

Growing in place: the interplay of urban agriculture and place sentiment

By: Rudy Dunlap, [Justin Harmon](#), & Gerard Kyle

Dunlap, R., Harmon, J. & Kyle, G.T. (2013). Growing in place: The interplay of urban agriculture and place sentiment. *Leisure/Loisir*, 37(4), 397-414.

This is an Accepted Manuscript of an article published by Taylor & Francis in *Leisure/Loisir* on April 30, 2014, available online:

<http://www.tandfonline.com/10.1080/14927713.2014.906173>.

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Abstract:

In this investigation, we drew from social constructivist understandings of place to explore both the meanings participants of an urban garden project in Austin, Texas, ascribed to place and the sentiment they attached to those meanings. Specifically, we asked participants to articulate the ways in which their participation was shaped by and/or had subsequently affected their feelings toward a given garden plot, neighbourhood, city, and/or the region of Central Texas. Our findings illustrate that participation in the gardening project shaped their place meanings and sentiment through two principal processes: (1) a sense of connection to the different garden plots through the resulting produce and the physical transformation of the site, and (2) a sense of connection to and identification with the community at large via links to other individuals who are involved in Urban Patchwork activities.

Keywords: urban agriculture | sense of place | community gardening | ethnography

Article:

Notwithstanding its established legacy (Goodman, Sori, & Wilkinson, 1987), urban agriculture has undergone a renaissance in cities and towns across the globe (van Veenhuizen, 2006). As a result, urban residents often have opportunities to participate in any number of agricultural endeavours, ranging from small allotment gardens in otherwise abandoned lots to urban farms comprising acres of green space. Participation in most urban agriculture ventures is voluntary and may be motivated by concerns about urban blight or the ill effects of industrial agriculture for individual and environmental health (Nordahl, 2009). Among the many reasons for participation, which may include concerns about personal health, environmental degradation and community food security, the present study explores how involvement in local agriculture activities helps shape the sentiment and meaning participants ascribe toward the many places that constitute the urban landscape. In this context, place meanings are descriptive and provide insight on why specific settings may or may not be important to the individual (Stedman, Beckley, Wallace, & Ambard, 2004). Alternately, place sentiment is evaluative, providing

insight on the intensity of emotion and feeling underlying place-related meaning. Although past work has demonstrated that civic engagement has the potential to build community-based resources such as social capital (van Veenhuizen, 2006), we also contend that place can be a resource on which social capital is built. The medium of local agriculture is conspicuous in this regard. Beyond the time and energy invested in the cultivation of the land and the produce it supports, the unique ethos among members serves to deepen their connections to the land at multiple scales (Lewicka, 2010). With this in mind, we investigated the ways in which individuals' place meanings were affected by their participation in Urban Patchwork (UP) Neighborhood Farms in Austin, Texas.

As a component of the larger alternative agrifood movement (Allen, 2004), citizen or "civic agriculture" (Lyson, 2004) encompasses an abundance of volunteer, community-based activities, including backyard, community and educational gardening as well as urban farming. Exemplary of this movement, UP is a not-for-profit organization that facilitates the creation and maintenance of neighbourhood-based farms in Austin, Texas. Within UP's approach to urban agriculture, individual homeowners sponsor farm plots by allowing a portion of their residential yards to be converted to cultivated plots that are then networked with neighbouring plots to form neighbourhood-based farms. The labour needed to cultivate produce comes exclusively from volunteers residing in the local community.

We seek to understand how individuals' participation in neighbourhood farm-based activities and social worlds underlies their sentiment toward place across several spatial scales; the plots they cultivate, the neighbourhoods in which these plots are situated, the city of Austin and the larger region. We draw from social constructivist understandings of place (Greider & Garkovich, 1994; Kyle & Chick, 2007; Lee, 1972; Milligan, 1998; Weigert, 1991) to explore both the meanings participants ascribe to place and the sentiment they attach to these meanings. Specifically, we observed and asked participants to articulate the ways in which participation was shaped by and/or has subsequently affected their feelings toward a given garden plot, neighbourhood, the City of Austin and/or the region of Central Texas.

Our findings indicate that participation in UP shapes individuals' place meanings and sentiment through two principal processes: (1) a sense of connection to the different garden plots through the resulting produce and the physical transformation of the site, and (2) a sense of connection to and identification with the community at large via links to other individuals who are involved in UP activities.

Review of the literature

Urban agriculture

The practice of urban agriculture in contemporary cities and towns results from the confluence of two broader social movements: sustainable agriculture and urban community organizing. Notwithstanding its roots in the first half of the twentieth century, the more recent manifestation of sustainable agriculture emerged in the 1970s and the 1980s as a response to the environmental harms of conventional industrial agriculture (Allen, 2004; Gottlieb & Fisher, 1996). It sought to remedy these harms by promoting individual and ecological health via a (contested) regime of organic cultivation and husbandry, albeit at the industrial scale. As such, the sustainable agriculture movement worked to create markets for organic fruits and vegetables that would entice producers to switch from conventional to organic cultivation on an industrial scale.

