Edible Sacramento: Soil Born Farms as a community-based approach to expanding urban agriculture

David de la Peña, Ph.D.

keywords   Urban agriculture, community engagement, alternative food networks, community gardens, permaculture

Abstract

Urban agriculture (UA) has taken root in Sacramento and its relatively quick rise owes much to the efforts of the nonprofit Soil Born Farms. The organization's transition from farming vacant land to becoming a nonprofit and regional UA advocate highlights the potential of grassroots organizations to create spaces of engagement and resistance. This paper focuses on calls for UA's expansion and the appropriate roles for government, nonprofits, and designers. In particular, it addresses efforts to expand UA through top-down design and policy initiatives, and it responds to critiques that UA may be misused to further the neoliberal project. As this study shows, Soil Born's ability to mobilize UA networks has exceeded the city's capacity to bring about systemic change. With a focus on incrementalism, relationship-building, and food systems education, Soil Born has helped establish networks that have mobilized citizens, urban farmers, gardeners and gleaners to remake Sacramento as an edible city. This paper concludes that institutionalizing the existing, dynamic grassroots networks and practices would significantly diminish their impact, and that top-down design approaches and critiques of grassroots efforts may be misplaced. Furthermore, landscape architects can play an important role in designing UA at multiple scales, but they must be grounded in a familiarity with local actors and practices in order to be relevant.

Introduction

On a cool autumn morning, Judith Yisrael is standing at a metal folding table, chopping collard greens and onions in her backyard farm in Oak Park, Sacramento. Surrounded by camera-wielding family members, dozens of neighbors and a handful of urban farming activists, she demonstrates how to prepare an Ethiopian dish of spicy greens on an electric skillet, and when she offers samples she is rushed by children, who leave only turmeric stains on their fingers and plates (Figure 1). Beyond the crowd, volunteers at the farm are showing guests around the garden beds, the bee boxes, and an orchard full of chickens (Figure 2). Meanwhile, Judith's partner Chanowk is admiring the new vegetable plots that Randy, of the nonprofit Soil Born Farms, helped prepare with 30 volunteers from the National Guard. I'm chatting with Chris, who like Chanowk is a student enrolled in a permaculture design course that Soil Born Farms is hosting. Chris and his wife Ruth are starting their own urban farmstead several blocks away, with help from classmates and other community-based organizations. This scene is increasingly common in Sacramento and is a sign that urban agriculture is thriving; yet it is doing so without much direct support from city and county officials, and with little involvement by landscape architects.

Despite its lack of direct support for urban farmers, the City of Sacramento did proclaim itself "America's Farm-to-Fork Capital" in 2012 and its visitor's bureau is promoting its local farms and culinary scene, as activists push urban agriculture (UA) ordinances through the city and the county with little resistance. This local UA movement parallels a broader fascination with food systems that was initially driven by chefs and writers like Alice Waters, Jamie Oliver, Michael Pollan, and Eric Schlosser (Nestle, 2006; Pollan, 2009; Schlosser, 2001). Over the past several years, UA has also permeated academic discourses in landscape architecture, community development, health, urban planning, and sustainable agriculture. In both academic and popular venues, writers have critiqued large-scale industrial farming while upholding grassroots food production—urban farming in particular—as an environmentally, socially,

Figure 1. Preparing greens with Judith Yisrael (de la Peña)

Figure 2. Open House at the Yisrael Family Farm (de la Peña)

and aesthetically preferred alternative to the conventional food system (see for example Rich, 2012).

The successes of the pioneering UA projects in cities like San Francisco, Seattle, Milwaukie, and Baltimore have prompted many within and outside of the movement to call for more expansive approaches that would extend the benefits of UA to more people (Nasr, MacRae, & Kuhns, 2010; SPUR, 2012). Some of these calls for scaling up UA, however, indirectly devalue the community-based nature of existing UA projects by proposing more consolidated, top-down approaches; grassroots efforts are lauded but simultaneously deemed too limited to effect substantial change (Viljoen, Bohn, & Howe, 2005). Some social geographers have also critiqued food activists and community gardeners for ignoring the structural causes of food injustice. According to these critics, local food system actors inadvertently play into a neoliberal trap by assuming general welfare responsibilities, and thus enabling the state to retreat from its obligations to health and sustainability (Goodman, DuPuis, & Goodman, 2012; Guthman, 2008; Staeheli, 2008).

This paper focuses on the current calls for UA's expansion and the roles of government, community-based organizations (CBOs) and designers. It examines the allure and the critiques of small-scale urban food production and provides examples of how designers have proposed extending UA's reach. Next, it describes how local food system actors—the nonprofit Soil Born Farms in particular—have nurtured community networks that support UA within the city of Sacramento. Using evidence from participant observation, interviews, and textual analysis, the paper describes how Soil Born grew from a small experiment in vacant lot farming to become a regional leader in urban agriculture, youth education, technical training, food access, and community engagement. Its experience illustrates the ability of local actors to scale up UA through community-based networks, as well as the potential challenges of a grassroots approach, which include an uneven distribution of resources, burdens of maintaining social programs, and the dependency on grant funding.

Secondarily, the paper explores the theme of design and the role of landscape architects, who have not been visible actors in Sacramento's UA movement. This study finds that many local UA actors believe that professional designers are primarily driven by aesthetic considerations at the expense of physical and social ecologies. In place of professionals, UA networks are more likely to eschew design altogether, or turn to "permaculture designers," whose values are perceived to be more aligned with their own. This study of Soil Born Farms and Sacramento's UA movement gives support to the notion that community-based approaches to creating and designing alternative urban food networks are viable and preferable to top-down approaches. It argues that landscape architects should engage in the discourse of how to expand UA, not through the ungrounded and unrealizable designs of urban and exurban agricultural infrastructures but through a familiarity with the local actors and places that have already demonstrated that farming the city is a valuable and necessary endeavor.

The Allure and Critique of Small-Scale Urban Agriculture

In their book Agricultural Urbanism, Janine de la Salle and Mark Holland characterize the rising awareness of food systems as "waking from the coma" (De La Salle & Holland, 2010). During the 20th century, they argue, urbanization and the commodification of food divorced people from farms and the systems that bring food to market; as a result, cities are places where citizens don't know where their food comes from, how it got there, or what it contains. This point of view is popular and convincing, and the exposure of America's dysfunctional "industrial food complex" by de la Salle, Pollan and

others, has been a launching point for food activism and food system reform (De La Salle, Holland, & Lanarc, 2010; Nestle, 2006; Pollan, 2009). When large scale grocery stores, industrial processing plants, multinational corporations and agribusiness are identified as the poison, as they have been by many critics, local markets, artisan production, CBOs, and small farms become the antidote (Cockrall-King, 2012; Weber, 2009).

For decades, discourses around UA were limited to community gardens, which were subject to a kind of romanticization and granted self-evident value with little empirical evidence. In recent years, scholars have added considerable weight to the intuitive notion of UA's multiple contributions (see Surls et al., 2014, for a compendium of UA research). UA as a whole has been difficult to evaluate, but documented benefits include increased property values (Been & Voicu, 2006), generation of fungible income (Nairn & Vitiello, 2010), reduced crime (Glover, 2004), carbon capture (Kulak, Graves, & Chatterton, 2013), food access (Cockrall-King, 2012; Lawson, 2007), public health (Twiss et al., 2003) and social capital and conviviality (Agustina & Beilin, 2012; Hou, Johnson, & Lawson, 2009; Rich, 2012). Within the design fields, recent literature tends to promote UA by appealing to an aesthetic of community-built informality. The popularity of books such as Urban Farms (Rich, 2012), Greening Cities, Growing Communities (Hou et al., 2009), Designing Urban Agriculture (Philips, 2013) speaks to a growing acceptance of landscapes that highlight intimate connections between people and place, that demonstrate local control, and that display an aesthetic of messy vitality. Sarah Rich's exquisitely photographed book, Urban Farm, is exemplary in this regard, replete with vivid images of hand-made signs, multi-colored bee boxes, improvised trellises, and unkempt compost heaps (Rich, 2012).

