1. Introduction

Within the last decade, community gardens in impoverished central city neighborhoods have emerged as important spaces of resistance against poverty and hunger. Community gardens provide antidotes to food insecurity, environmental degradation, and urban disinvestment (Pudup, 2008). They are important sites of citizenship practice and place-based community development (Armstrong, 2000; Baker, 2004; Kurtz, 2001; Schmelzkopf, 1995). Garden development can challenge hegemonic ideologies and assert rights to space for racially and economically marginalized citizens (Staeheli et al., 2002). However, community gardens face significant barriers stemming from structural inequities and discriminatory neoliberal policies. Thus, gardens are also sites of conflict (Irazábal and Punja, 2009; Schmelzkopf, 2002; Smith and Kurtz, 2003). These tensions compel community gardeners to engage in creative strategies and form networks of support. While past research acknowledges their importance, there is insufficient exploration of the role of networks in urban gardening.

We contend that formation of supportive networks is crucial for development and sustainability of community gardens in marginalized neighborhoods against barriers caused by structural inequities and discriminatory neoliberal policies. We thus examine the process of network formation and its role in enabling community gardeners to navigate tensions of neoliberalism. Elsewhere we examine the potential of gardens as spaces of citizenship within the framework of neoliberalism. Our findings derive from case study research in the marginalized ‘inner-city’ Milwaukee neighborhood of Harambee, where gardens are positioned as responses to neoliberalization, diminished local urban food environments, and high land vacancy. This project extends our decade-long investigation into citizen participation and community development processes in Harambee and other Milwaukee inner-city neighborhoods. For this project, we gathered data from 2010 to 2012, employing qualitative research methods. We conducted twenty-one semi-structured, intensive interviews with actors involved in Harambee neighborhood community gardens, including residents, community garden organizers, and representatives from nonprofit organizations and city government agencies actively involved in gardening efforts. Additionally, we engaged in participant
observation at four Harambee community gardens, attended relevant public meetings and conducted content analysis of planning and policy documents.

2. Neoliberalization and urban community gardens

Neoliberalization is theorized as a mode of political economic restructuring and a form of governmentality underpinned by specific ideologies about the appropriate relationship between the state, capital, and citizens. It occurs through creative destruction of existing institutional configurations and regulatory structures at multiple scales (Brenner and Theodore, 2002). Neoliberalization entails state welfare retrenchment, privatization (via markets or civil society) of formerly public services and goods, devolution of responsibilities to lower levels of government, emphasis on partnerships and involvement of non-state actors in governance practices, fiscal austerity, and competitiveness at all government levels (Jessop, 2002; Peck and Tickell, 2002).

The erosion of the social wage under neoliberalization has exacerbated socioeconomic polarization and marginalization by increasing marginal employment and reducing social supports for low-income populations (Lightman et al., 2008; Piven, 2001). It has also heightened demand for social services provided privately or through voluntary and grassroots organizations (Newman and Lake, 2006). Due to diminished spending on urban green space, many poorer urban neighborhoods now experience limited access to green spaces (Heynen, 2003; Roy, 2010). Thus, although urban community gardens existed prior to neoliberalization, they have proliferated as a particular localized response to neoliberalization at the urban scale (Baker, 2004; Kurtz, 2001). Urban community gardens provide access to affordable nutritious foods and safe green space where it might otherwise be unavailable (Armstrong, 2000; Irazábal and Punja, 2009; Schmelzkopf, 1995). By improving built environmental quality, urban community gardens may also raise property values or stimulate investment in neighborhoods (Quastel, 2009).

Simultaneously, urban community gardens face heightened challenges in the context of neoliberalization. The neoliberal reorganization of space has manifested at the urban scale in part through land use conflicts between the state (or associated capital interests) and citizens. This has been particularly prominent around green space access, where the state’s interest in privatizing land for development purposes directly confronts citizens’ interests in maintaining open access to green space for community use (Smith and Kurtz, 2003; Staeheli et al., 2002). State disapproval of green space often takes on racialized or classist implications, as the state may promote certain kinds of space at the expense of others, in ways that conscribe what kinds of people belong or do not belong in public space or what forms of public space are legitimate (Barracough, 2009; Domene and Sauri, 2007). In many cases, the local state has evicted community gardens or imposed severe restrictions on their forms (Irazábal and Punja, 2009; Rosol, 2012; Smith and Kurtz, 2003). Although states often actively utilize green space development as a means of generating revenue or attracting capital investment, these efforts tend to be oriented towards wealthy consumers and highly managed in form, and states may thus continue to oppose community gardens, which they regard as hindering capital accumulation (Domene and Sauri, 2007; Perkins, 2009b, 2010; Quastel, 2009; Schmelzkopf, 2002). In this context, community gardens may face tenure insecurity, regulations conscribing garden forms, or steep rents (Irazábal and Punja, 2009; Smith and Kurtz, 2003).

