were used as the foundation for the vision statement.

The planning team identified what the community's priorities for the garden were in their second exercise. The whole group participated in a brief discussion and together they chose 12 categories to vote on. Participants then received dot stickers and were asked to vote on the categories. After voting and debating, the priorities were determined as:

1) Food
2) Sustainability
3) Community building
4) Kids

The final exercise asked participants to write down their ideas for what they would like to see in the space. A total of 168 suggestions were made, and ranged from physical structures like raised beds to activities like classes and workshops.

The results from these three exercises combined shaped the proposed goals and objectives for the redevelopment of the garden (La Huerta Roots & Rays 2013 "*Goals and Objectives Matrix"*, p. 42) and were used to structure the following planning sessions. For example, they found that one of the community's priorities was that they develop an environment that was safe, fun and stimulating for children and so they decided to dedicate one of the planning sessions to *"Planning WITH and FOR Children"*. They also found that growing food was the top priority, and in the third exercise they received many suggestions about different growing different techniques and mediums, so they included a presentation on innovative growing techniques into the second session. Culture was also a popular topic, so they included an activity about Mexican art and culture into the fourth

session. By understanding what the community's needs and wishes were for the space, they were able to complete the schedule of planning sessions including activities, exercises and discussion topics that would cover these bases.

*6.2.2 Development Sessions*

The following four sessions were focused on developing the topics identified by the community in the initial planning session. Each week had one particular emphasis:

11/10/2013 - SESSION 2
Food: different gardening techniques for growing our own food

11/17/2013 - SESSION 3
Planning WITH and FOR kids

11/24/2013 - SESSION 4
Culture, Arts and Communication

12/01/2013
(THANKSGIVING – open space session to work on plan proposals)

12/08/2013 - SESSION 5
Review of plan proposals

12/15/2013 - SESSION 6 (Integration Session)
Defining the site plan

*6.2.3 Meeting Structure*

Each session was structured around a particular theme or goal, with activities, exercises and discussions that allowed participants to deepen their understanding around a particular matter or build consensus regarding specific issues. There was also free time or an activity allocated at every session for their two running themes: the individual projects and the site plan.

They tried to be creative and make the meetings as engaging as possible and so used different media, different presenters and different settings. The activities also included a lot of moving around and props and they avoided sitting around a table for too long and letting conversations drag on. They also tried to break up the size of discussion groups; sometimes they would have large group discussions and keep stack of people who wanted to speak, sometimes they would break into small groups then reconvene and have one representative from each group present their findings.

They quickly learned that their planning process was a living being, and that they had to adapt the structure of the meetings to suit the needs of the particular sessions. Sometimes this involved creating new processes from scratch. For example, one of the critical decisions they had to make was to determine how much of the growing area of the garden should be dedicated to individual, collective, or donation beds. The group was very divided about this and everyone felt very passionately about it. It was clear to them that if they tried to make a decision about this by talking it over with the whole group (they were expecting approximately 20-25 people) and trying to reach consensus, they would use up one entire 3-hour session, if not more.

They decided that they needed a process that was brief and democratic. After brainstorming with the planning team – and with other planning colleagues from UIC – they came up with a process of voting with corn kernels, whereby each garden member received 10 kernals, and they could use them to distribute the percentages they felt each of the three growing areas should receive[2]. On the day of, they had a brief group discussion when participants had the opportunity to present their opinions about the division of the space, and then they swiftly moved on to the vote. They managed to make a decision in less than 40 minutes, participants felt the decision was reached fairly and overall garden members were pleased with the outcome.

Each session was structured differently depending on the goals they had set for that week, but there were some commonalities among them. Here is an example of how a meeting was typically run:

The meeting would be set for 4pm and when participants arrived there would be snacks laid out by the sign-in table in the main hall. Poster boards would be up on the walls with sketches and notes from the previous sessions. At 4:15pm they would move into the conference room for a brief recap of the previous session and the agenda for the day. They would stay there for a brief presentation using slides and a projector and would break into small groups in the main hall for a charrette. At 5:30pm they would take a quick dinner break and then reconvene at 5:45pm to present their results: sketches would be tacked up the boards and groups would talk through their thought processes. This would be followed by a group discussion, with volunteers keeping track of time and

[2] The corn kernals also had a double symbolic effect as they were culturally relevant for the community, as well as something they grew at the garden.

taking notes on a flip chart, which would finally lead to a vote, if consensus had not yet been reached.

The planning team tried to pull in participants to present to the group as much as possible, whenever they found they could bring in a level of expertise that was missing from the conversation. Having personal knowledge about many of the participants beforehand, as they were already involved with the garden, and getting to know new participants on a personal level once they became involved, was a great advantage that allowed them to pull people deeper into the process.

For example, two participants delivered a great presentation on how the plan could incorporate elements from Mexican art and culture into the garden; another member presented on permaculture and different growing techniques. There was another participant who was a fantastic artist and could help with the designs and illustrations, but was also very shy, so they invited her to work with a few of the gardeners in small groups in situations she would feel more comfortable in.

They also invoked individuals or small teams to lead activities that they were experts in. For example one of the participants was an architect, so she led the conversations and activities regarding the development of the site plan; the session on planning with and for children was run by three other participants, a planning student, a child psychologist and a teacher's aide, who had the skills and the experience needed to structure planning activities for children.

Even though they had tremendous talent among the participants, on a couple of occasions they also invited outside speakers to serve as "resource people" (Center for Conflict Resolution, 2003). On such occasions, their intention was to broaden the group's perspective on specific topics and bring in some technical advice. For example, the director of NeighborSpace was invited to

deliver a presentation on Play Gardens, and brought photographs from examples of parks and gardens from around the world that the group could use as inspiration.