The appeal of local, grassroots food activism, however, is not without its critics, including those who favor structural solutions over piecemeal approaches. Some argue that the benefits of UA are not inherent by virtue of their local or small-scale qualities. Born and Purcell (2007) warn that the aura of the local is a trap, and that the scale or location of a farm does not predict its contributions to sustainability or health. Others expand upon this claim, adding that UA and food activism reinforce neoliberalism by "responsibilizing" citizens with the oversight and management of their own food systems and economic welfare, while the state retreats from providing a safety net in the form of food stamps or medical services (Biltekoff, 2013; Goodman et al., 2012; Guthman, 2008). Still others have pointed out that reliance on grassroots actors can make cities vulnerable to an uneven distribution of resources, as charitable services and community activism tend to concentrate in certain neighborhoods but not others (Galt, Gray, & Hurley, 2014; Ghose & Pettygrove, 2014; McClintock, 2014;

Pudup, 2008). Despite this caveat, McClintock and others still argue that UA offers enough benefits to outweigh its shortcomings. For McClintock, "radical" and "reformist" activism must also be accompanied by "broader, multiscalar discussions of political economic structure, redistributive equity, or just sustainability" (McClintock, 2014). My observations in Sacramento support the claim that grassroots actors like Soil Born operate amidst and with some awareness of the contradictions of their work, tactically operating within cracks left by a retreating state and creating spaces of resistance and of engagement. The UA networks fostered by Soil Born do not simply assume former responsibilities of the city; they also prod government officials to engage in broad policy discussions that would promote UA through relaxed zoning standards, tax incentives, and the creation of a regional food policy plan.

Scaling Up Urban Agriculture

Calls for greater governmental management of food systems is amplified by UA supporters who find that small-scale practices do not produce substantial change. April Philips, in Designing Urban Agriculture (2013), argues for example that UA must be scaled up "to make a more significant impact." She proposes designing agricultural landscapes at the scale of the city. "Current urban design and planning," she writes, "is focused on the fragments rather than a cohesive whole (2013, p. 5). Philips calls for a national policy framework for UA as well as city and regional planning processes, within which she still views the grassroots actors as essential stakeholders. Other design scholars, however, have been less convinced of the social benefit claims of local food system activists. In Andre Viljoen's edited book CPULs: Continuous Productive Urban Landscapes (2005), Susannah Hagan evinces some frustration with bottom-up practices:

> Urban agriculture tends to define itself as a bottom-up, grass roots movement with no time for the top-down elitism of designers. This is misguided. Environmentalism, in whatever guise, demands both top-down and bottom up initiatives. Freeing up or reclassifying land for UA requires more than a desire to hold hands and plant vegetables. It requires top-down intervention by planners and local authorities. (Viljoen et al., 2005, p. 55).

One might agree with Hagan that both top-down and bottom-up processes are necessary, but most of the essays in CPULs focus on top-down processes, making the case for a new city order that could only be realized by means of strong hierarchical control. The continuous productive landscapes, as represented in the image below (Figure 3) theoretically make use of unused urban land, but in most cities the vast scale of this proposal presents complications.

Bohn and Viljoen's interest in UA is admittedly buoyed by an aesthetic goal: "urban agriculture in particular," they write, "can be read as a deeply understood form of ornament within the city. Through urban agriculture it is possible to experience urban ornament" (Viljoen et al., 2005, p. 249). The ornament shown throughout the book depicts the productive landscape as patterned bands of color extending horizontally across the landscape and vertically onto building surfaces (Figure 4). This ornament includes "city-traversing open spaces running continuously through the built environment," yet the political and economic mechanisms by which this might be accomplished are again not clearly described (Viljoen et al., 2005, p. 11).

The futuristic visions found in the Viljoen text should remind readers of earlier urban design utopias. which Viljoen in fact references, including Ebenezer Howard's Garden City, Le Corbusier's City of To-morrow, and Frank Lloyd Wright's Broadacre City (Viljoen et al., 2005). Each of these designs integrates gardens and farming into a suburban or exurban context, and each would have required consolidated power to materialize. Wright was aware of this fact, and accordingly proposed replacing the county government with a county architect. But Viljoen's book is not alone in following the lead of these influential designers. The editors of Carrot City (Gorgolewski, Komisar, & Nasr, 2011), similarly call upon Howard and Wright in their "re-visioning" of the contemporary city. In their book, agriculture is imagined as integral to "farming subdivisions" and what one

Figure 3. Diagram of the city developing into a Continuous Productive Urban Landscape (Viljoen, 2005)

Figure 2.1

Figure 2.2

Figure 2.3

Figure 2.4
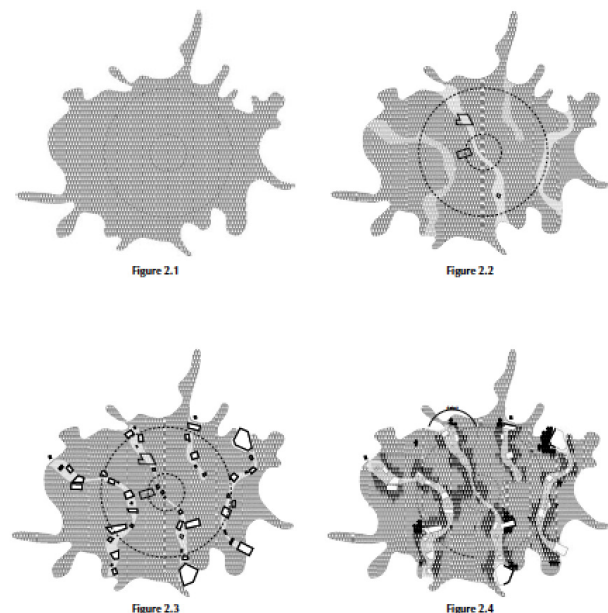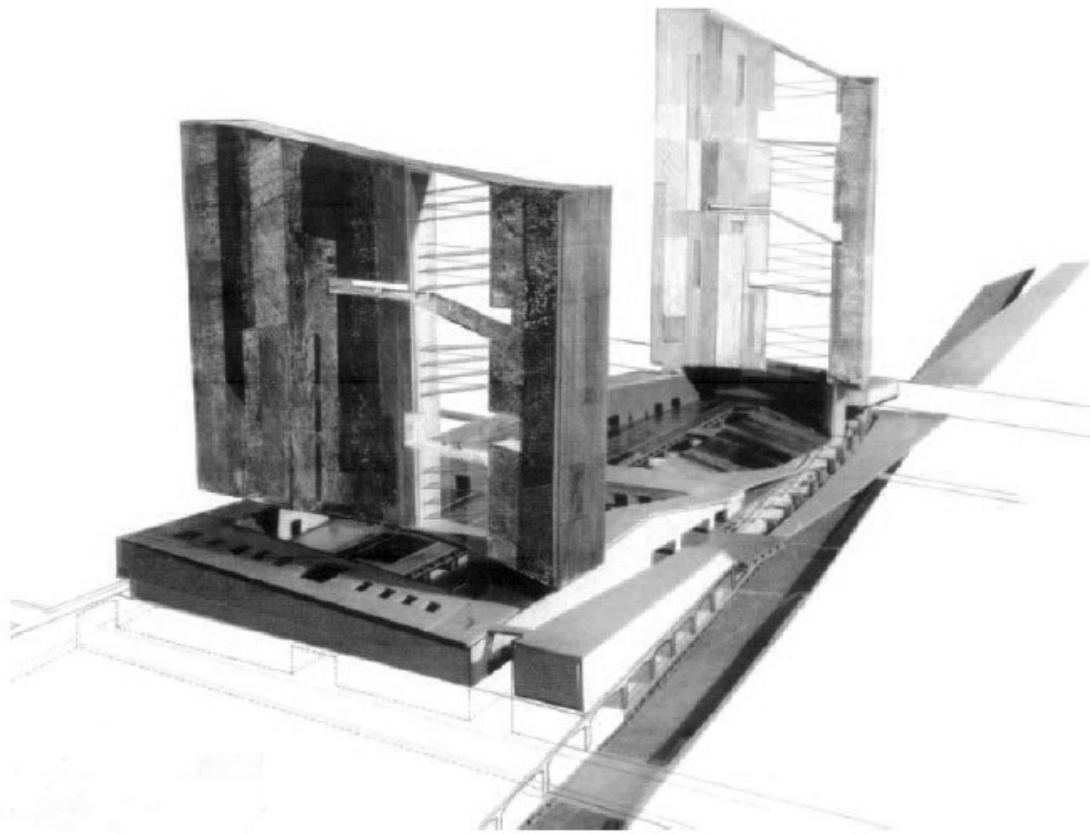
Urban Nature Towers:
A proposal for a high density CPUL accommodating 450 persons per hectare. Vertical landscaping, created by attaching a framework to the building's façade, supports trained soft fruit plants and fruit trees. The vertical landscape supplements horizontal urban agriculture fields.