The expansion of voluntary sectors and localization of responsibility under neoliberalization may also constrain community garden development because it has produced more competitive environments for grassroots organizing (Elwood, 2002; Ghose, 2005; Newman and Lake, 2006; Rosol, 2012). With the shift from government to shared or collaborative governance, local governments have promoted expanded roles for non-state actors in governance activities, including service provision and management, and participation in planning activities (Perkins, 2009b; Swyngedouw, 2005). While the shift to governance is discursively premised on increasing opportunities for civil society control, it has often diminished the power of civil society actors by compelling them to compete for resources and prioritize survival over political activism (Newman and Lake, 2006). This competitive context often leads to fragmentation of community organizing (Hackworth, 2007). Community organizations may also be coopted to support state agendas and accept responsibility for social service provision (Perkins, 2009a; Wolch, 1990; Trudeau, 2008). Grassroots community garden groups operate within these constraints and, due to their smaller size and less professionalized structure, may struggle to compete. Community gardening across a city may be fragmented and limited to neighborhoods where citizens already have access to material and social resources, resulting in challenges to establishing larger advocacy campaigns (Kurtz, 2001; Rosol, 2012; Smith and Kurtz, 2003).

Community groups have developed strategies to address these constraints, primarily through engaging in supportive networks of relationships (Armstrong, 2000; Smith and Kurtz, 2003). These networks may be material or discursive (Nicholls, 2009). Network development is a strategy often employed by marginalized actors, or actors experiencing barriers, to navigate constraints and leverage power (Featherstone, 2005; Ghose, 2007; Gilbert, 1998; Silvey, 2003). It appears to be particularly important for marginalized community organizations in neoliberal contexts, where resources are scarce and less secure (Elwood and Ghose, 2001).

Community garden groups utilize networks to negotiate land use conflicts, acquire material resources, and bolster advocacy (Irazábal and Punja, 2009; Schmelzkopf, 2002; Smith and Kurtz, 2003; Staeheli et al., 2002). These networks involve citizens, nonprofit organizations, government agencies, and private funders (Armstrong, 2000; Baker, 2004; Kurtz, 2001). They enable community garden groups to acquire necessary organizational resources and technical knowledge (Armstrong, 2000; Pudup, 2008; Schmelzkopf, 1995). Smith and Kurtz (2003) argue, employing Cox’s (1998) theorization of networks, that the use of social networks to fundraise enabled garden groups to expand the scale of the conflict beyond the local and beyond traditional circuits of capital by creating new ‘spaces of engagement’. The next section provides further explication on network theories.

3. Theorizing social networks

3.1. Social networks as strategy

Social network formation is a critical strategy for grassroots community organizing and a mechanism by which actors construct spaces to defend their interests (Cox, 1998). Network theories have evolved to explain interactions between individual actors and the social relations within which they are embedded, while balancing between roles of structure and agency.

Actor network theory (ANT) emphasizes the dynamic, evolutionary, flexible and unpredictable nature of networks. It advances the importance of the interaction of human actors and nonhuman actants, working together to form flexible heterogeneous networks (Latour, 1987; Law, 1992; Murdoch, 1997, 1998). This approach is used in science and technology studies, in which knowledge is seen as a social construction produced by ordered networks of heterogeneous materials composed of humans and nonhumans.
(Law, 1992). Because ANT places strong emphasis on relationships of exchange between humans and nonhumans, it is considered to be symmetrical (Murdoch, 1997). ANT views social space as constituted of networks in which actors struggle to become ‘agents’ (actors with power). Distinction between powerful agents and other intermediary actors is made once the network stabilizes, at which point less powerful actors become links in the network. ANT views action as “the property of associations rather than human agents,” and seeks to understand how associations are formulated, and how the roles and functions of “subjects and objects, actors and intermediaries, humans and nonhumans are attributed and stabilized” (Murdoch, 1997: 330). ANT has been critiqued for paying insufficient attention to power hierarchies within networks or to social inequities that affect socially marginalized actors. It has also been criticized for “avoiding any normative judgments which would differentiate more from less desirable outcomes” (Leitner et al., 2002: 285, citing Haraway, 1997).

The concept of network embeddedness theorizes how actors engage with multiple dynamic networks in different social contexts and utilize network connections strategically to promote their own interests (Granovetter, 1995). Such networks can be constituted by strong or weak ties, depending on whether actors are connected through relations of trust that build social capital or through informal acquaintance (Granovetter, 1983). Weak ties primarily allow for exchange of information and low-risk resources; strong ties encourage higher-risk resource exchange (Nicholls, 2009). Through the ‘strength of weak ties,’ actors can access opportunities through direct contacts and information flows.

In analyzing the politics of urban governance, Cox’s notions of “spaces of dependence,” “spaces of engagement” and “networks of association” are particularly useful. Spaces of dependence “are defined by those more-or-less localized social relations upon which we depend for the realization of essential interests” (Cox, 1998: 2). Spases of dependence contain local classes and interest groups, defined by social divisions of labor or other social geographies (e.g., residence). Strategies for territorial control emerge to protect local interests. In response, agents then organize themselves and engage with other centers of power, creating spaces of engagement, defined as “the space in which the politics of securing a space of dependence unfolds” (2). These include those sets of relations that extend into spaces of dependence, but also beyond them to construct networks of association, exchange and politics at multiple scales, that help to protect local interests (Cox, 1998). These networks of association then form spaces of engagement. Networks of association are built and used by agents from different local interest groups to influence (directly or indirectly) territorially powerful local state agencies.