### *6.2.4 Individual Projects*

At the first planning session they were able to catch a glimpse of the multitude of activities that the community would like to see in the garden. Their neighbors wanted to use the space to read a book, to grill, to grow food, to play chess, to teach their children about their heritage, to compost, to train espaliers, to sunbathe, to socialize, to raise chickens ... and the list went on and on. The only way they would manage to cover everything on the wish list was to break the work down into specific projects for small teams and individuals to tackle. After gathering feedback from the community about each individual element – 69 in total - (La Huerta Roots & Rays 2013, "*Individual and Group Projects"*, p. 34), participants took the lead on different projects and developed them over the course of the planning sessions. Examples of the projects included: chess table, chicken coop, compost bin, cooking area and grill, fairy garden, bike dome, shed, hops tunnel, herb spiral, and frankentree (La Huerta Roots & Rays 2013, see index of Individual and Group Projects, p. 43).

By the third week, participants had created rough proposals of their projects and the planning team wanted to help take them to the next level. Their goal was to have final versions of the project proposals ready by the end of the planning process, including descriptions, material lists, budgets, designs and renderings that they could include in grant applications. But this was a challenge as they were working with a very diverse group of people, from very different

backgrounds and varying skill levels. They decided the best way to accomplish their goal was to have some "experts" working with participants one-on-one to give them a helping hand.

The team invited fellow planning students, designers, artists, architects and engineers (including some who spoke Spanish) to one of their final planning sessions to work with the participants. Each one brought a laptop and worked with the participants for about 2 hours. The end result was a modest collection of original and professional quality project proposals for the items they were including in the plan.

This process was important for capacity building of participants because many were introduced not only to different programs (Sketchup, Photoshop, Illustrator, CAD etc.) but they also produced a project proposal of their own from start to finish. Several of those participants applied for grants through the garden and are currently implementing those same projects (for example, the chess table, the children's growing area and the grill were all ideas that were developed during the planning process and then executed by the creators during the following summer).

### *6.2.5 Garden Name and Logo*

Since the garden had been founded by a group of white gardeners and the name of the garden was in English, an issue that kept coming up in the planning sessions was that the garden name should be changed to one that characterized the nature of the new space they were trying to create. In the fourth planning session then, the one dedicated to "Culture, Arts and Communication", the team included a discussion about the garden name. This was one of the longest conversations they had as a group, and definitely one of the hardest decisions they made.

In the end, they came to a consensus that the name of the garden should reflect their multicultural, bilingual character, and so the name should also be multicultural and bilingual. Hence, on November 24th, 2013, the name of the garden changed from “Roots & Rays Community Garden” to “La Huerta Roots & Rays”.

A couple of months later, in an effort to involve the students from the local school with the redevelopment project, garden members organized a friendly competition to choose a logo for the garden. St Pius Elementary School was across the street from the garden, a few doors down. The students were invited to submit designs for the logo with the new garden name. The competition was open to everyone, but the winner was a 10-year old student from St Pius.

#### *6.2.6 Integration Session*

This final session aimed to integrate all the individual projects into a coherent plan. By the beginning of this session, they had already defined which projects and elements would be included in the redeveloped garden. Their goal then was to figure out how they would bring it all together.

During this session they worked with four different spatial modeling techniques. The most engaging was a paper model of the site plan with accompanying miniature figurines of all the elements and projects that were to be included in the plan (69 in total). They split into groups and took turns arranging the figurines.

Interestingly, according to the architect and garden member who led the exercises that created the site plan, what the group achieved together was, in her opinion, the optimal arrangement of the elements, and a superior arrangement than any group could have come up with alone. A stop

motion video of the process can be seen here: https://www.youtube.com/watch?v=QGYRO16-vLk ("The Evolution of Our Site Plan").

## 6.3 The Logistics

### *6.3.1 Outreach*

The planning team considered the outreach plan to be critical because of specific neighborhood issues. There were cultural and language barriers to cross, as well as prejudice and an unspoken hostility towards the garden group that they needed to overcome (since its conception the garden had been a place known for its "whiteness"). They thought their whole approach to the redevelopment process had to be well thought out and sensitive to these issues, and they were particularly concerned about how they were presenting the endeavor to the wider community.

The outreach plan then became a crucial tool for communication as they were trying to convey not only the incredible opportunity that they had in their hands *as a community* (and not as the garden group), but also that everyone was welcome to participate in the process. Hence, the reach of the communication plan was very important.

They started by creating a list of stakeholders, including all of the interested parties they thought might want to get involved or might have a stake in the project, such as the nearby schools, youth groups, community organizations, churches, local businesses and the alderman's office. They then identified the residents within a 3-block radius, and finally added all of the members on the Facebook page and mailing list.

Once they knew their audience, they started to develop the written and print material. Every piece of written material prepared was bilingual in English and Spanish and included contact information for questions in both languages.

When the print material was ready, the team went door-to-door with fliers and invited people to the first meeting. They also met with community leaders such as the priest at the local church, the alderman, and with teachers and the headmistress of the nearby school to carefully explain their intention, try to gain their support and ask for their help in spreading the word. When the team met with their stakeholders they explained that they considered the first meeting to be the most important, as it was then that they intended be establish the community's goals and objectives for the space. It would be the first time the planning team would explain what the remediation process would involve and what an incredible opportunity this was to the greater community.

The team realized it would also be important to have an online presence, and so they created a website to post summaries of all of the sessions, with the intention of making the process accessible to anyone who was not able to come to the meetings. The website may be viewed at: http://remediationandredevelopment.weebly.com.

### *6.3.2 Time and Location*

Just as the cultural and language barriers were significant concerns in their outreach plan, they were also key in the choice of location. They had secured two possibilities: St Pius Church and Blue1647, a co-working space that was relatively new to the neighborhood. Both organizations supported the project and offered to let them use the space for free.