Acknowledging the inherent detriments of industrial-scaled cultivation, be it organic or conventional, the sustainable agriculture movement has more recently embraced an ethos of localism that has nurtured an abundance of community-supported agriculture farms, farmers markets and other local producers (Cone & Myhre, 2000; Hinrichs, 2000).

Whereas the sustainable agriculture movement has evolved from a focus on activities at the industrial level to those at a local scale, urban community organizing has always been, necessarily, a localized endeavour. Although it has many foci, including the structural inequities related to racism, poverty and political disenfranchisement, urban community organizing has often involved a consideration of food, its distribution and its production within an urban context (Goodman et al., 1987). Whereas the sustainable agriculture movement was initially driven by concerns for environmental degradation, the work of urban farmers and organizers has tended to focus on issues of food in/security and social justice (Allen, 2004; Gottlieb & Fisher, 1996). Given its importance for food security, the cultivation of food has been endemic to cities since their emergence as a form of human settlement (Goodman et al., 1987). While backyard gardens, community gardens and urban farms have long existed in urban settings, their prevalence has waxed and waned largely in response to the underlying economic conditions that necessitate the subsistence cultivation (Redwood, 2009).

In fact, many of the endeavours that fall under the term “urban agriculture” are still primarily concerned with addressing the threat of food insecurity for urban residents. However, the resurgence of community gardens and urban farms can also partially be attributed to the focus on local cultivation that has been spawned by the sustainable agriculture movement (Feagan, 2007). The result is a patchwork of urban cultivation activities that are influenced by an amalgam of social concerns ranging from environmental degradation to individual health to childhood obesity to urban blight. As but one example of this larger field of urban agriculture, UP’s mission to “build community and learn to grow food” (<http://www.urbanpatchwork.org/>) exemplifies the multi-faceted nature of urban agriculture. Reflecting this diversity of concerns, fields of study ranging from horticulture to urban planning to psychology have explored the effects of urban agriculture on individuals and societies. As opposed to exploring the outcomes of cultivation per se, the present study aims to explore participation in urban agriculture as a context in which individuals may potentially foster connections to urban locales at different scales.

Sense of place

In the context of this investigation, we use sense of place to refer to various meanings individuals and collectives ascribe to the physical environment and the sentiment(s) they associate with these meanings. Drawing from symbolic interactionist perspectives on meaning (Blumer, 1969; Mead, 1938), we also consider place meanings to be subjective, fluid and dynamic. As such, place-related meanings emerge over time from individuals’ interaction with the setting, others within the setting and the broader cultural context in which the interaction is situated (Greider & Garkovich, 1994). Consequently, where there might exist consensus across a society on the constitution of the physical form defining a particular setting, heterogeneity will be found within the society on the meanings its members ascribe to the setting. This is not to say the setting’s physical qualities are unimportant. Beyond shaping the interaction potential and experience possible within the setting, the meanings ascribed to the setting’s physical attributes are less likely to be universal. The implication for understanding the social construction of place, then,

allows for the possibility that: (1) meanings associated with place are made different by the different actors situated within the setting, (2) the degree of homogeneity in perspective on meaning will be directly associated with the cultural homogeneity of the actors, and (3) given that culture is fluid and dynamic, so too are the meanings that characterize place (Stokowski, 2002).

With this understanding, our exploration of the meanings UP volunteers ascribe to place focuses on processes of interaction and transformation. In the review that follows, we highlight work illustrating how volunteer-engagement community-based programs like UP have powerful influence on the meanings participants ascribe to the settings in which these activities are nested. Broadly, the literature illustrates that community-based garden projects cultivate and support intimate interaction among volunteers with both the physical landscape and the social world affiliated with the program (Hancock, 2001; Kingsley & Townsend, 2006; Teig et al., 2009). The place-focused interaction born through participants' cultivation of the landscape transforms spaces from grass-covered lawns into cultivated garden plots. Alternately, participant interaction within garden-based social worlds serves to shape and maintain place-based meanings that are consistent with the ethos of the social worlds. Although these meanings are not uniform or homogenous, being individualized through personal experience, they remain consistent with the norms and ethos governing the project-based social world.

Place interaction and the emergence of place meaning

As Tuan (1974) observed, place is space made meaningful through human intent and action. It is through human activity, both mental and physical, that the landscape comes to be known and valued by its inhabitants. In these statements, two important elements of place creation become readily apparent: time and place-based experience. It is the steady accretion of experience within place, often with others, that works to foster deeper connections to place such that the meanings attached to the physical environment become important elements of self and community identity (Hernández, Hidalgo, Salazar-Laplace, & Hess, 2007; Kyle & Chick, 2007). A number of studies have shown this phenomenon to be true across a diverse array of contexts. For example, comparisons in the strength of attachment among residents and non-residents (Hernández et al., 2007) or more recent settlers to communities (Hay, 1998) have consistently shown that longer-term residents are able to articulate a diverse array of place meanings that carry greater personal significance and reflect deeper connections to the landscape. Alternately, Cooper Marcus (1992) observed that engagement with and taking part in the shaping of a place foster care and affection for place.