Cox (1998: 3) notes that, “networks signify unevenness in the penetration of areal forms. They are also rarely entirely contained by areal forms.” In urban contexts, relationships among actors often cross boundaries and scales. Scale jumping can occur when agents ‘jump’ to more central government branches to mobilize resources to protect or enhance their local interests. Thus it is important to analyze the spatiality of scales, and understand how horizontal networks of relations between actors and organizations interact with issues of scale (Brenner, 2001). The spatiality of networks is addressed in scaled network theory, which draws upon the concept of scale as a social production (Leitner et al., 2002). Scaled networks are dialectically related to hierarchies and markets. While thematic networks link together actors from different places with common concerns, territorial networks link actors in a common geographic area.

We use a synthesized framework to conceptualize network, drawing upon the notions of networks of association, network embeddedness, and scaled networks. We use the term actor to refer to social actors, either as individuals or as representatives of a group interacting within various networks.

3.2. Power and difference in social networks

Conceptualizations of networks as dynamic and actively constructed recognize the unequal distribution of power within networks (Featherstone, 2005; Nicholls, 2009). According to Ghose (2007: 1966), “networks reflect structural inequities along class, gender, and racial lines, and contain hierarchical power structures” that shape who is included. Network formation depends on actors’ abilities to navigate power relations, which are likely to vary on the basis of resource access, mobility, or perceived social status (Routledge, 2003). Engagement in a particular network may require knowledge about procedures for participation or behavior according to terms set by more powerful actors within the network. Specific individuals or organizations often serve as “key brokers” or gatekeepers within a social network because of their relative affluence, mobility, or social status; these key brokers enjoy greater influence within the network (Nicholls, 2009: 87). Accordingly, conflict and competition are likely to occur as network relations are established and (re)negotiated (Cox, 1998). Recognition of potential power differentials and conflicts within networks requires attention to discursively and materially constituted roles of differently positioned actors within networks.

Some of the recognized challenges in urban community gardens are attributed to conflicting priorities or competition for funding among connected actors (Baker, 2004; Smith and Kurtz, 2003). As shared spaces, gardens are produced through negotiation of difference and boundary delineation (Kurtz, 2001; Staeheli, 2008). Gardens developed by non-locals, for example, may go unused by local residents because they feel no ownership over the space (Armstrong, 2000). Discursive constructions that circulate within food activist organizations and activities broadly have been shown to contribute to exclusion by coding spaces as white and affluent (Alkon and McCullen, 2011; Guthman, 2008; Slocum, 2007).

While such challenges tend not to be discussed in terms of network theories, they clearly coincide with aspects of these theories. Examining the role of social networks in community garden development is important precisely because social networks contain power dynamics. Understanding networks is crucial to understanding how socio-spatial difference emerges from, or is challenged by, community garden development. Because participation in networks depends on individual actors’ abilities, some actors will benefit more from particular networks than others (Ghose, 2007). Actors that depend on network relationships may be co-opted or coerced by more powerful network actors. Our analysis of the Harambee neighborhood case study will consider the complexities entailed in network formation as a strategy for community garden development. As we will demonstrate, although networks enable Harambee community garden development, networks formed between citizen groups and other actors also contain unequal power relations and conflicts that can constrain the activities of community garden groups. We analyze and discuss our findings in the following sections. In order to contextualize Harambee within broader political economic landscapes, we first describe the general social, political, and economic characteristics of the City of Milwaukee.

4. Community gardens in Milwaukee, Wisconsin

Milwaukee has undergone significant changes over the past five decades due to deindustrialization and the decline of Fordist-Keynesian systems, urban disinvestment, suburbanization, and white
flight (Ghose, 2007). These trends have heightened socioeconomic polarization and worsened economic conditions in many Milwaukee neighborhoods. Milwaukee is highly racially segregated, with many neighborhoods in North-central areas inhabited predominantly by African-American residents.

Since the early 1980s, the City of Milwaukee has adopted characteristically neoliberal approaches to governance. This is evident in downtown redevelopment geared towards attracting real estate investment, in the greater dependence of community-based organizations on private grants, and in downsizing within nonprofit organizations (Ghose, 2007; Zimmerman, 2008). While voluntary organizations in Milwaukee struggle to compete for limited funds, they are increasingly compelled to accept responsibility for parks maintenance, emergency food provision, and other basic services (Perkins, 2010). Many consequences of neoliberalization are distributed unevenly across Milwaukee. High foreclosure rates, unemployment, and crime are clustered in low-income neighborhoods in North-central areas of the city.

In this context, urban community gardens have emerged, primarily on vacant lots, providing recreation, green space, and food to residents who tend them. There are currently approximately twenty community gardens on vacant lots across Milwaukee, developed and managed by different citizen groups and nonprofit organizations. Some of these gardens originated in the 1980s; others were built as recently as 2010. Although the City of Milwaukee openly promotes urban agriculture and allows groups to build community gardens on vacant lots, city policies maintain several critical constraints on the development of community gardens. Because most vacant lots in Milwaukee are city-owned, citizens seeking to build a community garden on a vacant lot must obtain permission from the city planning department, the Department of City Development (DCD). DCD provides seasonal community garden permits for six-months or for three-year terms. The seasonal permit must be renewed annually and can be revoked at any time. To obtain permits, citizens must formally apply, provide a garden site plan, demonstrate support by a sponsoring organization, and pay fees. DCD will deny permits if it deems particular lots to have real estate development potential. Once a permit is granted, it provides strict land use guidelines: permanent structures (e.g., toolsheds) are prohibited, raised beds are required, the space must be cleared during winter, and grass must be mowed. Groups must also retain liability insurance covering the garden space. Groups wishing to obtain water from fire hydrants (a common source for vacant lot gardens) must pay additional fees to Milwaukee Water Works (MWW), the municipal water utility.