Blue1647 offered the best option in terms of infrastructure. They had an enormous amount of space, including a main hall with desks and chairs, meetings rooms with projectors and white boards, computer labs and wireless internet. It was a seven-minute walk away from the garden but was relatively hidden away and unknown. It was also a space that celebrated Black culture, a tiny but growing minority in the neighborhood. St Pius Church on the other hand had only one small meeting room to offer and no other amenities, but it was well known by community members, right across the street from the garden and was very well known and respected in the community. The space also celebrated Mexican and Latino culture.

The planning team knew they would have a better turnout if the meetings were held at St Pius, yet they needed the infrastructure that Blue 1647 could offer. They decided to have the first meeting at St Pius, as it would be an introduction of sorts, and then, once they had connected with the participants, hold the charrettes at Blue1647.

They were also concerned about finding a time for the meetings that would be most appropriate. They knew that in most families in Pilsen both parents had full time jobs and so weekdays or weeknights would be difficult for people to attend. They also knew from their gardening experience that Sundays were generally good days to gather a crowd. They decided to vote on a couple of options with the rest of the garden members and found that Sundays from 4 to 7pm would be the best time to hold the meetings.

### *6.3.3 Food*

As the meetings were scheduled to happen around dinnertime, the planning team made an effort to have food available. The team reached out to local stores, bars and restaurants asking for

food donations and received a positive reply. They had a good line-up of food donations scheduled for all six meetings.

They found that food was also important to keep participants active. The meetings were supposed to last 3 hours but inevitably they ran long or people stayed behind afterwards to work on individual or group projects. There were also snack breaks between activities, and these extra opportunities for informal exchange provided occasions for people to develop new ideas to present when they regrouped after the breaks. They were important for the creative process and enriched the conversations.

### *6.3.4 Childcare*

One thing that the planning team had not anticipated was the number of children that attended the first meeting at St Pius. They had not arranged childcare, they did not have toys and games and they had not considered ways to include the children in the planning process. They found that the presence of the children impeded the parents from participating because their attention was constantly divided. The children were also bored with all of the "grown-up talk", meaning that there were constant interruptions and the meeting did not flow as well as it could have. Offering childcare for the younger children was therefore crucial to welcome and engage families, and necessary to maintain a high level productivity in the meetings; and including the older children in the planning process would enrich everyone's experience.

The team adapted the meeting structure to make the necessary accommodations. They wanted to make sure the children were as engaged as the parents and participated whenever possible. The team divided them into age groups and organized special activates for the older ones,

and provided toys, games and crayons for the younger kids, along with adult supervision. Indeed, the team felt childcare was so important to keep participants at ease and focused on the planning activities that childcare was one of the only things they paid for from their very limited budget.

### *6.3.5 Bilingual Communication*

*La Huerta Roots & Rays*, being the multicultural space that it is, motivated the team to organize a fully bilingual planning process. Two languages, Spanish and English, were used from day one and participants were encouraged to speak in the language they felt most comfortable in. All meetings were opened with the following announcement (delivered in English and Spanish): *"This is a bilingual meeting, please speak in the language you feel most comfortable in."* All of the meetings included simultaneous interpretative translation, and multiple English-Spanish/Spanish-English dictionaries were available for participants to consult.

Even though the translation cut into the meeting times and almost doubled the workload, the planning team found that it was one of the most successful aspects of their planning process. They communicated very well as a group and the dual cultural perspective on all issues discussed brought a richness and depth to the conversations. They were confident that this greatly impacted the groups' creative flow and the quality of the resulting plan.

### *6.3.6 Facilitation*

The meetings were facilitated primarily by the two planning students who were on the planning team. They were careful to be as inclusive and respectful as possible, and to maintain the process open and transparent. They knew roughly what "deliverables" they needed at the end of

each session in order to make progress with the development of the plan – mostly decisions needed to be made and consensus reached concerning specific issues. At the end of each session, they would do a recap of what had been decided in that session and would open with the same message at the following meeting, to make sure the process moved forward. In total, 70 people participated in the whole planning process, but a much smaller number, roughly 20, came consistently every week. Since new people came every week, they had to be inclusive but make sure that the decisions the group had already made were not re-opened.

### *6.3.7 Final steps, Implementation and Recognition*

Once the planning process was over and the group had created the planning document and the project proposals for the individual projects, they started working on fundraising, grant writing and project implementation.

Funding for remediation of the site had already been secured by NeighborSpace through OSIF funds[3]. However the redevelopment of the garden, including all of the construction and landscaping, still needed to be financed. Even though their intention was to do most of the physical labor themselves, there were some tasks that they would have to contract out, and there was also a lot to be spent on materials.

In the end, they were able to secure approximately USD$45,000 in in-kind donations, store credit and cash from a variety of sources and grants, including U$10,000 from Whole Foods, U$15,000 from the Walton Foundation, U$3,000 from the Christian Relief Service and U$5,000 from Home Depot and more. Professionals who lived in the area provided services (for example

[3] Open Space Impact Fee

two contractors who lived by the garden built the fence and the paths[4]); local stores provided equipment and materials (for example Sunbelt Rentals loaned a bobcat for a whole month and Ozinga provided concrete at a massive discount). Finally, many people from the neighborhood showed up to help on the workdays as they rebuilt the site together.

By May 2014, the garden had been remediated and about 70% of the plan had been implemented. The redevelopment was overall a great success, and a detailed video of it can be seen at https://www.youtube.com/watch?v=Bo7qrU7Yfc8 ("La Huerta Roots & Rays - Time lapse of remediation/redevelopment 2014").