Plate 15

Figure 4. Depiction of the urban and ornamental potential of CPULs (Viljoen, 2005)

designer calls "Agriburbia" (Gorgolewski et al., 2011, p. 21). In another essay by landscape urbanist Charles Waldheim, Wright's Broadacre City, Hilbersheimer's New Regional Pattern, and Andrea Brazi's Agronia are all given as precedents for a new agricultural urbanism, and they are all low-density plans that extend urbanity indefinitely across the landscape (Waldheim, 2010).

Whether or not one finds inspiration in Howard's diagrams or in the fantastical renderings of Corbu, Wright, Hilbersheimer or Branzi, the implications of these visions should give the reader pause. In their illustrations, productive landscapes are represented as simplified, abstract spaces or swaths of color and texture. The messy vitality and the evidence of communal human care celebrated in Rich's Urban Farm are absent. Without understanding how and why urban agriculture comes into existence, and what social, physical and economic resources it needs to thrive, the utopian visions in CPULs and Carrot City cannot be viable.

An Argument for Community-based Urban Agriculture

The critiques of community-based UA presented in this paper point to similar conclusions—that grassroots UA is idealized and ineffective, or worse, contributing to social inequity; and that UA should be scaled up through controlled and coordinated efforts by the city, or by other governing agencies. In some ways the pendulum continues to swing, from a critique of large-scale, impersonal farming to a celebration of artisanal, local practices, and back to calls for increasing the scale of UA through highly-controlled systems. Not all critics, however, discount the potential of small-scale actors to make systemic structural changes. For example, April Philips acknowledges the successes of grassroots efforts like City Slicker Farms in Oakland, California; she also offers guidelines for small-scale producers on creating a business plan (Philips, 2013). De la Salle and Holland emphasize the importance of action at the regional scale, but also call for incentivizing local artisanal food production and for creating guidelines for integrating agriculture into communities (De La Salle & Holland, 2010). With respect to neoliberalism, geographers Nathan McClintock and Ryan Galt acknowledge that alternative food networks do in fact operate amidst contradictions, but they assert that action is preferable to paralysis (Galt et al., 2014; McClintock, 2014).

In Sacramento, the aesthetic appeal of small-scale, community-driven agriculture has helped put the spotlight on local minority farmers like Chanowk Yisrael, or the vacant lot guerrilla farmer Ron Rutherford. Other young activists have also been highlighted by the media and by politicians to promote the city's Farm-to-Fork movement: Scott Thomson, whose project ReSoil provides nitrogen-rich food scraps to urban farms; Todd McPherson, who works with youth at local school gardens; and Dominic Allamano, who leads Soil Born Farm's fruit gleaning project. These individuals and many others are jointly creating an alternative food network along with what Ryan Galt refers to as "subversive and interstitial food spaces" (Galt et al., 2014). Their activist efforts are framed as alternatives or resistances to the "capitalist rationalities" of conventional food systems.

For landscape architects, finding their appropriate role in designing UA both at a local and a regional level presents many challenges. In smaller-scale contexts like community gardens, designing a prescribed landscape can work against community self-empowerment, especially if the designers are not embedded as members of the community (Hou et al., 2009). On the other hand, appreciating local expertise need not be accompanied by a denial of one's own expertise, as Randolph Hester and other community designers point out (Hester, 2005). At the scale of the city, landscape architecture approaches

often take one of two directions: one, toward a focus on new development at the city's edge; and two, with grand gestures that are neither economically viable nor socially constructive. Such has been the experience of landscape urbanism, and such is the tone of CPULs, Carrot City, and even Agricultural Urbanism.

Sacramento's thirteen community gardens are all laid out by one city staff member in consistent fashion, and many residents and activists admit to finding the resulting rigid and rectilinear aesthetic anathema to their organic notions of community gardening. Other actors, like Soil Born Farms, have turned to the field of permaculture for their preferred source of design expertise. Permaculture is a design approach that emphasizes regenerative and productive landscapes in which human and non-human ecologies are mutually supporting (Hemenway, 2009; Mollison & Holmgren, 1978). Because of its holistic approach and emphasis on productive landscapes, permaculture has been embraced by most of Sacramento's UA community. While permaculture may more effectively address the overlapping ecological and social systems found in small scale farming, I contend that the skills that landscape architects offer could expand the impact and meaning of permaculture gardens.

Soil Born Farms offers an example from which one might consider the roles of government, nonprofits, and designers. It demonstrates that government could be more enabling to UA but is not likely to be more catalytic than the grassroots actors and networks they foster. This is not to say that government should simply "get out of the way," as one activist expressed, but rather that government might be most effective to create opportunities and to reduce risks for grassroots actors to continue to innovate with ways to produce food within cities. The resulting transformation may extend well beyond creating a sustainable food system, as Soil Born's Allamano makes clear:

> When we're so fragmented, everybody's depressed and lonely. Most people are irrelevant to each other. We've lost a lot of things that are essential to our innate well-being. By reconnecting that narrative, it lets us start to look at how we inhabit our places, our neighborhoods, the village, the ecosystem, habitat. How do we reconnect to each other, to the seasons and cycles, become producers, not just consumers? Contribute to the well-being of the land that contributes to our well-being? How do we midwife the reemergence of a beneficial human population? (Personal communication, 2014)

Allamano's vision of a connected populace and food system would be structured and designed quite differently than the utopias highlighted in CPULs, Carrot City, or

Waldheim's essay. In the following section, Soil Born's history and vision show how UA can be expanded in ways that maintain its scale and its regenerative and connective potential.