The act of shaping the landscape through the context of a community garden also brings participants closer to place in several ways. For example, consistent with Kellert and Wilson's (1993) biophilia hypothesis, involvement with a community garden and the act of shaping place could well be linked to humans' evolutionary origins. Their hypothesis suggests that humans have an innate emotional affiliation with other living organisms that has been shaped over millennia through interactions with features of the environment that have been helpful to the survival of the species. Urban-based community gardens afford an opportunity to satiate this need that might otherwise be suppressed within urban contexts. At first glance, this might reflect a degree of determinism and create conflict with our social constructivist orientation. However, the need for nature is mediated through cultural lenses (Tuan, 2004). For some, community-

based gardens are an opportunity to connect to nature, whereas for others, more intimate interaction with wilderness-like landscapes is required to satiate their need for nature.

Shaping the landscape through the creation and maintenance of a community garden project also has implications for identity. The choice of plants and vegetables, their arrangement and the surrounding landscaping are deliberate choices that are a reflection of participants' selves (Austin & Kaplan, 2003). These efforts are aimed at creating a place that is self-affirming, in addition to communicating individual and collective identity (Kyle & Chick, 2007). Some of these decisions also have their roots in childhood memory (Cooper Marcus, 1992) where choices are driven by efforts to recreate place in the form of places previously experienced.

Finally, past work has shown that place attachments to "natural" landscapes are often supported by these settings' restorative qualities and their potential to enhance self-esteem. For example, in the study by Korpela, Hartig, Kaiser, and Fuhrer (2001) of US undergraduates' favourite places, natural landscapes were most often reported for their ability to support emotional well-being. Respondents associated descriptors such as calmness, relaxation and comfortableness with their referenced natural setting. In the context of self-esteem, work drawing from identity theory (Burke & Stets, 1999; Cast & Burke, 2002; Stets & Burke, 2000) suggests that interaction with places of significance that are valued for positive reasons has the potential to enhance self-esteem. Since an identity comprises a set of meanings defining who one is, it provides a person with a sense of who s/he is and how s/he ought to behave. Accordingly, people act in a self-regulatory manner with the goal of achieving consistency between the self-perceived meanings and their perceptions of others' interpretation of their meanings in any situation (Burke, 1991; Burke & Stets, 1999; Cast & Burke, 2002; Stets, 2006). When consistency between the two sets of meanings occurs, identity is successfully expressed and affirmed, that is self-verification. Places afforded positive meaning offer contexts for self-verification processes to unfold that can enhance self-esteem (Cast & Burke, 2002).

Shared experience and the shaping of place meaning

Our conceptual framework for understanding the co-production of place-related meaning within the context of the UP project draws from symbolic interactionist perspectives on the construction and maintenance of meaning (Giddens, 1990). This perspective emphasizes the ways in which physical environments and the self influence and find expression in one another. It also informs us of how the altered landscape contains and communicates shared symbols and meanings by those who dwell within the setting (Gieryn, 2000). This is not to discount the relevance of the physical elements that constitute the setting. Physical objects, design, layout and scale all play a role in shaping potential experience. The interactionist framework, however, foregrounds the meaning the individual ascribes to elements of the landscape and the actions that occur within it.

In the context of the UP project and many other community gardens across the United States, the place experience is a shared experience. Members of community gardens reflect distinct social worlds in which the experience, place and relationships are created, shaped and made meaningful by social world members (Shibutani, 1955; Spradley, 1980). For place-based meaning, then, the community garden social worlds mediate members' interactions with the landscape. Consequently, actions of cultivating the soil, planting seeds, tending the garden and so on are not solitary activities performed in isolation. Rather, these activities and their meaning are negotiated among social-world members. In this process, the meanings ascribed to the landscape can be intimately connected to the meanings that individuals also associate with the

relationships they share with other garden members and their experiences. In this way, the physical setting becomes a significant reference that encapsulates an array of meanings derived from shared experience. This co-production of place meaning has been documented by several authors studying place in diverse contexts. For example, Kyle and Chick (2007), studying the meanings that tenters camping at an agricultural fair in rural Pennsylvania ascribed to the settings that encapsulated their fair experience, observed that meanings anchored in the experience and setting were most often shaped by significant others with whom the place and experience were shared. Alternately, Milligan (1998) examined employees' perceptions of campus coffee houses from which they were relocated and re-situated. She observed that following the relocation, her informants' descriptions of the old site were fondly contrasted against the new site. While the new site was reported to be aesthetically more appealing, it lacked the "character" of the old site, defined in terms of the relationships shared with former employees, shared experience and its spatial dysfunctionality.

Accompanying the meanings people ascribe to place are normative expectations that govern behaviour and action within the setting. Given that place meaning provides insight on why a setting might be of significance to an individual or collectives, it also reveals what actions the group might consider appropriate for the place in question. For example, classrooms, churches and football fields are all settings in which certain actions could be considered appropriate or inappropriate. The determination of right or wrong is largely an artifact of the cultural lens through which the action is viewed. Gieryn (2000) referred to these qualities of place as the "normative landscape." Issues over the norms governing action within public settings can be problematic and give rise to questions over morality (e.g. what actions are appropriate?), the politics of place (e.g. who determines what is normative?) and the territorial distinctions that can "gate keep" access to the landscape (e.g. gendered and racialized territories). Although leisure is a context that facilitates agentic action, it is also situated within the confines of societal structure.