During the planning process, a strong community developed around the garden that is now protecting and managing the space. At the time of this writing, the 2015 gardening season was in full swing. Regular gardening activities began in 2015 as soon as the snow had melted. A community meeting has been called, inviting neighbors to participate in the garden; a garden manager has been voted in for the season; positions have been filled for the steering committee; seeds have been started at Blue1647, which had now became a full community partner; and new grants have been awarded to fund some of the remaining projects.

The tremendous support received during the reconstruction process reflected how the Pilsen community open-heartedly embraced the plan and the garden's redevelopment. Grants awarded from national organizations (Captain Planet Foundation, Walton Foundation) give a sense of how solid the project was; and in-kind donations and financial support received from local businesses

[4] The gentleman who built the paths lived across the street from the garden. He had never been involved with the garden and did not attend any of the planning sessions, but said he was working on the paths because "Now I have a reason to come here, for the grill and the picnic area. The garden is going to become an extension of my backyard".

and organizations (Ozinga, Sunbelt Rentals, Christian Relief Services) reflected what an impact the project had on the wider community and how much credibility the garden group had gained during the process. Finally, an award from the APA-IL for Community Outreach in 2014 was the ultimate recognition.

# 7. Findings

In this study, we have proposed that community gardens depend on an engaged community that will drive resources to sustain it. And, as the aforementioned literature suggests, this is not an easy thing to achieve. We have also proposed that a participatory planning process can be used to foster this long-term engagement with a community garden, and we have selected the case of *La Huerta Roots & Rays* as an example of this. In this section, we present the main findings of this study, which detail the practices through which the planning process fostered community engagement.

For analytical purposes, we have divided this section into two parts: engagement with the planning process; and engagement with the plan.

## 7.1 Engagement with the planning process

For a participatory planning process to be successful, people need to be truly involved. First, they need to be able to attend the meetings; they also need to feel that they are welcome; and they sometimes need to be empowered (for example, through effective facilitation). In this case study, we were able to identify several instance when these measures were used.

### *7.1.1 Careful Outreach Plan*

The planning team carefully planned and executed an outreach strategy that involved numerous stakeholders in the community. There were some particular challenges in this outreach

plan that are worth mentioning: there were culture and language barriers, and there was hostility towards the original garden group's "whiteness". The outreach plan took these issues into account and acted to counteract them by seeking out the community leaders and gaining their support, and by preparing bilingual print material that was culturally relevant.

The outreach plan was a fundamental first step to bring a diverse group of people on board with the planning process. It brought various advantages to the process. First, it brought legitimacy to its participatory nature - many non-members of the garden felt that they could participate in the planning process. Second, this brought legitimacy to what the team was doing vis-à-vis the neighborhood - community members would be more prone to support decisions made during the planning process even if they did not participate since they had been encouraged to join the effort. Third, this helped the planning team tap into community resources (such as food donations) from businesses and organizations in the neighborhood that knew that the process and the garden redesign were in progress.

### *7.1.2 Language*

As most of the residents of Pilsen were Spanish speakers, the planning team's decision to conduct a bilingual planning process was significant. Some participants did not communicate well in English, and they would not have been able to understand, let alone voice their ideas, if the process had not embraced them. Additionally, the fact that the interpretive translators were garden members ensured a closer, more personal environment that made people feel comfortable with the process.

### *7.1.3 Logistics*

Many decisions regarding the meeting's logistics were important to increase the participatory nature of the process. The first aspect refers to time and location; the planning sessions had a good turnout because these were carefully planned around the dynamics of the neighborhood. For example, the team was sensitive to the fact that even though they had a great location with the necessary infrastructure for the planning sessions, the church was a familiar location and hence more welcoming for the community. As such, they decided to hold the first meeting at the church, and then, after bringing people on board, they continued the sessions in the second location.

Second, offering food was a good measure to increase participation and to help people connect in an informal manner. Having good, hot food available gave people energy to keep going, even when the meetings ran late. Besides, it allowed for families to participate, as they would not need to cook that evening for the family. It also worked well to have snack breaks between activities; the breaks were informal and gave people an opportunity to interact and get to know each other, forming bonds between participants.

Another relevant measure taken was offering childcare as it was necessary to maintain a high level of productivity in the meetings. The fact that they also adapted the meeting structures to include planning activities specifically targeted for children is yet another example of how they were concerned with creating an inclusive and engaging process.

### *7.1.4 Making the process interesting, relevant and fun*

The planning team made a conscious effort to make the process interesting and fun for participants. Activities included a lot of moving around and props, and they avoided making people

sit around a table for too long and letting conversations drag on. This constant shifting of gears was important to keep such a diverse group of people engaged. They also adopted creative ways of doing things, customized for their particular context. For instance, voting was performed in a variety of ways, using dot stickers, beans, runoff method and more.

The final session was dedicated to the charrette of the site plan, which was perhaps the most engaging activity. This was a great exercise for multiple reasons. First, the dynamic nature of the exercise demanded constant negotiation between participants, and in the end they had reached a consensus about the layout. This really brought participants together. Second, it allowed everyone to visualize what they had been working towards for the past several weeks, giving participants a great sense of accomplishment, pride and satisfaction. This was crucial, as it motivated them to move forward the next steps in the process (fundraising and implementation of the plan) and to remain engaged with the garden.

### 7.2 Engagement with the Plan

As this study proposes, the first step to guarantee future community engagement with a project is to involve people in the planning process. The second step is to conduct the planning process in such a way that its practices will induce people to develop a sense of ownership with that which is being planned.

*La Huerta Roots & Rays*' planning process was successful because it promoted many practices that gave people ownership of the project; and ultimately making people feel emotionally attached to the garden and connected to other garden members motivated them to stay involved.