Setting the Stage for Farm-to-Fork

Soil Born Farms was conceived as an idea between Shawn Harrison and Marco Franciosa, two UC Santa Cruz students of agroecology, who were steeping themselves in the teachings of master gardener Alan Chadwick and Waldorf educator Rudolf Steiner. Harrison was inspired by the innovative and socially conscious urban farms at The Food Project in Lincoln, Massachusetts and Fairview Gardens, surrounded by suburban Santa Barbara, where he apprenticed. Around 1997, the pair began searching for vacant land upon which to begin a profitable small farm of their own. Their goal, according to Franciosa, was "to bring the food right to the people and get them involved in the farm" (quoted in Laskowski, 2004). In 2000, they set their sights on Harrison's hometown of Sacramento, convinced that the city's potential for UA was enormous yet untapped, and they began to traverse the city's broad arterials looking for opportunity (S. Harrison, personal communication, 12/2014).

Sacramento is a city of roughly 450,000 residents in a region of 3.5 million, 75 miles northeast of San Francisco in the midst of the fertile farmland of the Central Valley. In 2012, mayor Kevin Johnson officially proclaimed Sacramento "America's Farm-to-Fork Capital" (Lillis, 2013)(Figures 5,6)[1]. This was a marketing ploy, backed by the city's Convention and Visitor's Bureau, but it was also hard to deny: the city is surrounded by what is among the most productive and diverse agricultural lands in the country. Seventy percent of the land in the six-county region is farmed, producing 3.4 million tons of food per year (SCVB, 2013). With 2.5 million residents annually consuming only 2.2 million tons of food, Shawn Harrison is correct to say that the city has the potential to feed itself with locally produced food. However, this bounty does not usually end up on local forks; most leaves Sacramento for other markets. Rice production, for example, comprises 93% of the region's grain crops and 98% of that is exported, mostly to Asia and the Middle East (Agriculture in Metropolitan Regions, Vision, & Education, 2008). The mass exporting of food crops has been the norm since the city's founding in 1848. From the start, farming around the Sacramento region was conducted at a massive scale and by large farms and cooperatives [2]. As Harrison puts it, "Agriculture grew up before the people were here" (Personal communication, 2014). The combination of low population and high farm output left food producers looking for markets for their foods, and innovating methods for preserving, processing, packaging, and marketing food for export (Walker, 2004). It was in Sacramento and the Central

Valley that the industrial food system was born. Sacramento's early farming history, then, is hardly something to be nostalgic for but rather already contained the blueprint for today's food system that the visitor's bureau, the mayor's office, and grassroots activists are now attempting to redefine.

When Harrison and Franciosa arrived in Sacramento in 2000, they found very little in the way of urban farming or UA activism. There were a few key exceptions. At UC Davis, Harrison had recently completed a summer apprenticeship at the student farm, whose principles of sustainable agriculture, experiential learning and student leadership would complement Soil Born's vision. In Sacramento, the Mandella Garden was another exception: a successful and beloved community garden established in 1971, but embroiled in what would be a losing battle against infill development. And at the Rudolf Steiner College in nearby Fair Oaks, Harald Hoven's Raphael Garden had been operating as an urban farm since 1987 and running a CSA (Community-supported agriculture) since 1993.

Farming Hurley Way and the American River Ranch

In late 2000, Harrison and Franciosa found the piece of land they were looking for, a vacant 1.5 acre parcel with good soil on suburban Hurley Way, surrounded by houses, apartments and a middle school (Figure 7). The two dropped a hand-written note in the owner's mailbox that read: "We'll give you free food if you let us farm your property." The next day, the owner agreed to a lease of "$1 plus free vegetables every year" (Laskowski, 2004). Soil Born grew quickly, adding partner Janet Zeller of the Sacramento Natural Foods Co-op in 2002 and making a profit selling certified organic food to local restaurants and at farmers markets. One clear advantage they had was in being able to develop close relationships with restaurateurs. "We can give them whatever they need," said Franciosa in 2004. "If they need 15 pounds of squash for their evening special, we can get it to them in five minutes. They love us" (Laskowski, 2004). This was the start of building a network around urban food systems.

In 2003, Soil Born partners invited the public to help then envision ways to expand the reach of their programs, and soon after transformed itself into the nonprofit Soil Born Farms: Urban Agriculture & Education Project, which allowed them to teach ecological horticulture through school programs, start an apprenticeship program, and conduct outreach to disadvantaged communities. They had begun to undertake these projects on Hurley Way, working on a pilot program with teachers to create a program called

Figure 5. Mayor Kevin Johnson proclaims Sacramento as Farm-to-Fork Capital (Downtown Sacramento Grid)

Figure 6. Annual Farm-to-Fork Gala Dinner on the Tower Bridge (Merced Sun Star)

"Food, Health, and the Environment," modeled after Alice Waters' Edible Schoolyard project in Berkeley. Soil Born's educational program was a clear response to the withdrawal of government support, as Harrison noted in 2005: "Schools are cutting after-school programs, and this school is a low-income school, so about 70% of the kids are on free lunch programs, which are horrible" (in Hess & Winner, 2005, p. 57). Soil Born also began an apprenticeship program to "provide training for aspiring farmers by teaching the basic concepts and practical applications of organic food production" (SBF, 2014b). To address food access issues, they started a project called "Food, Education, Equity, and Diversity (FEED), to do outreach and education for residents in the low income Del Paso Heights community. The program worked with recent immigrants and community gardeners to encourage the use of organic techniques and to augment the limited supply of fresh produce in local markets (Hess & Winner, 2005). All of these projects needed more space in order to expand.

The Rancho de Los Americanos was a 35,521-acre Mexican land grant (Figure 8) made in 1844 to William Leidesdorff, a Jewish-Danish entrepreneur and one of the first black millionaires in the US (Palgon, 2005). Of the original land grant, one remaining 55-acre farm tract was preserved for farming and leased to various for-profit farms (Figure 9). In 2006, building upon its successes on Hurley Way, Soil Born began collaborating with the county to restore the ranch and the riparian habitat along the river; in 2007 they farmed 5 acres of the ranch; in 2008 they were granted a lease for 25 acres, and today they manage the full 55 acres. From their two farms, and with a staff of 8 employees and 8 apprentices, Soil Born now undertakes a broad array of programs: market farming; farm stands, a CSA, a school garden initiative; at-risk youth training; adult education; summer camps; and a neighborhood gleaning project.

Soil Born's programs boast impressive numbers that speak to their quick expansion. Throughout 2014, the market farm grew 45 crops and tended 690 fruit trees. They operated farm stands weekly and prepared 5,000 CSA boxes for subscribers. They employed and trained seven apprentices. Through "Growing Together: A School Garden Initiative," 10 school gardens were supported, over 100 teachers were trained, and over 2,500 students gained hands-on learning through integrated school garden, health and environmental curriculum. They operated summer day camps for kids, and over 150 home gardeners took classes and workshops on gardening, rainwater collection, and medicinal herbs. In addition, Soil Born hosted a Permaculture Design Course. Their annual "Day at the Farm" event drew over 2,500 attendees, and over the year they coordinated 1,000 volunteers. Their most ambitious program is what Harrison calls "The Edible

City Initiative," or "Harvest Sacramento." Harvest Sacramento conceives of the city itself as a diffuse site of food production, starting by gleaning existing fruit trees in private yards. Last year they harvested about 50,000 pounds of fruit and donated it to the Sacramento Food Bank and Family Services (SBF, 2014a).