Description of research context

Founded in Austin, Texas, in 2009, Urban Patchwork Neighborhood Farms' mission is to "help families and neighbours in small communities turn unused yard space into farmland that provides fresh, organically grown produce, fruits, nuts, and eggs to the nearby residents of each neighborhood" (Urban Patchwork Neighborhood Farms, 2013, April 14, para. 3). This mission is realized through the creation and maintenance of three neighbourhood farms located in the central and eastern portions of the city of Austin. Each farm is composed of between three and six garden plots that are networked together to create a small farm. Formalized by a letter of agreement, private homeowners host the garden plots on their property, and in doing so commit to paying the monthly water bill and allowing participants access to their property for the purposes of working in the garden.

The garden plots are variously located in the hosts' front, side or backyards, and each plot measures approximately 1000 square feet in size. Depending on the season, UP's plots produce a mix of vegetables that are typical of most farmers' markets in the southern United States, including tomatoes, squash, okra, broccoli, beans, eggplant, peppers and different types of leafy greens. As with most forms of bio-intensive agriculture, UP's plots also feature plants, such as lambsquarters and amaranth, which are well adapted to the localized climatic conditions of central Texas. Once harvested, each farm's produce is sold via a community-supported

agriculture (CSA) model in which neighbourhood residents purchase a seasonal share in the farm that entitles them to weekly baskets of fresh produce (Nordahl, 2009).

In contrast to industrial agriculture, which is largely mechanized, UP employs a biointensive methodology that seeks to maximize yields by improving soil fertility and relying almost exclusively on manual labour (van Veenhuizen, 2006). As such, UP's plots are cultivated by volunteers from the neighbourhoods in which its farms are located and from across the city of Austin. Cultivation of its plots is accomplished via volunteer workdays that occur five or six days per week almost every week of the year. Workdays are coordinated through the organization's email listserv that alerts potential volunteers to the weekly schedule of activities, including the location, duration and nature of activities. A typical workday begins at 8 am with introductions and a briefing by the workday leader regarding the day's activities. No two workdays are alike and activities encompass the extent of the growing cycle, ranging from the excavation and preparation of new plots to the planting of seeds and transplants to the harvesting of produce. Recognizing the strenuous nature of its activities and the voluntary nature of its workforce, UP workdays typically end in the early afternoon. Workdays are supplemented by occasional business meetings and celebrations as well as weekly market days during which shareholders pick up their produce. Such meetings are important for solidifying social relations formed during workdays and for maintaining esprit de corps amongst volunteers.

Attendance at workdays varies greatly depending on the season, the weather and the nature of the work. A typical weekday draws four or five volunteers, although that number could range from as few as two to as many as 12 or 15. Typical workday groups are composed of three or four individuals who have spent several months volunteering with UP and one or two individuals who are volunteering for the first time. If promoted well, special event workdays, such as the "dig in" of a new plot, attract as many as 30 attendees, most of whom are first-time volunteers. Such special events are well publicized within a network of individuals and organizations that are concerned about food and agriculture issues. Thus, dig-ins or garden tours serve as an important means of recruiting individuals who are interested in issues related to urban agriculture. As with most volunteer organizations, recruitment of new members is a perennial challenge. Volunteer recruitment is particularly difficult for UP due to the strenuous nature of its activities, which result in a considerable amount of attrition amongst participants. Despite this attrition, a core group of approximately 20 volunteers provide some stability to the organization.

UP volunteers are homogeneous in many respects: approximately 75% of participants are women of Euro-American descent who have or are in the process of pursuing some form of post-secondary education. Approximately two-thirds of UP's volunteers are under the age of 30, with the remainder in their 30s, 40s, 50s and 60s. As such, perhaps as many as one-half to two-thirds of UP's volunteers are university students who have the flexibility to work during the week. The remaining participants are a mix of homemakers, retirees and individuals who maintain a working schedule with sufficient flexibility to accommodate volunteer activities. Economically, volunteers are predominantly middle class, although many of them count on their UP produce as an important component of their household food provision.

Research methodology

Given our focus on the social construction of place meaning, we employed a qualitative approach to inquiry that included participant observation and interviewing.

Data generation

Data were principally generated from participant observation and semi-structured interviews conducted by the first two authors. Workdays served as the primary context for observation, and the first two authors participated in more than 50 workdays between May 2011 and July 2012. We performed the same activities as any other volunteers (e.g. planting, harvesting) and composed our field notes as soon as possible after the conclusion of the work period. In addition to workdays, we attended meetings, celebrations and, when invited to do so, socialized with other volunteers outside of the workday setting

In addition to workday participation, the authors interviewed 11 individuals, seven of whom would be considered core members due to the frequency and duration of their involvement. The remaining four members were active participants, but not to a degree that would constitute core membership in UP. Initial interviews lasted between 45 minutes and 2 hours and were recorded to facilitate transcription and analysis. In several cases, second interviews were needed to elaborate on concepts that emerged during the data analysis process. The interviews generally explored three topic areas: (1) participants' previous experiences related to agriculture and gardening; (2) participants' place sentiments regarding their residence, the City of Austin and Central Texas; and (3) their involvement with UP and its role in fostering a sense of place at varying scales. In addition to these semi-structured interviews, the researchers engaged in numerous ethnographic interviews (Spradley, 1979) as relevant during the course of their fieldwork.