### *7.2.1 Democratic decision-making*

Every decision made was either by consensus or by vote. Even the most crucial decisions of the project were made democratically. For instance, even though the decision to remediate the (contaminated) land seemed obvious, the garden leadership still called a meeting with garden members to understand their positions and feelings about it. It also ensured that the decision was made by the group as a whole, giving everyone ownership of this important decision.

Another example of this was the first session, in which everyone could propose the goals and objectives for the garden. All goals and wishes of the community were included in a "goals and objectives matrix", which served as a guide throughout the whole planning process. All of the ideas that were suggested in that first meeting were included.

### *7.2.2 Individual projects*

Perhaps the activity that most fostered engagement and empowered participants was the development of the individual projects. As explained before, participants proposed ideas of elements to include in the garden (a grill, a picnic table, an apple tree, etc.) and were tasked with developing a one-page professional-grade summary of it.

Appendix 1 includes a table of the projects that were developed during the planning process (table 1). The first two columns present data on which projects were implemented. The other four columns indicate who was responsible for implementing each project: the "planning team", composed of a handful of planning students and garden leaders; the "garden members", most of whom participated in the planning process; the "community members", including neighbors who prior to participation in the planning process had not yet been involved with the garden, students at

the local school, youth groups and volunteer groups; and finally, the projects that were assigned to a "contractor".

Columns marked with an "X" indicate who was responsible for the implementation of each project. This includes overseeing the construction/development, actual hands-on building, and/or planting of each. For example, the native plants project (6.6) was organized by the "planning team" (they ordered the soil, the plants, the concrete and procured the bricks); "garden members" drove to a demolition site to pick up the bricks, while other bricks were donated by a community group; the "planning team" and the "garden members" then built the planting areas; and finally, the "planning team", the "garden members" and "community members", including volunteers from a local youth group, planted the native plants, completing the project. In this case then, three columns are marked with an "X".

In total, 69 projects were developed during the planning process. Of those, 51 had been implemented by the end of 2014. Of the 51 projects that were implemented, only 18 were executed with help from the planning team. Garden members took the lead and participated in the implementation of 39 projects, and the greater Pilsen community in the implementation of 21. Only 8 projects were paid jobs built by contractors.

This data reflects the extent to which participants in the planning process, garden members and the community that surrounded the garden felt empowered by the initiative. The space was practically rebuilt entirely by the greater community, with only 8 projects hired out to contractors.

If we analyse these numbers in the light of Arnstein's ladder of citizen participation, and consider the "planning team" to be the "power holders" (1969)[5], we can infer that the planning process succeeded in empowering participants in the two top rungs of the ladder: "delegated power" and "citizen control". Delegated power may be seen in examples such as the individual (1.1), senior (1.3) and donation beds (1.6), where the planning team ordered the supplies but the projects were proposed, designed and implemented by garden members and the greater community; while citizen control may be seen in multiple instances, in projects that were proposed and executed by garden and community members, without direction from the planning team, such as the bottle, tire and can planters (1.19, 1.20 and 1.21), the bird feeders (5.3), the seed saving project (6.1), all of the educational and directional signage (7.4, 7.5 and 7.6), and many more.

As is being proposed in this thesis, involvement with the planning process is essential for the long-term sustainability of the project, because it empowers and fosters the sense of "ownership" among participants. In this case, by bringing people to not only participate in the process, but to actually implement the plan, their connection to the place bears a concrete, rather than abstract, significance: there was indeed a part of the garden that existed due to them, and it was now their job (and the community's) to keep it alive.

### *7.2.3 Skill sharing and empowerment*

[5] Even though that is a bit of a stretch, considering the planning team was composed of 2 planning students and a few garden members, and had no connections to government or institutional planning agencies, were in fact, just passionate members of the community.

Another manner of fostering engagement and a feeling of empowerment was by assigning participants with special roles and functions throughout the process. Every session included presentations and activities led by different participants, often designed for participants to showcase special skills and expertise. For example, one of the garden members was an architect, and she helped with the site plan. Another was a child psychologist and she worked with the younger participants. Another member was a master gardener, and she prepared a presentation on gardening techniques. This made participants feel valued and appreciated, as they all had something special to contribute to the process. This is reminiscent of the asset-based model of community-based development where individual skills, assets and talents are identified and mobilized (Beran, 2012).

## 7.3 Limitations

Before assessing our proposition and concluding our thesis, it is necessary to expose some of the limitations of the current study.

First, the limitations regarding the methodology adopted must be acknowledged. Even though we believe participant observation was an appropriate method of data collection for our study, we could have expanded it to include interviews and surveys. By doing this, we would have been able to produce a richer account of how the planning process affected participants' sense of ownership regarding the community garden. Using multiple data sources would also have enabled us to triangulate the findings and confirm the interpretation of the data.

Second, as mentioned earlier in the outline of the methodology, participant observation can produce research bias. When the planning process started, I was living in the neighborhood for two

years and was personally involved with the project. Even though I have been reflexive about my position and have tried to be objective and avoid bias, it is likely that my position has introduced bias in some parts of this research. I just hope that the insights gained from being a participant in the process outweigh the risks associated with this dual role of participant and researcher.

Finally, another limitation of this research refers to the variables studied. There are various factors that contribute to the long-term sustainability of a community garden - land tenure, funding, access to water, strong leadership, among others. This research has focused on only one factors: community engagement. Even though we believe it is reasonable to narrow the focus of a research project on to a single variable, this study could have examined how the issue of community engagement relates to these other factors. For instance, how does community engagement affect the necessity of securing land tenure or funding? Perhaps strong community engagement can make a garden succeed even without these factors, as the community would be empowered to look at alternative solutions to their challenges. It would be interesting to see future research tackling the interaction between these variables.

# 8. Conclusion

Community gardens are unlike any other public spaces in that the responsibility for their maintenance lies upon the community that surrounds it. Very few cities provide resources and services to upkeep publicly owned spaces like urban gardens, and when they do they are minimal. This means that *one of the most important aspects of planning a garden is engaging with its potential users to make sure the space is kept alive and well maintained*.