To support all of the activities that Soil Born Farms undertakes requires a robust management support structure and more funding than farm sales alone could ever provide. Across the country, similar nonprofit farms operate successfully and serve as a model for urban agriculture, but unappreciated by most is the fact that they are heavily dependent on subsidies. As the New York Times noted in an article entitled "Don't Let Your Children Grow Up to Be Farmers," Milwaukee's celebrated urban farm, Growing Power, received $6.8 million in grant support over the past five years (Smith, 2014),. Soil Born's budget is fast approaching that mark. Executive director Shawn Harrison now spends more time managing grants, contracts, volunteers, educational programs, and advocating than he does farming. Says Allamano, "we can't be a profitable farm and fund social programs and community programs and educational programs; we work with low income communities that cant afford to pay the true cost of a lot of the educational programs, so you wind up in this situation where you're running on the nonprofit industrial complex hamster wheel just to survive" (Personal communication, 2014). To Harrison, Soil Born provides a service for emerging urban farmers, but not a model. He still believes that small-scale urban farming is financially viable, but also that Soil Born is not a model for profitable market farms:

> We're definitely advocates for market farms, and farming as a secondary activity … [We're] losing money every year … but we're teaching young farmers. It's a socially based enterprise.

Figure 7. Annual Equinox Dinner at Hurley Way Farm (Valley Community Newspapers)
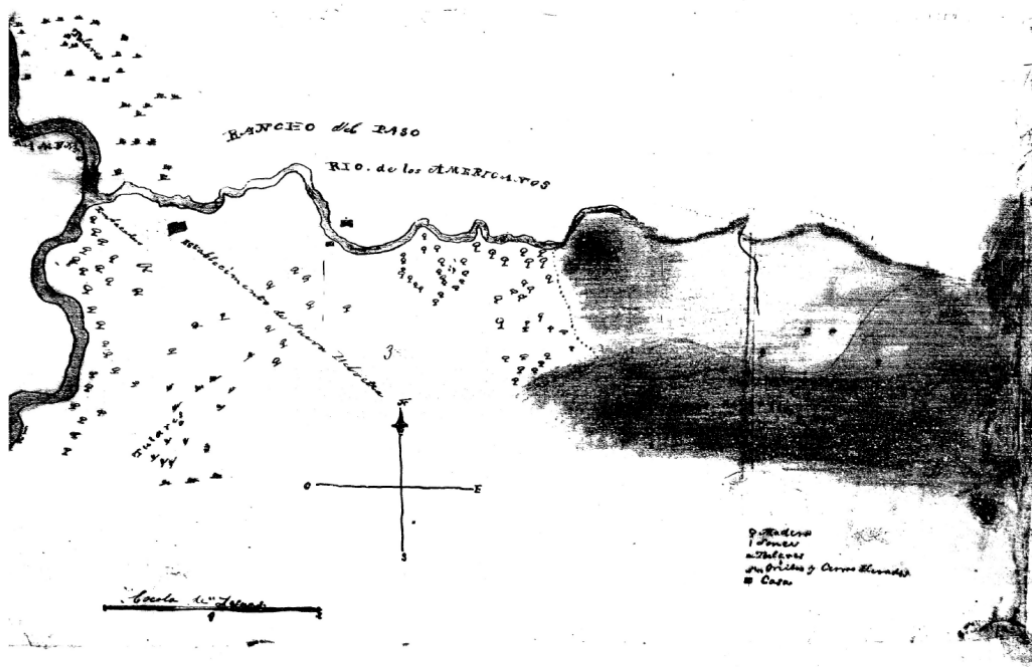
Figure 8. Rancho de los Americanos ca. 1855 (California Archive)

Figure 9. American River Ranch ca 2014 (Google Earth)

We rely on donations and events and grants, to provide services to the community. Our goal is to teach and train more young farmers, get more people growing food themselves, in front and backyards, getting people eating better. (Personal communication, 2014)

Landscape design, for Soil Born's founders, has played a negligible role in the advancement of their UA project. The farm on Hurley Way is hardly noticeable to passersby and maintains a utilitarian aesthetic, surrounded by low-density suburban buildings with little pretense. The American River Ranch, on the other hand, is endowed with broad vistas of the river. Design projects have been

undertaken here to accommodate expanding programs: a fenced-in youth garden is designed to be educational and also beautiful, with a large chicken coop that sacrifices the functionality of mobility with a more visually striking and permanent design element. The nearby community kitchen has added an attractive outdoor seating area with a brick oven, and a classroom building has been renovated. In 2012, the Sacramento Metro Chamber donated design and construction services to create an "outdoor classroom," an amphitheater with stepped seating and native grasses, designed by a local architect (Figure 10).

Despite the site's natural beauty and added design features, the founders and the public that supports Soil Born still returns each year to the less formal Hurley Farm for its annual Equinox Dinner, the organization's biggest fund-raiser. As founder Janet Zeller reasons, "people love the intimate feel" of the original farm (Dienst, 2012). The dismissal of professional design presents a challenge for landscape architects, whose reputation is not entirely favorable among urban farming activists. Randy Stannard, a food access coordinator with Soil Born, says that small-scale farms can't afford the luxury of professional design.

> I think of landscape architecture as creating really impressive things but it usually costs a lot of money. One, just to pay somebody to get the design, but then to implement what was done. Well, this isn't a low budget, grassroots, let's-minimize-cost type of thing. (Personal communication, 2014)

Creating a design process that includes users is a skill that not all designers have, and even typical community design processes, such as design charrettes, can be off-putting: "We're going to do a design charrette?" asks Stannard mockingly, "What the hell is that?" (ibid.). It isn't that design is unimportant to Stannard, who notes that people are attracted to good design and it makes them want to be a part of the successful project. Landscape architects have a long way to go in demonstrating their added value to community-based UA projects.

Soil Born Farms and Sacramento's Urban Agriculture Network

Soil Born Farms has incited changes to Sacramento's food system. By acting as an example, by providing educational programs, and by demonstrating the unrealized potential of harvesting the city, it have given thousands of residents useful insight into their relationship with food. Soil Born director Shawn Harrison believes that the city should play a role in food policy, literacy and production. However, he refuses to draw hard lines around what the city is, preferring to define "city" as "we as human dwellers" (Personal communication, 2014). Just as he and other members of CBOs participate in regional food policy discussions, some agency staff and representatives also participate within UA networks as members and volunteers. It is impossible, then, to isolate informal from formal networks. That being said, Harrison does believe that governing agencies have historically neglected to put food on their radar:

> Their job is to build houses and to maintain streets and infrastructure and things of that nature. The food system is beyond the streets that they built and maintain. They're not players in that. But that's beginning to shift. Their role is mostly policy and regulation, but they can be a hindrance or they can be a positive force by playing an active or inactive role. (ibid.)

In contrast, UA, says Harrison, is "mostly borne of local control, where a lot can happen" (ibid.).

The network of UA that exists in Sacramento today is expanding quickly and is made up of government agencies, commercial interests, non-governmental agencies, and activist citizens. The figures below depict how "the city" with all of its actors has established networks around UA. The two diagrams illustrate firstly the inconsistent connections between agencies and CBOs (Figure 11), and secondly the broader set of connections that Soil Born has been able to manifest (Figure 12).

These diagrams show how the networks have coalesced around various themes: commerce, food production, social and environmental advocacy, education, health, and housing. Soil Born, it should be noted, is not the only organization that plays a central role. The California Endowment, a statewide nonprofit devoted to health, supports the UA network through a 10-year multi-million dollar "Building Healthy Communities" (BHC) grant in South Sacramento [3]. The Food Systems Collaborative, led by the non-profit Valley Vision, has also brought together various leaders of CBOs and is currently planning a more extensive food systems policy initiative that will connect local UA actors with the Sacramento Area Coalition of Governments (SACOG).

Whichever of the three most prominent non-profits one wishes to focus upon, it is useful to note that non-profits connect well with a full range of UA actors, while governments often act in fragmentary and uncoordinated ways. This observation challenges the notion that government is the most effective means of coordinating food systems. In fact, the goals of creating sustainable food systems may be better met through the leadership of nonprofits rather than government. It should be noted that in other cities, such as Seattle, Baltimore or Toronto, government has taken leadership roles in expanding

Figure 10. Architect's rendering of new outdoor classroom (Sacramento Press)

UA. These cases have been successful, however, because they have built upon local UA networks and provided resources that help them thrive.