Additionally, there are constraints on community gardens deriving from their material and organizational resource needs. Necessary community garden materials that must be purchased or obtained via donations include clean soil (required by DCD to mitigate heavy metal contamination), lumber for raised beds, seeds, tools, and permit fees. Development of community gardens also requires substantial voluntary organizing to complete permit applications, fundraise, and ensure adequate labor for garden construction and maintenance.

Milwaukee Urban Gardens (MUG), a nonprofit land trust based in Milwaukee, plays a central role in the development of community gardens throughout the city. In 2000, it emerged as a coalition representing various citizen groups that actively petitioned the City to change its land use policy regarding community gardens. It then gained sufficient legitimacy to act as an intermediary organization connecting Milwaukee DCD to community garden groups. Groups seeking garden permits apply to MUG; applications approved by MUG are sent to DCD for final approval. Groups pay annual permitting fees directly to MUG, which delivers them to DCD. MUG also purchases land for community gardens; it currently owns three sites.

4. Case study: Harambee neighborhood

Harambee is a predominantly residential neighborhood with significant levels of poverty, unemployment, and property vacancy relative to the city as a whole. As of 2005, approximately 12 percent of Harambee properties (600 lots) were vacant; the overall vacancy rate for Milwaukee was 4 percent (City of Milwaukee, 2005). Approximately 43 percent of Harambee residents (nearly double the proportion for the city as a whole) had incomes below federal poverty level. 86 percent of Harambee residents identify as African-American.

Harambee has a rich history of community organizing, activism, and citizen participation in local governance. In 2006, the Milwaukee branch of Local Initiatives Support Corporation (LISC), a national organization that promotes urban revitalization and nonprofit economic development by providing financial and technical assistance to community development organizations, selected Harambee as the focus of a comprehensive neighborhood planning initiative. In partnership with multiple private foundations, local corporations, nonprofit organizations, city government agencies, and Harambee residents, LISC developed a neighborhood plan articulating goals and priorities for development of the neighborhood. Harambee residents participating in the process identified community gardening as a high priority. Accordingly, the plan reserved a specific parcel of land for future agricultural use. In 2007, following the creation of the neighborhood plan, Groundwork Milwaukee, a local nonprofit organization based outside of Harambee, worked with a Harambee resident to build the 5th Street Garden. Subsequently, four additional community gardens were built and one community garden rebuilt in the neighborhood (Table 1).

Harambee community gardens reflect diverse forms and organizational structures. Each community garden exists with a temporary lease on a formerly vacant, city-owned residential lot and is thus affiliated with MUG. However, each garden is managed by an organization independent of MUG, either Groundwork, Victory Garden Initiative (VGI), Off the Grid Milwaukee, or All People’s Church. In gardens managed by Groundwork, groups of citizen volunteers are responsible for regular maintenance and decision-making; Groundwork assists with major construction projects and fundraising and ensures compliance with city land use policies. Various other entities (including philanthropic foundations, local hardware stores, and the City of Milwaukee Department of Public Works (DPW)) have been involved at particular times in Harambee community garden development (Fig. 1, Fig. 2).

5. Harambee community garden networks

Community garden development and maintenance in Harambee is challenged, as it is throughout Milwaukee, by city land use policies that require groups to obtain permits and by heightened competition for resources in the context of neoliberalization. Because it is a low-income neighborhood where many residents have been socially marginalized, certain barriers to community garden development are experienced more strongly in Harambee. Residents face relatively greater difficulties leveraging financial resources or convincing DCD that they are deserving of community garden permits. Yet groups have managed to surmount or mitigate these challenges, primarily through territorially-scaled networks constructed among citizens, nonprofit organizations, City of Milwaukee agencies, and other actors (see Fig. 2).

5.1. Networks as strategic resource

Territorial networks are an important means of building organizational capacity and political clout, particularly for grassroots and...
community-based organizations (Elwood and Ghose, 2001; Smith and Kurtz, 2003). Actors in such networks can also expand network scope by linking to thematic networks. In Harambee, territorial networks connecting citizen groups to nonprofit organizations, city government agencies, and private funders are utilized strategically as a resource for developing and maintaining community gardens. Strong ties characterize these territorial networks: formal relationships between actors enable the transfer of valuable and high-risk resources including finances, staff time, and land use permits. Weak ties are also important, as means by which garden groups obtain information and knowledge necessary to enter networks of strong ties. Additionally, thematic networks have been established through key actors in territorial networks.

Most Harambee garden groups are small, informal, dependent entirely on volunteer labor, and lacking the financial resources and organizational infrastructure associated with formal nonprofit organizations. For individuals and small groups seeking to build community gardens, network relationships enable connection to larger and formally established organizations with greater organizational capacity, staff capacity, political influence, access to financial resources, and abilities to fundraise. Connection to larger organizations also provides access to knowledge and information about processes of obtaining permits and applying for grants. Finally, larger organizations are able to bolster small garden groups by advocating for them and helping them to recruit and organize volunteers.