In addition to field notes and interview transcripts, various documents served to further illuminate UP's role in fostering participants' sense of place. The UP website (<http://www.urbanpatchwork.org/>) provided important information about the organization's vision and mission, whereas weekly emails detailed the timing, location and nature of various activities.

Data analysis

Guided by Charmaz's (2006) constructivist approach to grounded theory, analysis of the data entailed a recursion between emergent concepts and the data, a method referred to as constant comparative analysis (Glaser & Strauss, 1967). The process commenced with open coding in which the first two authors read the field notes and transcripts, and then assigned short, descriptive codes to portions of data that were deemed significant in light of the research questions. They then reviewed the accumulated code list, reconciled disparities in their characterization of the data and collapsed similar codes into a smaller subset of focused codes. Using these focused codes, the first two authors coded the data a second time and used the focused codes to sort the data into coherent categories. Following the focused coding process, the first two authors once again compared the coded transcripts and field notes in order to reconcile disparities, which were minimal. These categories served as the basis of analytic memos in which the researchers described the distinguishing characteristics of each category and its relevance to the guiding research questions. After once again being compared to the raw data, the analytic categories described in the memos served to structure the study's findings.

Findings

Our findings support the assertion that voluntary participation in urban agriculture activities, specifically those associated with UP, is an important context for exploring processes underlying the construction and maintenance of place meaning. Our analysis of the data revealed two explicit dimensions by which participants constructed place meanings: first, via physical interactions with the site and the resulting produce, and second, through membership in the UP social world.

Connection via physical interaction

Participants' place meanings were most consistently and prominently expressed with regard to their physical interaction, i.e. physical labour, in UP's various garden plots. As described above, participants' physical interactions with the garden sites encompassed a wide variety of tasks. Plots were typically dug into residential yards, which entailed excavating existing grass, amending the soil, mulching and shaping the ground into rows for planting. Once the plots were prepared, plants were transferred, rows were weeded and produce eventually harvested. In addition to these basic cultivation tasks, volunteers engaged in any number of small projects, including the assembly of irrigation systems and the construction of structures to protect plants from weather and pests. Additionally, UP volunteers helped maintain chickens and coops at approximately half of its sites. All of these tasks entailed strenuous physical labour for participants, much of which occurred in the heat and humidity of summer in Central Texas.

As opposed to a necessary evil to be endured, most participants expressed an appreciation for the labour entailed by volunteering with UP. Indeed, participants used phrases such as "get[ting] their hands dirty" (Rose, 19 July 2012; Robert, 3 December 2012), wanting to have one's "hands in the ground" (Alex, 12 July 2012) or "working with [one's] hands" (Susan, 30 April 2012) to describe labour as facilitating a literal connection to the garden plots. Lara captured this sentiment when she described the manner in which physical labour facilitates an intimate knowledge of the plots themselves:

I think people take food for granted in general, and gardens too. I was working with Alan in his plot, and he said something that was so striking, "man, it takes a lot of calories to make a garden." I was like, "damn straight it does. It takes a lot of calories." It's a lot of hard work. You have to be out when the weather isn't pleasant. You have to pay attention to some things right then; they can't wait. You have to know what those things are. You have to think about this weird climate that we're in, and work with it. (6 June 2012)

Characteristic of many participants' descriptions, Lara's words emphasize the intensely physical nature of cultivation activities. Thus, as opposed to industrial agriculture, these comments reflect the intimate relation with the soil and plants that is fostered by biointensive agriculture.

Drawing on these physical interactions, several participants described their connection to the garden plots as it manifested in physical and visual changes to those plots. When asked about how gardening might foster a sense of connection to a particular place, Jeff described his interaction with a particular UP plot:

I think that there's [the plot] that I was working on and when I went back a few weeks later after I moved off I certainly felt a connection to it. . . I walked through the garden that I had put a lot of sweat and toil into, [and] it was satisfying to see [the plants] a

couple feet higher. And then I went to see [the woman who runs UP] a few weeks ago at the [farmers'] market and she had all of the vegetables that I had planted, which is like seeing a fraction of the fruits of your labour, which was pretty satisfying. (19 July 2012)

Visual changes, such as the ripening of produce or the growth of plants, provided participants with tangible outcomes related to their labour and the realization that their efforts could alter the landscape. Similar to other participants, Susan expressed a strong connection to the plots that she had worked in. When asked about the nature of that connection, she highlighted changes to the landscape that had resulted from her labour:

I think seeing [the plots] develop and change over time, that a lot of the sites look very different now than when I started a year ago and getting to be a part of that process and see it change over time, I feel very invested in what's happening at them. A lot of [the work] is just digging in entire new plots that were filled with Bermuda grass and then turning it into a productive plot, which is very satisfying. Getting to see little things that will happen over the course of a season, things that result from doing all the mulching or turning in a plot. There's a lot of investment, and labour, and sweat equity that goes into that and feels really satisfying with the job. (30 April 2012)

As her comments reflect, participants often described their connections to the different garden plots in terms of their connection to the physical changes occurring at a given site.