In order for people to care for the space, they need to feel connected to it. A basic premise of planning a community garden therefore is *developing a community that will grow around the space*. The people involved need to be engaged in a way that they naturally take ownership of it.

This thesis has shown that one way of creating this connection and sense of ownership is through a participatory planning process, a proposition which is fundamented by community participation theory. Findings indicate that the specific practices implemented for *La Huerta Roots & Rays'* redevelopment project served not only to empower and mobilize participants during the planning sessions, but also to foster a sense of community and ownership towards the space. They also confirm that these practices lead to the establishment of a powerful bond between a community and a physical space, which contribute to the long-term sustainability of community gardens. As such, the case has demonstrated the validity of the proposition, that: *community engagement may be fostered through participatory planning, which contributes to the long-term sustainability of community gardens*.

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# APPENDIX

| | Implemented | | Persons Responsible for Project Implementation | | | |
|---|---|---|---|---|---|---|
| **Project Name** | **Yes** | **No** | **Planning Team** | **Garden Members** | **Community Members** | **Contractor** |
| **1. Growing** | | | | | | |
| 1.1 Individual raised beds | X | | X | X | X | |
| 1.2 Area for kids to garden | X | | | X | | |
| 1.3 Senior raised beds | X | | X | X | X | |
| 1.4 CSA donation box | | X | | | | |
| 1.5 St Pius herb donation | X | | | X | | |
| 1.6 Donation beds | X | | X | X | X | |
| 1.7 Communal berms | X | | | X | | |
| 1.8 Hugulkultur | X | | | X | X | |
| 1.9 Herb spiral | X | | | X | | |
| 1.10 Three sisters | X | | | X | | |
| 1.11 Mushroom logs | | X | | | | |
| 1.12 Grape vine arbor | X | | ! | | X | |
| 1.13 Berry fence | X | | ! | | | X |
| 1.14 Hop tunnel | X | | | X | X | |
| 1.15 Dwarf fruit trees | X | | | X | | |
| 1.16 Fruit tree espalier | X | | | X | | |
| 1.17 Frankentree and guild | | X | | | | |
| 1.18 Boot planters | | X | | | | |
| 1.19 Bottle planters | X | | | X | | |
| 1.20 Tire planters | X | | | X | X | |
| 1.21 Can planters | X | | | X | X | |
| **2. Kids** | | | | | | |
| 2.1 Kid's clubhouse | | X | | | | |
| 2.2 Green box | | X | | | | |
| 2.3 9-piece puzzle | | X | | | | |
| 2.4 Music wall | | X | | | | |
| 2.5 Rocks and logs to climb on | X | | X | X | | |
| 2.6 Free little library | X | | | X | | |
| 2.7 Miniature garden | X | | | X | | |
| **3. Art and culture** | | | | | | |
| 3.1 Mural on wall | X | | | | X | |
| 3.2 Mosaic pavers | X | | | X | X | |
| 3.3 Mosaic on cinder blocks | | X | | | | |
| 3.4 Mosaic stoops | | X | | | | |
| 3.5 Nopal sculpture | | X | | | | |
| **4. Social** | | | | | | |
| 4.1 Grill | X | | | X | X | X |
| 4.2 Sink, shelves and food prep | | X | | | | |
| 4.3 Eating / seating area | X | | | X | | |
| 4.4 Fire pit | X | | | X | | |
| 4.5 Chess table | X | | | X | | |
| 4.6 Hammock | X | | | X | | |
| 4.7 Golden mean | | X | | | | |
| 4.8 Bike dome | X | | | X | X | |

Table 1: Implementation of individual projects

| | Implemented | | Persons Responsible for Project Implementation | | | |
|---|---|---|---|---|---|---|
| **Project Name** | **Yes** | **No** | **Planning Team** | **Garden Members** | **Community Members** | **Contractor** |
| **5. Birds, bees and chickens** | | | | | | |
| 5.1. Beehives | X | | X | | X | |
| 5.2 Bird bath | X | | | X | | |
| 5.3 Bird feeder | X | | | X | X | |
| 5.4 Chicken coop | | X | | | | |
| **6. Sustainability** | | | | | | |
| 6.1 Seed saving | X | | | X | | |
| 6.2 Compost system | X | | | X | X | |
| 6.3 Rainwater harvesting | | X | | | | |
| 6.4 On site water source | X | | X | | X | X |
| 6.5 Bike rack | | X | | | | |
| 6.6 Native plants | X | | X | X | X | |
| **7. Communication** | | | | | | |
| 7.1 Information kiosk | X | | X | | X | X |
| 7.2 Information board | X | | | X | | |
| 7.3 Mailbox | | X | | | | |
| 7.4 Picking / no picking signs | X | | | X | | |
| 7.5 Directional signs | X | | | X | | |
| 7.6 Educational signs | X | | | X | | |
| **8. Storage** | | | | | | |
| 8.1 Shed | | X | | | | |
| 8.2 Shedito | X | | | X | | |
| **9. Borders and pathways** | | | | | | |
| 9.1 Main entrance - arbor | X | | X | X | | |
| 9.2 Corner entrance on Cullerton | X | | X | X | | |
| 9.3 Side entrance along alley | X | | X | | | X |
| 9.4 Back entrance and staging area | X | | X | | | X |
| 9.5 Fence around perimeter of garden | X | | X | | | X |
| 9.6 Fence around individual growing area | X | | X | | | X |
| 9.7 Pathways | X | | | | X | |
| 9.8 Woodchips | X | | | X | X | |
| 9.9 Central social area | X | | X | | X | |
| 9.10 White clover | X | | X | X | | |
| **Totals** | **23** | **5** | **12** | **14** | **9** | **6** |