Specific nonprofits in these networks—MUG, Groundwork, and LISC—serve important mediating roles in the development of community gardens. Mediators or strategic brokers are actors capable, because of their relative affluence, political clout, or mobility, of linking together geographically or socially disparate actors (Larner and Butler, 2007; Nicholls, 2009). In Harambee, these mediators have considerable power and connect citizen groups with nonprofits, city government, and sources of funding and material

<table>
<thead>
<tr>
<th>Garden</th>
<th>Year founded</th>
<th>Overseeing organization</th>
<th>Number of participants</th>
<th>Supporting actors</th>
<th>Land tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td>All People's</td>
<td>1995/2008</td>
<td>All People's Church</td>
<td>15</td>
<td>Victory Garden Initiative Milwaukee Urban Gardens Bliffert Lumber</td>
<td>3-year lease</td>
</tr>
<tr>
<td>Concordia</td>
<td>2009</td>
<td>Victory Garden Initiative (VGI)</td>
<td>10</td>
<td>Milwaukee Urban Gardens Bliffert Lumber Urban Ecology Center</td>
<td>3-year lease</td>
</tr>
<tr>
<td>Nigella Commons</td>
<td>2010</td>
<td>Groundwork Milwaukee</td>
<td>8</td>
<td>Groundwork Milwaukee Milwaukee Urban Gardens Bliffert Lumber</td>
<td>6-month seasonal permit</td>
</tr>
<tr>
<td>Richards Street</td>
<td>2009</td>
<td>Off the Grid Milwaukee</td>
<td>11</td>
<td>All People's Church Milwaukee Urban Gardens</td>
<td>3-year lease</td>
</tr>
<tr>
<td>5th Street</td>
<td>2007</td>
<td>Groundwork Milwaukee</td>
<td>7</td>
<td>Groundwork Milwaukee Milwaukee Urban Gardens Bliffert Lumber</td>
<td>6-month seasonal permit</td>
</tr>
</tbody>
</table>

Table 1

Community gardens in Harambee neighborhood.

Fig. 1. Actors and networks in Harambee community gardens.
resources. While MUG remains a powerful local entity, LISC and Groundwork have different levels of power and legitimacy as both are national organizations with local chapters, operate at multiple scales and connect territorial networks to thematic extralocal actors. Missions and goals of these national entities are then enacted locally and local organizations gain access to institutional knowledge and resources. Given their strong organizational infrastructure and established history of funding recruitment, citizen groups are keen to partner with LISC and Groundwork.

LISC is a key power broker in urban governance, as it brings for-profit development in disinvested neighborhoods. It played a foundational role in facilitating development of relationships among various actors interested in community garden development through its 2007 strategic planning process. According to a LISC Program Officer, “there was no organized community gardening effort in Harambee” prior to the 2007 planning process (Personal communication). LISC’s presence influenced Groundwork to participate in Harambee community garden development. Groundwork’s Executive Director attended planning meetings, where she learned of Harambee residents’ interests and connected with individual residents who later became organizers of Grow and Play, 5th Street, and Nigella Commons gardens. All garden organizers except one cited these planning meetings as the source of initial contacts leading to the development of their community gardens. While most were aware of Groundwork’s community gardening efforts, it was not until attending planning meetings that they met its Executive Director and discussed collaboration.

Associations with MUG have enabled Harambee community groups to more easily negotiate acquiring legal permission to build community gardens. MUG maintains active relationships with Milwaukee DCD and MWW that allow MUG to streamline the permit application process for community gardens. It communicates directly with DCD staff to identify vacant lots available for gardens, and works with each community group throughout the application process, assisting with garden site plan creation, and ensuring that groups understand DCD’s permit terms. MUG’s assistance is important, particularly for citizens with minimal organizing experience or unfamiliarity with land use policies, because it consolidates complex procedures and eliminates citizens’ needs to negotiate directly with the city. Part of MUG’s success stems from strong support from political allies, like Milwaukee Alderman Nik Kovac, who have championed community gardens and helped persuade DCD to permit them. Network relationships have thus allowed Harambee groups to overcome constraints to community garden development associated with local government policy.

Connection to Groundwork serves as an organizational resource for Harambee community garden groups. For Nigella gardeners, Groundwork has “a really great network of resources” that they lack, including knowledge about local political processes and other organizations that would provide beneficial resources (Personal communication). Groundwork assisted Nigella, 5th Street, and Grow and Play gardens in identifying feasible vacant lots, conducting outreach, and seeking approval from neighboring residents. Groundwork also temporarily employed a garden organizer to guide residents in the process of garden design. Because the citizen groups that sought to develop these gardens have no formal organizational infrastructure and operate voluntarily with minimal resources, connections to Groundwork were essential.