Connection mediated by social relations

As described above, workdays were by necessity collaborative events, and thus the labour was typically accompanied by an ongoing, albeit intermittent, social interaction. Once work began, introductions were often followed by descriptions of the ways in which people learned about UP, which in turn led to accounts of individuals' previous involvement with urban agriculture. Not surprisingly, approximately 50% of volunteers had had some previous exposure to some form of bio-intensive agriculture. Conversation often proceeded with a brief recounting of individuals' biographies, which would lead to interchanges around commonalities such as places that two people had previously lived. Perhaps related to the general homogeneity of its volunteers, individuals often discovered shared preferences for different culture products including music, books, movies and especially food. In this way, volunteering served as a means for many people to form acquaintances and friendships around common interests.

Katrina captured the manner in which shared interests facilitated relationships, explaining that "involvement is really good when you're a person who lives in a new place and doesn't know anyone. And I know a lot of people now and I'm more rooted. . . . It's really nice to have community, especially around food" (9 December 2012). Similarly, Jenny explained that "being new in town, [volunteering] was a great way for [her] to plug into the neighbourhood, to have a connection to the neighbourhood, and to meet really cool people in [her] neighbourhood" (11 January 2013). When asked about her social interactions at UP, Lara said, "I do feel connected to [Austin], and I would say much more so since I've been involved with Urban Patchwork. The friendships I've developed are really strong and really constructive" (8 June 2012). These statements reflected the general sentiment that in addition to learning how to grow food, UP

presented volunteers with an important opportunity to form relationships and connection to a larger social network.

Interestingly, many participants used their participation in gardening activities as a means to strengthen connections to their own family history. Numerous participants described participation in UP activities as a means of connecting with older relatives who had participated in various agricultural activities. Lara captured this dynamic, explaining that,

It feels like I'm a little more attached to my real roots, it reminds me that I'm growing the same things that my grandma grew. . . . My [grandparents] had a huge garden and we spent a lot of time in it. It was a big part of their diet and my parents weren't like that. My grandparents were definitely like that, and they're not around anymore, so that is nourishing to me, that I can have space in my life like they were living. (8 June 2012)

In this way, UP activities and garden plots served to strengthen psychological ties to friends and relatives, living and deceased.

Not surprisingly, volunteers indicated that the social relations formed through their participation in UP were instrumental for their construction of place meanings. When asked how his participation in UP had affected his construction of place meanings, Jeff explained that his connection to place "is more of the connection to the people than it is to the land. It is almost like the place or land is a sort of conduit where people can connect" (19 July 2012). In this way, the specific locale was an important factor in actually facilitating social relations. Mike extended this assertion to include the food that was grown in particular plots and neighbourhoods in Austin:

. . . having food from a place strengthens the connection to place. [That connection] is about food that's coming from the city I'm in and also from people that I'm connected to. . . . My family's here, my wife's family is here, my work is here. My whole history is with these [garden plots]. (7 January 2013)

In this way, Mike and others understood the cultivation of food at particular sites to be intertwined with the social relations formed through those activities. Commenting on the way in which relationships shape volunteers' connections to a particular plot, Susan explained that there is:

. . . a smaller community within the larger Urban Patchwork community that will occur on specific days or at specific plots that volunteers make a point to come to. Every time we come out to that site, if I'm there with somebody else who [was] also there last week and the week before, then we can reminisce about the way it looked before and we can really appreciate the change that has happened. (30 April 2012)

Susan's comment captured the manner in which social interactions influenced an affinity for and sense of connection to a particular garden plot. In some cases these connections evolved into a sense of possessiveness for certain plots. When one of the land hosts terminated his sponsorship of a garden plot, several volunteers expressed a sense of ownership and frustration at being denied access. Jenny explained that the plot she:

. . . was assigned to was taken back by the landowner. I was truly sad to see all that hard work go – I still feel a little attached to that garden, even though it isn't ours anymore! . . . Psychologically, I don't yet feel such a connection to the new garden, perhaps because of the distance. But regardless, even after taking a hiatus through the winter, I still feel attached to the people. And to the neighbourhood. Working with UP helps provide me with not just a sense of belonging, but a sense of dedication to a place, and an on-going tie to a place over time. (11 April 2013)

Jenny's comments captured the way in which her social relations allowed her to cope with being prohibited from working at a particular site. In this way, her UP social world ameliorated the negative emotions generated by her dislocation from the plot. Beyond the investment of time and energy, the garden plot acted as a spatial anchor situating memories of past people/place experience within the broader Austin landscape. Indeed, her social relations facilitated a more generalized connection to the neighbourhood.

A note on scale

Our questions also sought to explore the construction of place meaning across multiple scales (e.g. neighbourhood, city, region). Concerning the function of physical interactions for fostering place sentiment, our data revealed that participants consistently described their physical interactions as facilitating connections to individual garden plots. By contrast, place connections that were mediated by social relations often occurred at the scale of both individual plots the neighbourhoods in which those plots were located, and to a lesser extent for the city of Austin. Jerry captured this dynamic, when he explained the larger impact of UP's mission in his neighbourhood:

My goal [for UP] is to develop the neighborhood and constitute it as an entity, even if it's not officially state chartered. You know, it takes a village to be a village. It seems like a logical direction or conclusion if you think about it. Neighbourhood or neighbourship, people sharing their lives around a place, and physically affecting the place, and inhabiting the place. (06June 2013)

Consequently, the meanings participants ascribed to the relationships with other UP members were the conduit by which place-related meanings traversed and became embedded within other spatial scales. While the plots are nested within these broader place scales, there was dilution in the intensity of meaning participants attached to these larger territories.