Governing agencies, for their part, can enable but cannot replace community-based networks; they are incapable of being the grassroots, no matter how they may attempt to emulate or appropriate grassroots practices. As an example of this limitation, Sacramento Vice Mayor's Chief of Staff, Joe Devlin, spoke about the potential of UA on a key city-owned property, but only if a broad coalition of actors could make it work. "Between the school district, the Food Bank, Farm-to-Fork, and others," he said, "there could be a tremendous community benefit here. We just don't have the expertise or the bandwidth to figure it out" (J. Devlin, field notes, 12/15/14). Lacking bandwidth may be a reflection of reduced budgets for government, but the lack of expertise and limited connections is actually the key to why grassroots actors are the locus of knowledge. Their immediate, face-to-face experiences with organizations, individuals, and the soil give them both technical and immersive knowledge about the urban food systems and the social systems they seek to improve.

Soil Born's activities in South Sacramento highlight its ability to manifest long-term change through connecting people to each other and to food systems. Working with support from the California Endowment, Soil Born supports a vast area of over a dozen neighborhoods where the majority of residents live in food deserts. Dominic Allamano, who coordinates Soil Born's efforts here, aims to create what he calls "precursors" to a stronger society:

[The residents] haven't been active participants for a while. Their health is probably not there. Their time is probably limited. Their yard is maybe a tree or two, maybe a fruit tree, which is awesome, and Bermuda grass. The soil is compacted, the norms, the rhythms are upset. We're starting almost from scratch. We're like an alien species that's landed here on this planet and doesn't know how to live here. (Personal communication, 2014)

Soil Born Farms has assumed the role of managing food access for the California Endowment's BHC area, working with other groups to foster more engaged gardeners, install home-based food production, build and support school gardens, distribute food to food insecure residents, introduce healthy snacks into corner stores, and manage the gleaning project Harvest Sacramento. "The idea," says Shawn Harrison, "is that these things build upon one another to change the fabric of the built environment in those neighborhoods, built around community engagement. So it's like our mini-edible city … by the time we're done with that 10 year initiative, we'll have layered and interjected a whole range of activities into each one of those neighborhoods and hopefully they'll start to have a little life of their own" (Personal communication, 2014).

Nathan McClintock (2014) argues that reliance upon nonprofits can result in the uneven distribution of resources, and this has been the case in Sacramento without question. The 10-year focus on the BHC has shifted Soil Born's focus away from its previous work in the Del Paso Heights neighborhood; with other organizations facing the same commitment to the BHC, the epicenter of UA in the city has shifted south. UA actors are cognizant of this unevenness but
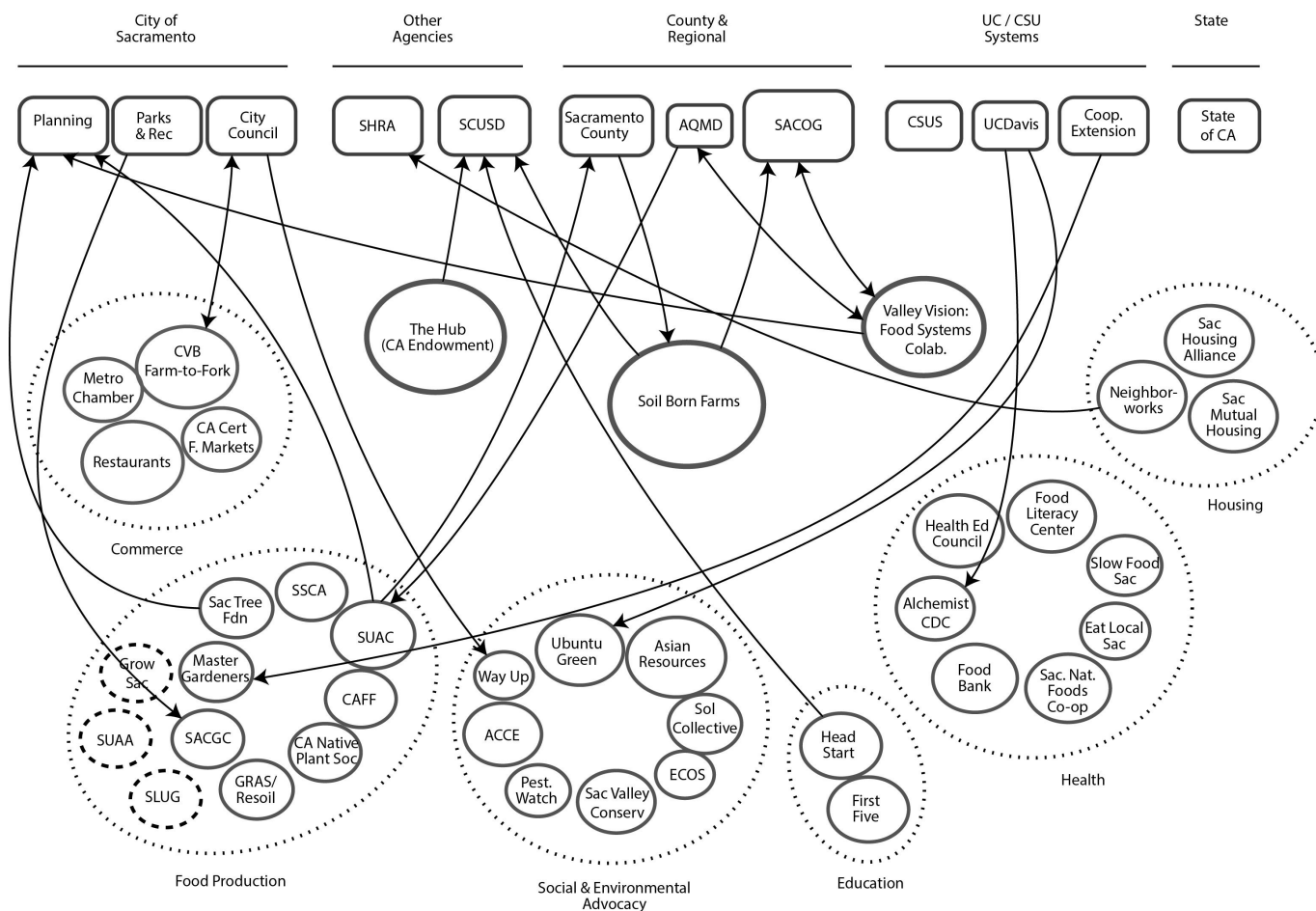
City of Sacramento | Other Agencies | County & Regional | UC / CSU Systems | State

Planning | Parks & Rec | City Council | SHRA | SCUSD | Sacramento County | AQMD | SACOG | CSUS | UCDavis | Coop. Extension | State of CA

CVB Farm-to-Fork
Metro Chamber
CA Cert F. Markets
Restaurants

Commerce

The Hub (CA Endowment)

Valley Vision: Food Systems Colab.