Table 1: Implementation of individual projects

# VITA

# Patricia Bon

Citizenship: Brazilian

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## EDUCATION

**UNIVERSITY OF ILLINOIS AT CHICAGO** | *Masters Candidate, Urban Planning and Policy* — **Chicago, USA**
2012 - ongoing

- Concentration: Food Systems Planning, Community Development, Sustainable Urbanism
- Expected graduation: December 2015 (thesis approved pending changes)

**UNIVERSITY OF EDINBURGH** | *Joint Bachelors and Masters degree in Sociology* — **Edinburgh, UK**
1999 - 2003

- Concentration: Urban Sociology

## AWARDS

**THE ROB MIER AWARD – SOCIAL JUSTICE AND EQUITY PLANNING** | *University of Illinois at Chicago - College of Urban Planning and Public Affairs* — **Chicago, USA**
2013

- The Rob Mier Award is an annual scholarship awarded to a student who demonstrates commitment to social justice and equity planning.

**COMMUNITY OUTREACH AWARD 2014** | *American Planning Association Illinois* — **Chicago, USA**
2014

- For the Remediation and Redevelopment Project for La Huerta Roots & Rays

## EXPERIENCE

**Brasília, Brasil**

**PROJECT MANAGER** | Horta Comunitária SQN 106 — 2015 -
*I am leading a community-driven planning process in Brasília to set up a community garden in SQN 106. Implementation of the project is estimated to begin in March 2016.*

- Developed project proposal that was approved unanimously by community council;
- Managing all areas of the project, including communication, scope, timeline, costs, stakeholders and human resources;
- Organizing community meetings and community planning process;
- Coordinating stakeholder participation including 45 community members;
- Wriitng detailed summaries and reports of all the meetings.

**GRADUATE ASSISTANT** | *College of Urban Planning and Public Affairs* — **Chicago, USA**
2012 - 2014

- Supported and maintained relationships with partner organizations and student employers by assisting the Director;
- Prepared notes and summaries of meetings and other documents;
- Prepared presentations and hosted workshops and meetings for students, faculty and staff;
- Liased with public and provided information on a variety of issues such as the department's career development program and activities;
- Organized large, annual events and smaller, internal presentations and workshops;
- Worked collaboratively with multiple university departments, business organizations, non-profit organizations, students, faculty and staff.

**PROJECT MANAGER** | La Huerta Roots & Rays – *Remediation and Redevelopment Project* — **Chicago, USA**
2012 - 2014

*La Huerta Roots and Rays is a community garden in the south side of Chicago. In 2012 we discovered the soil at the site was very contaminated and has extremely high levels of chromium and lead. For the*

*past couple of years I worked as a volunteer leading a community-driven remediation and redevelopment project to clean up, re-design and rebuild the site.*

- Organized 6 community-planning sessions to develop blue print for the garden;
- Compiled final plan (http://issuu.com/patriciabon/docs/book_1.1_print);
- Coordinated participation of multiple stakeholders, including 70 garden members and neighbors, community organizations, youth programs and schools;
- Removed 240 tons contaminated soil and rebuilt site in Spring 2014;
- Increased growing area for food by 70%;
- Total cost: US$100,000.

**PROJECT MANAGER** | NeighborSpace – *The Harvest Study*
**Chicago, USA**
2012 - 2013

*The goal of the Harvest Study was to calculate how much food was being produced in community gardens in Chicago in 2013. The intention was to supply data to support burgeoning food policy in Chicago.*

- Collected data and prepared map of 600 community gardens in Chicago;
- Developed research design, outreach plan, and staff training;
- Coordinated site visits and data collection for 4 research teams over 3 growing seasons at 270 sites;
- Compiled finalized data.

**PROJECT MANAGER** | Rede Terra and Fundo de Microrrevoluções - *Semear & Viver*
**Cristalina, Brazil**
2011

*The goal of Semear & Viver was to recover a small spring in Assentamento Vitória that was drying up due to deforestation. The spring supplied water to a small community of family farmers.*

- Developed, coordinated and financed (with crowd funding);
- Worked in partnership with Rede Terra (a non-profit organization that works with sustainable family farming and environmental protection); and Fundo de Microrrevoluções (a small group of independent do-gooders who raise money for projects in Brasilia);
- Started and transplanted 1,000 native tree seedlings (including fruit trees) in an area that was severely damaged;
- A summary of the project may be viewed here: http://fundodeiniciativas.blogspot.com.br/2011/06/2-reflorestamento-da-cerra-linda-de.html

**PROGRAM DEVELOPER** | SENAI - *Workshop on Food Safety and Kitchen Hygiene*
**Díli, East Timor**
2009

*During a business trip to East Timor, I identified a demand for instruction on basic food safety among the cooks I was working with. In response, I organized a free, open workshop on food safety, kitchen hygiene and basic cooking techniques for chefs and home-cooks with the local SENAI office.*

- Developed project, coordinated program and taught the classes;
- Worked in collaboration with SENAI on logistics, outreach and materials;
- Prepared handbook and presentation;
- Led 2 classes, 9 hours each, for a total of 90 participants.

**CHEF** | *Food Industry*
**Scotland, Brazil, England, South Korea, East Timor**
2003 - 2011

*Between 2003 and 2011, I worked as a chef at high-end restaurants and events in several parts of the world.*

- Founder and co-owner of Umami Catering in Brasilia;
- Short stints at Aquavit, Patú Anú and personal chef at events in Brasília, including work in Embassies and international events;
- Spokesperson for Brazilian culture and cuisine in Seoul in 2012 for the C20 Conference;
- Brazilian food festival in East Timor;
- Internship at The Fat Duck in the UK;
- 3 years at Roberta Sudbrack in Rio de Janeiro.