Summary of findings

Beginning with grass-covered lawns, the plots and participants undergo transformation. The creation of place meaning begins with plot design and layout; Bermuda grass gives way to a carefully landscaped area featuring enriched soil that will eventually yield produce. Each area of the plot is carefully considered for its potential to support specific varieties of plants with consideration of their relationship to one another, their need for moisture and the tolerance for the Texas sun and heat. The transformation of the backyard into the landscaped garden plot also

reflects a milestone along the journey to grow produce. Participants now begin to visualize the plot's potential.

Following the sowing of seeds/seedlings, participants then begin to nurture and maintain the landscape. Daily and weekly routines of weeding, watering and tending to the needs of the plants dominate. This process, described by Pam as “hard and heavy and dirty and sweaty,” resembles a struggle between participants and the harsh conditions (e.g. pests, drought, heat). Growth, flowering and the production of fruit/vegetables provide feedback that indicates success and solidifies participants' engagement with the site.

The conclusion of this “journey” is marked by the beginning of harvest, a milestone that, for some members who lie outside the core of the UP social world, often brings a satisfying end to their involvement and provides tangible illustration of their effort. For those members central to the UP project, however, harvest further sustains their engagement. This journey is experienced with others who share a common goal. The journey's end offers an opportunity to both reap the benefits of participants' labour and reflect upon the experiences that help transform the barren backyard into a productive landscape.

While we have used the “journey” metaphor to describe UP participants' involvement in the project over the course of the growing season, the beginning, duration and end – if one can exist – vary among members. For UP participants whose journey began early with the cultivation of the site and concluded with harvest, the transformation is compelling. For some, while there is some stability in the meanings they ascribe to the neighbourhood or city, the growing season was the beginning of remaking place. For UP members who have several or more seasons of involvement, the new plot represents an opportunity not only to share their vision of place with others but also to create new meaning through new experiences and social relations. Alternately, for participants new to the UP project, the harvest is a poignant and exciting moment. As the landscape was altered, so too were their relationships with other members, the plot and the broader landscape.

Interpretation

The purpose of this investigation was to explore the ways in which participation in an urban garden project – Urban Patchwork – shaped volunteers' feelings toward the project garden plots, the neighbourhood, the City of Austin and/or the region of Central Texas. Our findings illustrated that participation in the project shaped the meanings participants ascribed to the landscape through two principal processes: (1) a sense of connection to the different garden plots through the resulting produce and the physical transformation of the site, and (2) a sense of connection to and identification with the community at large via connections to other individuals who are involved in UP activities.

Place transformation

First, our data illustrate the process of place transformation is multifaceted. Through varying degrees of physical exertion and discomfort, participants laboured to cultivate local, organic produce. The motives underlying their persistence were driven by both functional outcomes and more abstract individualized meaning. Functionally, the production of organic produce yields life-sustaining nutrients. While this motive remained dominant throughout the participants' involvement with the UP project, it is the mode of production that is most compelling. Because

the produce was the product of their labour, it is no longer an “anonymous generic vegetable” whose origin is a mystery. The vegetable, an object of care for participants spanning up to several months, now has identity. It has a birthplace and a small cohort of caregivers. These personalizing acts give meaning not only to the food participants consume but also to the locales in which the food is cultivated and harvested. In this transformation, the garden now begins to bear the image of its creators (Csikszentmihalyi & Rochberg-Halton, 1981).

The means of production also closely align with participants’ values governing their attitudes related to food security, community well-being and social cohesion. More than simply putting “food on the table,” participants’ involvement reflected concerns over processes related to how the food is produced and the implications associated with its production. Although variability exists within political and religious orientation, concern for healthy food and healthy community was common. Consequently, the UP Project acted to provide space for disparate ideologies to coexist without threat. Territories for such coexistence seem to be increasingly rare as extreme ideologies secure prominent platforms afforded through social media (Sunstein, 2008). Alternately, participation in the UP Project afforded participants some protection from having to reveal and defend their ideologies. In this way, the garden plots were considered by participants to be neutral spaces that were welcoming of all persuasions.

The physical act of cultivating garden plots also parallels other contexts in which place is built, modified and manipulated. As noted, participants assisted in the construction of their garden plots beginning with what they viewed to be relatively unproductive backyard spaces. Not unlike residents who contribute to the growth and development of their cities (Feldman, 1990; Hay, 1998), our informants also assisted in the growth and development of their garden plots. In varying ways, participants built infrastructure, contributed to various forms of production and engaged socially. These collective actions resemble functioning communities in which members, with differing capacity, contribute to a common good (Theodori, 2001). While contributions differ in form and magnitude, collectively, they each act to sustain the “community.”