Soil Born Farms

Sac Housing Alliance
Neighbor-works
Sac Mutual Housing

Housing

Food Literacy Center
Health Ed Council
Slow Food Sac
Alchemist CDC
Eat Local Sac
Food Bank
Sac. Nat. Foods Co-op

Health

Sac Tree Fdn
SSCA
SUAC
Master Gardeners
Grow Sac
CAFF
SUAA
SACGC
CA Native Plant Soc
SLUG
GRAS/ Resoil

Food Production

Way Up
Ubuntu Green
Asian Resources
ACCE
Sol Collective
Pest. Watch
Sac Valley Conserv
ECOS

Social & Environmental Advocacy

Head Start
First Five

Education

Figure 11. Relationships between government and UA actors (Alex Cole-Weiss)

hope that the model being developed in South Sacramento will ultimately be replicated throughout the city and beyond. Allamano thinks of the multi-layered work in South Sacramento as an experiment in applying "acupressure points" to the city, with the hope that a healthier food system might emerge throughout the city:

> It's a planned emergence. We can't do this; we can't make it happen; we can't drive an outcome. We try to improve system conditions; we try to build more connections; we try to change the narrative; we try to create the precursors to the things we want to see. (Personal communication, 2014)

Allamano's approach to bringing about change to the physical city starts with connecting people to each other. The programs of Soil Born Farms, including the work in South Sacramento, the offering of permaculture courses, and the training of young farmers, help create connectivity and support networks that further UA goals.

Conclusions

Without question, UA has taken root in Sacramento and its relatively quick rise in scale and effectiveness owes much to the efforts of Soil Born Farms. The organization's transition from small for-profit farm to become the regional advocacy leader and a model for food systems education highlights the potential of grassroots organizations to create spaces of engagement and resistance. This potential has exceeded the city's capacity to bring about systemic change from the
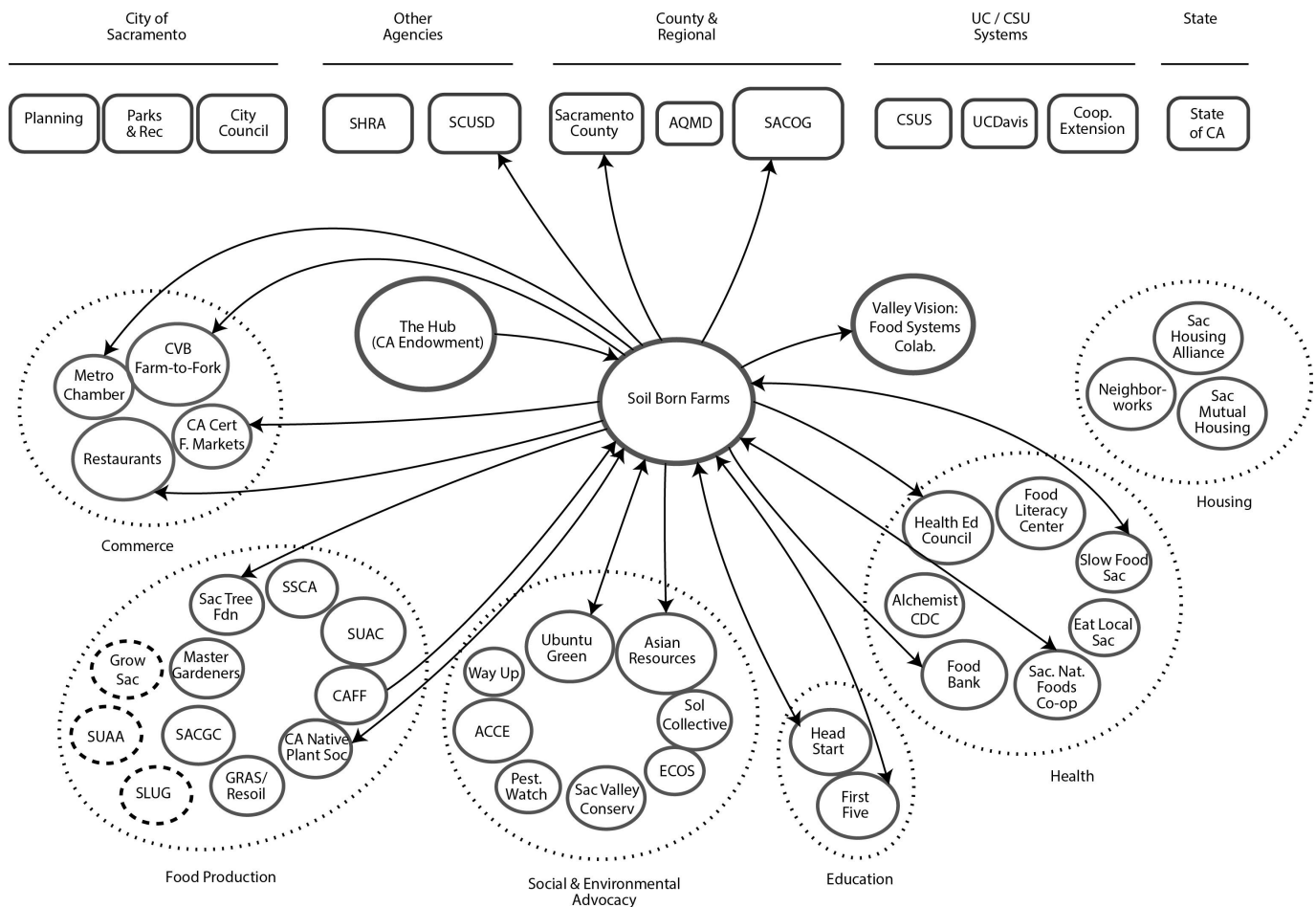
Figure 12. Relationships fostered by Soil Born Farms (Alex Cole-Weiss)

top down. Through a focus on incremental change, relationship building, food literacy, and ecological stewardship, Soil Born has succeeded in mobilizing citizens to support their mission and urban farmers, gardeners and gleaners who are beginning to create the edible city. As more grassroots actors engage with UA, the movement broadens into broader, regional discussions about food systems policy, including lobbying efforts aimed at both the city and the county to pass UA ordinances and advocacy efforts to Valley Vision and the regional council of governments to initiate a Food Systems Action Plan.

Soil Born's nonprofit model, however, is not without challenges or contradictions. The multiple social benefits that accompany their endeavor depend heavily upon charitable donations of money and labor, a fact that undercuts Soil Born's value as a model for profitable urban farming. Furthermore, the roles they have assumed for education, and the injections of energy and materials that have accompanied projects for school gardens, tours

and camps, expose and also enable the inexcusable failure of the state to fund health education in public schools. For landscape architects, the UA networks that have been created offer opportunities for engagement, both at the community and the regional planning scale. It is this author's opinion that regional policies and large-scale UA designs will be irrelevant unless they are informed by actual practices and local experiences. Landscape architects have important skills to contribute to both small and large-scale UA projects, and also much to learn from the urban farmers, activists and backyard gardeners who know UA best.

Notes

1. Because of its early association with agriculture and food processing, Sacramento became known as "cow town," or more lightheartedly "Sacratomato." It was an image that locals were eager to lose, and one that city boosters fought until the mayor's proclamation (Darnell, 2012).

2. Despite popular nostalgia for small farms, Sacramento's story, and California's for that matter, was never about local farms. In fact, statewide, the average size of farms has steadily declined over the past century (Walker, 2004).

3. The California Endowment is a nonprofit focused on broad issues related to health. As a "conversion foundation," created in 1996 out of the privatization of the nonprofit Blue Cross, they are themselves a product of neoliberal forces that have capitalized public welfare.

References

Agriculture in Metropolitan Regions, UC Berkeley, Vision, Valley, & Education, Sustainable Agriculture. (2008). Sacramento Region Local Market Assessment: University of California, Berkeley.

Agustina, Imas, & Beilin, Ruth. (2012). Community Gardens: Space for Interactions and Adaptations. Social and Behavioral Sciences, 36(1), 439-448.

Been, Vicki L., & Voicu, Ioan. (2006). The effect of community gardens on neighboring property values. New York: Furman Center for Real Estate & Urban Policy, New York University School of Law.