Networks function as a means to acquire material and financial resources for community garden development. Soil, lumber for raised beds, tools, insurance, and land and water use permits, have financial costs that can be prohibitively expensive. In order to overcome this barrier, Harambee groups utilize network connections to acquire material resources for community garden development from “a patchwork of sources,” according to one garden organizer (Personal communication). Because financial resources tend to be limited and uncertain, Harambee community garden groups have formed strong ties locally to obtain material resources through in-kind donations or grants from various sources, including foundations, local businesses, nonprofit organizations, and city

Fig. 2. Territorial and thematic networks of key actors in urban community gardens in Milwaukee.
agencies. MUG provides seeds and liability insurance to Harambee community gardens at no cost. Bliffert Lumber, a local company, has donated lumber to several Harambee community gardens. Sweetwater Organics, an urban farm, provides free compost. DPW provides free woodchips. The Grow and Play and 5th Street gardens receive no direct funding, but rely on Groundwork to cover necessary costs through the organization’s programming funds. All People’s Church hired a temporary garden coordinator through a grant received in conjunction with the church’s youth program. This strategy of obtaining resources through multiple and varying donors is characteristic of the neoliberal context, in which competition for funding is heightened, grants are more competitive, and donors is characteristic of the neoliberal context, in which competition for funding is heightened, grants are more competitive, and relations with funders tend to be insecure over time (Newman and Lake, 2006). Actors gain access to wider ranges of opportunities by embedding themselves in multiple networks and establishing arrays of ties (Nicholls, 2009). The ability to form networks as a mode of resource substitution is vital for survival of grassroots organizations (Elwood and Ghose, 2001).

Although grant funding and donations are available for community gardens, citizens must be aware of their existence and the specific mechanisms for acquiring them. DPW, for example, donates woodchips unofficially and garden groups must know to ask. Excepting resources provided by MUG, which are provided automatically when groups apply to the organization for permits, groups must proactively locate resources. Nonprofit organizations, like Groundwork, experienced in locating grant opportunities, soliciting donations, and working with government and philanthropic agencies tend to be better positioned to acquire material resources relative to small, informal citizen groups. These organizations tend to have greater knowledge of potential donors and grant application procedures. Groundwork, for example, has cultivated an extensive list of corporate donors on which it can call to obtain tools. Furthermore, for most Harambee garden groups without out 501(c)(3) nonprofit status, grant eligibility often depends on connecting to official nonprofits. Connections to other groups are thus doubly important, because they provide access to material resources (strong ties) and information about potential funding sources (weak ties). For example, Nigella organizers obtained a grant they learned about from Groundwork, and depended on Groundwork as their fiscal agent to be eligible for the grant.

Harambee gardens also require physical and organizational labor. Labor is particularly important for construction of a new garden, but is necessary throughout the life of the garden. In Harambee gardens, including those with paid staff, unpaid volunteers comprise the bulk of participants. Accordingly, volunteer recruitment and management are central to successful garden development and maintenance. Most Harambee gardens developed initially because citizens voluntarily organized and recruited participants prior to applying with MUG. MUG requires (in accordance with DCD requirements) that groups seeking community garden permits have at least four committed members and an organizational sponsor. Networks help citizens build this organizational capacity. Typically, individuals interested in developing a community garden utilize existing personal networks or relationships with neighbors to find individuals with whom to create a group. Nigella organizers began by posting fliers and knocking on doors to invite neighbors to a planning meeting, where several residents decided to develop a community garden. Occasionally, as with the 5th Street Garden, one individual connects first with an organization like Groundwork that assists in recruiting additional participants.

Once a group has permission for garden development, labor is needed for the work of hauling soil, removing brush, and constructing beds. In many Harambee gardens, the residents most actively involved in organizing are elderly, and need assistance with physical labor. Personal or organizational networks are central mechanisms by which small garden groups recruit needed labor. After a garden is built, it needs consistent, ongoing care to ensure plant beds are tended, grass is mown, and snow is shoveled in winter. Because individual volunteers have limited capacity, garden groups prefer to share duties among multiple individuals. Yet, in all Harambee gardens, the number of volunteers tends to fluctuate over time. To address these challenges, groups typically rely on multiple, overlapping networks. Each group recruits volunteers through different channels, depending on the particular networks in which it is embedded, but most groups draw on connections to formal organizations and informal friend or family networks. These networks are often localized within Harambee, but they also frequently extend beyond.

Relationships with organizations provide access to labor because organizations have their own established networks and processes that enable them to efficiently recruit volunteers. Gardens that connect with Groundwork gain access to volunteers that Groundwork recruits through AmeriCorps and the City of Milwaukee “Earn and Learn” program to assist with construction and maintenance tasks, such as building raised beds or spreading mulch. Harambee Cluster Two Neighborhood Association (HCTNA) has assisted the Grow and Play Garden in recruiting volunteers, because some Grow and Play Garden participants are active members of HCTNA and are able to publicize the garden’s volunteer needs at HCTNA meetings. Connection to HCTNA constitutes a localized territorial network, whereas the volunteer network constructed through Groundwork is extralocal.

Informal friend and neighbor relationships serve as crucial supplementary labor sources in times of extra need. While participants in the church’s youth program are primarily responsible for the maintenance of All People’s Garden, church members and neighbors also volunteer when greater labor is needed. The pastor has intentionally endeavored to “build connections” between neighborhood residents and All People’s Garden, because he feels that having more people aware of and concerned for the garden increases its likelihood of survival and success (Personal communication). Harambee garden groups emphasize that establishing and maintaining broad networks of potential volunteers decreases the chance that a garden will go untended at any point. When, for example, Nigella organizers needed to spread mulch over the garden but were short on volunteers, they invited friends and children in the neighborhood to assist. Grow and Play gardeners convinced a neighbor to shovel the walk in front of the garden because they were not regularly able to do so. These informal networks, which are often drawn upon spontaneously, are a crucial factor shaping the production of Harambee community gardens. This results in spaces loosely connected to many people but stabilized around certain individuals. Accordingly, gardens have various meanings and functions. At All People’s Garden, some utilize the garden as a place to grow food, others as space to socialize occasionally, and others enjoy it as aesthetic improvement to the built environment. At Nigella, children frequently visit, some simply to “hang out” in the green space, and others to learn about gardening (Personal communication). In this way, broad informal networks produce Harambee gardens as inclusive places rather than places defined solely by a limited group.