## COURSES & TRAINING

**DESIGNING YOUR GARDEN USING PERMACULTURE PRINCIPLES** | *Inspiration Kitchens* **Chicago, USA**
2013

- 2-day, 16-hour project-focused workshop on how to design gardens using permaculture techniques.

**RACIAL HEALING THROUGH THE FOOD SYSTEM** | *Intensive Leadership Facilitation Training (ILFT)* **Chicago, USA**
2012

- Training program to explore, challenge and question institutional and structural racism and learn practical applications of becoming an agent for change.

**CHICAGO CONSERVATION CORPS** | Chicago Center for Green Technology **Chicago, USA**
2012

*An initiative of the Chicago Department of Transportation to recruit, train and support a network of volunteers who work together to improve the quality of life in neighborhoods and schools through environmental service projects.*

- The course covered conservation principles and skills in Water (conserve water, manage stormwater, and improve water quality), Green Spaces (how to work with community groups to create new spaces and care for existing ones), Waste (recylcling, reducing, reusing), Energy (using alternative energies and energy efficiency), Green Health (promoting indoor and outdoor air quality, active transportation, healthy eating and vegan diets); Community Organizing (recruiting and managing volunteers, leading community projects); Project Development and Implementation (completing a community asset map, managing a budget, making a plan and carrying it out).

**HOMEGROWN CHICAGO** | Openlands **Chicago, USA**
2012

*HomeGrown Chicago is a training program sponsored by Openlands that focuses on fostering neighborhood groups to assess, plan for, and build long-term stewardship for community-managed green spaces.*

- The course covered information on how to start, maintain and manage a community food gardens in urban areas, and included information on organic food production, food access and food donation programs, community organizing, membership and leadership skills.

**PDC: PERMACULTURE DESIGN COURSE** | IPOEMA, Instituto de Permacultura **Brasília, Brazil**
2011

- The course covered principles and skills in functional design, systems thinking, animal raising, and small-scale sustainble farming.

**SAF: SISTEMAS AGROFLORESTAIS** | IPOEMA, Instituto de Permacultura **Brasília, Brazil**
2011

*Agrofroestry is a land use management system that grows trees and shrubs among crops and pasture. It combines agriculture and forestry technologies to create a diverse, productive, profitable and sustainable agriculture practice.*

- The course covered basic agriculture and agroforestry principles including different planting systems (alley cropping, hedges, orchards, mixed woodlands, trees in pasture), ecological benefits (soil management, weed control, nutrient cycling, enhancement of biodiversity, increased yield and nutrient content); economic benefits (economic stability through diversification of local products and economies, improved food and fuel security, improved health through nutrition).

**EMPRETEC** | SEBRAE **Brasília, Brazil**
2011

*EMPRETEC is a United Nations program established by the UN Conference on Trade and Development (UNCTAD) to promote the creation of sustainable small- and medium-sized enterprises.*

- The course covered Opportunity-seeking and initiative; Persistence; Demand for quality and efficiency; Calculated risk-taking; Goal-setting; Information-seeking; and Systematic planning and monitoring.

## CONFERENCES & SPEAKING ENGAGEMENTS

**7th INTERNATIONAL AESOP SUSTAINABLE FOOD PLANNING CONFERENCE** **Torino, Itália**
*Presenter.* 2015
- I presented a paper on participatory planning processes for community gardens.

**CONNECTING CHICAGO COMMUNITY GARDENERS** **Chicago, USA**
*Speaker and facilitator.* 2014
- CCCG is an annual conference in Chicago for community gardeners to connect, learn, share ideas, and work together.
- I was a speaker on a panel about food donation programs at community gardens and talked about our experience with the programs we implemented at La Huerta Roots & Rays.
- I was a facilitator for the South West side regional breakout session.

**GARDEN KEEPERS** **Chicago, USA**
*Speaker.* 2014
- GardenKeepers is an interactive, hands-on course for community gardening focused on earth friendly, chemical free methods conserving natural resources.
- I was invited to talk about our planning process for La Huerta Roots & Rays.

**FORUM ON DEVELOPING WORKER COOPERATIVES IN CHICAGO** **Chicago, USA**
*Participant.* 2013
- Forum on developing cooperative businesses for the Chicago area; included an overview of cooperative models in the US and an analysis of the economic impact of cooperatives in the United States.
- My interest was in how we could apply cooperative models in food production.

**THE LOCAL FOOD SYSTEM AS A STRATEGY FOR ECONOMIC DEVELOPMENT** **Chicago, USA**
*Volunteer and Participant.* 2012
- Workshop organized by CEED (Center of Excellence in the Elimination of Disparities) about the potential economic benefits to municipalities that can be realized through the production, processing, distribution, consumption, and recycling of food.

**EARTH SUMMIT 2012 (RIO+20)** **Rio de Janeiro, Brazil**
*Participant.* 2012
Participated in the following events, among others:
- Innovation and uptake of best practices for sustainable agriculture
- Food security, green economy and biodiversity conservation: lessons from the Brazilian agriculture sector
- Indigenous Peoples, Food Sovereignty and Sustainable Development

## ADDITIONAL INFORMATION

**LANGUAGES**
- Bilingual in Portuguese and English
- Intermediate Spanish
- Basic knowledge of French and Italian

**COMPUTER SKILLS**
- Ability to work with several operating systems, including Windows and Mac OSX
- Microsoft office (Word, Excel, Powerpoint)
- Adobe Creative Suite (InDesign, Illustrator, Photoshop)
- Website management tools (Wordpress, Weebly)
- Social media (Facebook)

**MEMBERSHIPS**

- Advocates for Urban Agriculture
- Chicago Food Policy Advisory Council
- American Planning Association

## REFERENCES


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