Biltekoff, Charlotte. (2013). Eating right in America : the cultural politics of food and health. Durham: Duke University Press.

Born, B., & Purcell, M. (2007). Avoiding the local trap: Scale and food systems in planning research. Sage urban studies abstracts, 35(3), 195.

Cockrall-King, Jennifer. (2012). Food and the city : urban agriculture and the new food revolution. Amherst, N.Y.: Prometheus Books.

Darnell, Brandon. (2012, 3/27/2012). Restauranteurs to fight 'cow town' stigma. Sacramento Press.

De La Salle, Janine M., & Holland, Mark. (2010). Agricultural urbanism : handbook for building sustainable food & agriculture systems in 21st century cities. Winnipeg, Manitoba: Green Frigate Books.

De La Salle, Janine M., Holland, Mark, & Lanarc, H. B. (2010). Agricultural urbanism : handbook for building sustainable food & agriculture systems in 21st century cities. Winnipeg, Manitoba; Sheffield, VT; Chicago, IL: Green Frigate Books ; Distributed by Independent Publishers Group.

Dienst, Alicia. (2012). Autumn equinox celebrated at Hurley Way farm for annual SBF fundraiser. Retrieved 12/15/2014, from http://www.valcomnews.com/?p=12388

Galt, Ryan E., Gray, Leslie C., & Hurley, Patrick. (2014). Subversive and interstitial food spaces: transforming selves, societies, and society–environment relations through urban agriculture and foraging. Local Environment, 19(2), 133-146.

Ghose, Rina, & Pettygrove, Margaret. (2014). Urban Community Gardens as Spaces of Citizenship. Antipode(3), n/a.

Goodman, David, DuPuis, E. Melanie, & Goodman, Michael K. (2012). Alternative food networks : knowledge, practice, and politics. Abingdon, Oxon; New York: Routledge.

Gorgolewski, Mark, Komisar, June, & Nasr, Joe. (2011). Carrot city : creating places for urban agriculture. New York: Monacelli Press.

Guthman, Julie. (2008). Neoliberalism and the making of food politics in California. Geoforum, 39(3), 1171-1183.

Hemenway, Toby. (2009). Gaia's garden : a guide to home-scale permaculture. White River Junction, VT: Chelsea Green Pub.

Hess, David J., & Winner, Langdon. (2005). Case Studies of Community Gardens and Urban Agriculture. Retrieved from http://www.davidjhess.org/uploads/3/5/1/3/3513369/sustloccasescommgard.pdf

Hester, Randolph T. (2005, 2005). (Re)constructing communities: design participation in the face of change, Davis, CA.

Hou, Jeffrey, Johnson, Julie, & Lawson, Laura J. (2009). Greening cities, growing communities : learning from Seattle's urban community gardens. Washington, D.C.: Landscape Architecture Foundation in association with University of Washington Press, Seattle & London.

Kulak, M., Graves, A., & Chatterton, J. (2013). Reducing greenhouse gas emissions with urban agriculture: A Life Cycle Assessment perspective. Landscape and Urban Planning, 111(1), 68-78.

Laskowski, Tara. (2004). Community Roots Grow Deep with Urban Farmer. Mason: The Magazine for Alumni and Friends of George Mason University.

Lawson, Laura. (2007). Cultural geographies in practice. Cultural Geographies, 14(4), 611-616.

Lillis, Ryan. (2013, 10/31/13). Sacramento touted as America's 'Farm-to-Fork Capital'. Sacramento Bee. Retrieved from http://blogs.sacbee.com/city-beat/2012/10/sacramento-

touted-as-americas-farm-to-fork-capital.html

McClintock, N. (2014). Radical, reformist, and garden-variety neoliberal: coming to terms with urban agriculture's contradictions. Local Environment 19(2), 147-171.

Mollison, Bill C., & Holmgren, David. (1978). Permaculture. Ealing [England]; Melbourne: Transworld Publishers.

Nairn, M., & Vitiello, D. (2010). Lush lots: Everyday urban agriculture - From community gardening to community food security. Harvard Design Magazine(31), 94-100.

Nasr, Joe, MacRae, Rod, & Kuhns, James. (2010). Scaling up Urban Agriculture in Toronto: Building the Infrastructure. Toronto, Canada: Metcalf Foundation.

Nestle, Marion. (2006). What to eat. New York: North Point Press.

Palgon, Gary M. (2005). William Alexander Leidesdorff: first Black millionaire, American consul and California pioneer. Atlanta, GA: G. Palgon.

Philips, April. (2013). Designing urban agriculture: a complete guide to the planning, design, construction, maintenance and management of edible landscapes.

Pollan, Michael. (2009). In defense of food : an eater's manifesto. New York: Penguin Press.

Pudup, Mary Beth. (2008). It takes a garden: Cultivating citizen-subjects in organized garden projects. Geoforum, 39(3), 1228-1240.

Rich, Sarah. (2012). Urban farms. New York: Abrams.

SBF, Soil Born Farms. (2014a). Soil Born Farms: Healthy Food for All.   Retrieved 12/18/2014, 2014, from http://www.soilborn.org

SBF, Soil Born Farms. (2014b). Soil Born Farms: Organic Farming Apprenticeship.   Retrieved 12/15/14, 2014, from http://www.soilborn.org/index.php/joomla-overview/job-opportunities/728-organic-farming-apprenticeship.html

Schlosser, Eric. (2001). Fast food nation: the dark side of the all-American meal. Boston: Houghton Mifflin.

SCVB, Sacramento Convention and Visitor's Bureau (Writer). (2013). What Makes Sacramento America's Farm-to-Fork Capital? In KJ2 Productions (Producer). Sacramento.

Smith, Bren. (2014, 8/9/2014). Don't Let Your Children Grow Up to Be Farmers, Opinion. New York Times. Retrieved from http://www.nytimes.com/2014/08/10/opinion/sunday/dont-let-your-children-grow-up-to-be-farmers.html

SPUR. (2012). Public Harvest: Expanding the Use of Public Land for Urban Agriculture in San Francisco. San Francisco.

Staeheli, Lynn A. (2008). Citizenship and the problem of community. Political Geography, 27(1), 5-21.

Surls, Rachel, Feenstra, Gail, Golden, Sheila, Galt, Ryan, Hardesty, Shermain, Napawan, Claire, & Wilen, Cheryl. (2014). Gearing up to support urban farming in California: Preliminary results of a needs assessment. Renew. Agric. Food Syst. Renewable Agriculture and Food Systems, 1-10.

Twiss, J., Dickinson, J., Duma, S., Kleinman, T., Paulsen, H., & Rilveria, L. (2003). Community Gardens: Lessons Learned From California Healthy Cities and Communities. American journal of public health, 93(9), 1435.

Viljoen, Andre, Bohn, Katrin, & Howe, J. (2005). Continuous productive urban landscapes : designing urban agriculture for sustainable cities. Oxford; Boston: Architectural Press.

Waldheim, Charles. (2010). Notes Toward a History of Agrarian Urbanism. Places Journal.

Walker, Richard. (2004). The conquest of bread: 150 years of agribusiness in California. New York: New Press, distributed by Norton.

Weber, Karl. (2009). Food, Inc.: how industrial food is making us sicker, fatter and poorer -- and what you can do about it. New York: PublicAffairs.

About the Author

Dr. de la Peña is an Assistant Professor at UC Davis in the department of Human Ecology, where he has taught Landscape Architecture and Community Development since 2013. He received his Ph.D. in Landscape Architecture and Masters of Urban Design from UC Berkeley; he is also a licensed California architect with a Masters of Architecture from the University of Texas, Austin. His research projects explore urban agriculture, design-build, and participatory urbanism in California and in Spain.