Informal social networks often extend beyond the physical bounds of the neighborhood. Two Nigella participants reside outside of Harambee, but joined because they regularly visit the neighborhood to care for family. Nigella organizers have also intentionally bolstered volunteer participation by recruiting friends residing in other neighborhoods. Similarly, VGI recruits volunteers for Concordia Gardens via its citywide network of friends and supporters. For Nigella and VGI, embeddedness in extralocal networks is a result of organizers’ (former) residence outside Harambee. Because it has numerous connections extending beyond Harambee,
VGI has successfully recruited many volunteers, most of whom are not Harambee residents. Simultaneously, VGI has had relatively minimal success in recruiting participants from within Harambee, because it has not established sufficient network ties with neighborhood residents. The role of networks linking Harambee gardens to actors outside of the neighborhood supports Silvey’s (2003: 147) contention that “cross-place social relations” are as important as residential location “in shaping identities and the meanings of place.” This also challenges easy distinctions between territorially- and thematically-scaled networks. Harambee garden groups are embedded in both territorial and thematic networks, but strategically utilize each to varying degrees to support their interests. Variable spatial extents of these networks highlight the uneven and contingent nature of social networks and the functions they serve (Featherstone, 2005; Leitner et al., 2008; Nicholls, 2009). While localized social networks may constrain actors in some contexts, they may elsewhere be liberating; similarly, scalar networks can alternately alleviate and produce conflicts (Silvey, 2003).

Social network embeddedness theories argue that actors engage in networks to promote their own interests and navigate conflicts (Cox, 1998; Granovetter, 1995; Leitner et al., 2002). Because the community garden development process in Harambee entails multiple steps and procedures, community groups benefit from the assistance of formal organizations dedicated to navigating this process. Supporting nonprofit organizations assist groups in navigating complex and potentially prohibitive procedures by providing them access to organizational resources and political clout. Groups utilize formal and informal networks to build volunteer capacity and obtain information. In Harambee, individuals and groups that have more or stronger connections to networks of organizational resources are more likely to be able to enter into the process of community garden development and are better able to navigate this process. The emergence of community gardens in Harambee despite obstacles is a function of the strength and breadth of networks groups forge, which have opened channels for them to pursue garden development. These channels correspond to Cox’s (1998: 2) “spaces of engagement,” in which actors negotiate to secure their essential interests. Unlike in Smith and Kurtz’s (2003) case, networks linking Harambee garden groups to other actors are not formed in defense of existing places, but to open new spaces for gardens to emerge. This productive characteristic of networks is reflected in organizers’ repeated expressions of optimism regarding the success of their gardens despite challenges, due to support from multiple actors.

Most significantly, Harambee garden groups engage in networks with comparatively powerful actors, like LISC and MUG, that have political influence and connections to powerful financial and state actors. Forming networks in this manner is an observed strategy for marginalized actors to leverage political power (Ghose, 2007). Connections with established nonprofit organizations lend legitimacy to the interests and claims of Harambee garden groups, enabling them to obtain legal land rights and other resources. Thus, Harambee garden networks constitute alternative spatialities that circumvent conventional relations (Featherstone, 2005). However, as we argue next, the power dynamics within these networks serve to reproduce particular state priorities and certain forms of inequality and exclusion.

5.2. Power in Harambee garden networks

While network formation is an enabling strategy for Harambee community garden groups, network connections are also necessary for gardens to develop and thrive. Recruiting volunteers, acquiring material resources, and navigating governmental procedures depend on the social networks in which garden organizers and participants are embedded. Citizen groups that do not establish formal relationships with MUG will be unable to obtain permission from DCD to legally build gardens on city-owned vacant lots. Consequently, citizens who are unable to form appropriate networks may be disadvantaged in, and potentially excluded from, community garden development. Therefore, it is crucial to examine the configurations of power reflected in and produced by networks in the context of Harambee community gardens.

Social networks form unevenly and can (re)produce race- or class-based difference by delimiting who can participate in those networks (Leitner et al., 2002). Because networks are formed as actors compete for power and resources, engagement in networks depends on the abilities of individual actors to navigate power hierarchies (Cox, 1998). Actors must actively insert themselves into networks through cooperation and competition (Ghose, 2007). Competition among actors in networks can constrain actors and reinforce unequal power relations (Newman and Lake, 2006). Our case indicates that the quantity, quality, and strength of social ties are important factors shaping the functions and forms of Harambee gardens. Harambee citizen groups enter networks with nonprofit organizations, DCD, and donors by conforming to the specific regulations and criteria these actors impose and by demonstrating that they are more deserving of support than other community development projects. Because networks can be exclusionary, the production of gardens through these networks unevenly imbued with power results in the production of spaces that are exclusive.