While the focus of this investigation was on participants of the UP project and their respective plots, the implications for the construction of place meanings transcend these boundaries. It was apparent from respondent interaction and interviews that what occurs in backyards was not confined to these backyards. Numerous participants described their involvement with UP as a means of fostering attachment to the various neighbourhoods in which garden plots resided. The “meaning spill over” has been previously reported in the literature. For example, in Kyle and Chick’s (2007) examination of tenters’ attachment to their site situated within an agricultural fairground, they observed that the place meanings ascribed to the tent site were nested within more abstract meanings ascribed to the fairground and the broader community. Similarly, we observed that the meanings participants ascribed to the individual garden plots were also embedded in broader meanings connected to neighbourhood, city and region. Given that these territories are arbitrarily defined by political agendas, it should not be surprising that they do not neatly conform to social presence. Participants’ lives require them to move throughout the neighbourhood, city and state. Consequently, meanings bleed across politically defined boundaries to more closely resemble the character of those who dwell within these spatial units, however defined (Lee, 1972).

Social cohesion

Findings from this study corroborate previous research (Hay, 1998; Kyle & Chick, 2007; Milligan, 1998) on the continued relevance of social worlds for understanding place bonding and on the co-creation of meaning. The UP social world shaped the creation of meaning and social world members were also, in part, the object of attachment. The processes underlying the social construction of meaning hinge on discourse and action among social world members. Given the shared experience, meanings associated with place, the experience and the produce were cocreated with other UP members. Also, as noted, the fondness for place across multiple scales was embedded in the sentiment participants ascribed to the relationships they shared with other members of the UP social world. The meanings ascribed to these relationships, forged through the shared experience of gardening, have become embedded in the landscape.

When contrasted with previous inquiries into the social worlds of community gardeners, UP participants' affinity for and identification with one another may be exceptional. Previous studies have identified intra- and intergroup power struggles nested within larger economic, racial/ethnic and gender inequities (Glover, 2004; Parry, Glover, & Shinew, 2005). In contrast, the UP social world and its constituent relationships were largely harmonious, which may have been a function of its demographic and cultural homogeneity

Implications for understanding leisure behavior and potential for further exploration

Beyond investigations of natural resource-based recreation, the relevance of place for understanding leisure behaviour has been foreshadowed by other phenomena impinging upon the experience. Because place research occupies a prominent space in most of the major disciplines, this omission is surprising. Be it the meanings and symbols youth use to shape the experience of their local recreation centres (Henderson & King, 1999) or the social ties that bind attendees to agricultural fairs (Kyle & Chick, 2007), there is ample evidence to suggest that an understanding of the meanings recreationists ascribe to place provides valuable insight into their leisure behaviour. This is not to suggest that place is paramount and dominating. Rather, we suggest greater consideration is warranted for the acknowledgement of place in shaping leisure behaviour. Place is more than a stage in which leisure is experienced (Milligan, 1998); it can be an affordance and constraint (Kleiber, Wade, & Loucks-Atkinson, 2005), a manifestation of enduring engagement (Bricker & Kerstetter, 2000), a locus for social world gathering (Kyle & Chick, 2007), a context for youth expression (Henderson & King, 1999), a territory for misogyny (Massey, 1994), resistance (Keith & Pile, 1997), agency (Werlen, 1993), expression (Lee, 1972), and so on. In fact, we can think of few phenomena where an understanding of the meaning of place has little relevance for leisure behaviour. The leisure experience is always anchored in place, be it tangible or virtual. The acknowledgement of the relevance of place for understanding leisure behaviour, beyond natural resource recreation contexts, is slow in coming.

While a rapidly growing body of literature is emerging on the contributions of community gardens to the development of social capital (Glover, 2004), less is known of their contribution to participants' connections to the locales (plot, neighbourhood, etc.) in which these gardens are situated. Given the social nature of human-place bonding, it is hard to imagine the cultivation of social capital emerges in the absence of some connection to the landscapes in which the capital is cultivated. The construction and maintenance of social capital require action from actors who reside in the locale. Consequently, the sentiment ensuing from the receipt of social capital must surely be attributed, at least in part, to the landscapes and territories supporting its development. A wealth of leisure research in addition to the broader place research

has demonstrated that past experience is instrumental for the development of place attachment (Altman & Low, 1992; Hammitt, Backlund, & Bixler, 2006; Shumaker & Taylor, 1983; Wynveen, Kyle, Hammeitt, & Absher, 2007). If shared experience (in place) is instrumental for the creation of social capital, the literature on social capital might also benefit from an understanding of the role of place meaning and attachment in this process. Can social capital be constructed or emerge in an era of placelessness?

Opportunities for further inquiry

A limitation of the present study relates to the selection of informants. Absent are negative cases, i.e. those who dropped out of the UP Project and others residing close by garden plots who may object to the UP Project's presence. Our informants' associations with place and the UP Project were all positive. It would be interesting to investigate the meanings ascribed to place and experience among those who no longer participate or those who object to the Project. A number of interesting research questions could be explored that address meaning conflict, contestation and territoriality. As our work with the UP Project continues, we aim to explore these issues and would also encourage others.

Note

1. All participant names are pseudonyms.

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