While all Harambee community garden groups have successfully formed strategic network relationships, the nature of these relationships varies among gardens. The variety in funding sources utilized and in the organizational and volunteer capacities of Harambee garden groups reflects the different networks in which each garden group is embedded. While variation in network embeddedness is not inherently detrimental, in the case of Harambee it means that groups do not automatically have access to the same resources. Garden groups like VGI, Nigella, and All People’s Church have relatively broad and deep social networks and, therefore, relatively broad pools of volunteers.

Dependence on networks means that Harambee garden groups are often compelled to accommodate or comply with the interests of other actors within networks. When priorities conflict among actors in networks, actors in positions of relative economic and political power tend to have greater authority to dictate the priorities of network activity (Cox, 1998; Ghose, 2007). Relatively affluent or mobile actors may function as brokers through which decision-making processes flow, which can create conflict due to brokers’ simultaneous allegiance to parties whose interests differ (Larner and Butler, 2007; Nicholls, 2009). When community gardens are managed by external organizations, control over production of these spaces may shift away from citizens, such that externally imposed notions of accountability and efforts to monitor [gardens]... channel the activism promoted in the gardens into particular ways of operating and being... in ways that limit the radical potential of the mobilizations that occur within those spaces (Staeheli et al., 2002: 204).

In Harambee, the priorities of community garden groups often conflict with the priorities of nonprofit organizations and DCD. Because Harambee garden groups depend on network relationships with these actors, garden groups have substantial incentives to avoid conflict and to perform according to the priorities and terms these actors set. While the onus of control in Harambee gardens resides predominantly with garden groups, supporting nonprofit organizations may influence these spaces by guiding citizens toward particular ends that align with the organizations’ values.
Nonprofit organizations are shaped by numerous factors, including organizational mission, funding constraints, staff culture, and political context (Elwood and Ghose, 2001). Nonprofits involved in Harambee community gardens are driven foremost by their organizational missions, values, and funding needs, which do not automatically ally with the interests and needs of community gardens. MUG selectively supports gardens that meet particular criteria, prioritizing gardens that it judges to be self-sufficient, likely to survive for multiple years, and compliant with DCD land use regulations. In order to gain MUG’s assistance, community groups necessarily tailor their garden plans to meet these criteria. Because Groundwork’s mission is not exclusive to urban agriculture, this organization is relatively more selective in supporting community gardens. Groundwork promotes community garden development to the extent that it supports Groundwork’s environmental restoration and justice goals. Like MUG, Groundwork prioritizes projects it judges to be self-sufficient and likely to last. Because Groundwork faces perpetual financial insecurity (due to the competitive nonprofit funding climate) it prioritizes projects it believes are economical. Preferred projects require relatively minimal capital investment, have tangible impacts, and can be supported over time by community members, independently of Groundwork. LISC supports Harambee community gardens only to the extent that community gardens promote neighborhood revitalization and for-profit economic development. While pragmatic from nonprofit organizations’ perspectives, these priorities constrain Harambee gardens by promoting particular garden forms. This is evident in the use of small (4 by 8 feet) raised beds in all Harambee gardens, which MUG encourages all gardens to do. This results in the discursive construction of ‘good’ garden spaces according to ideals of affluence as conceptualized in terms of aesthetic order (contrasted to discourses of ‘blighted’ urban landscapes), akin to the coding of spaces as white (Alkon and McCullen, 2011; Guthman, 2008). Scholars have argued that entrepreneurial gardens may discourage community gardens while actively promoting other forms of urban green-space development because gardens are associated with raced or classed conceptions of disorder or are unable to generate revenue (Domene and Sauri, 2007; Perkins, 2009a, 2009b). Because nonprofits occupy a unique intermediary position in the network linking the more powerful state agencies and donors to politically marginal grassroots groups, they can unintentionally become the conduit that channels the agendas of the powerful actors among the grassroots groups.

As the chief intermediary between Harambee community garden groups and the City of Milwaukee, MUG functions as a gatekeeper. MUG communicates with DCD on behalf of community garden groups and selects which garden applicants will be sent to DCD for permit approval. Gatekeepers, as prominent leaders of a social network, have relatively greater power to determine the activities, terms of interaction, and rules of governance within the network (Nicholls, 2009). Although gatekeepers may set the rules with intent to be fully inclusive, actors who are relatively resource-poor or inexperienced may be effectively excluded from participation because they are unfamiliar with or less capable of responding to the rules. Although Harambee garden groups do not express feelings of exclusion due to MUG’s role in mediating their relationship to the local state, they have minimal interaction with state actors that regulate community gardens and do not participate in negotiations about land use policies or lease terms. Harambee garden groups participate according to terms established by DCD in conversation with MUG, without challenging the rules.

Network conflict derives from relationships between Harambee garden groups and the City of Milwaukee, because city government policy explicitly prioritizes housing and commercial economic development over other land uses. As a consequence of neoliberalization, the City of Milwaukee has adopted policies that promote entrepreneurial development and reduce spending on social services, while simultaneously increasing the demand on citizens to participate in shared governance through volunteerism (Ghose, 2005; Perkins, 2010). Thus, although the City of Milwaukee professes support for urban agriculture (as a form of volunteerism) and allows short-term leases for community gardens on vacant lots, its interests in market-oriented growth and tax-revenue generation conflict with community garden interests. Consequently, Harambee groups struggle to obtain land tenure and financial support for community gardens because the city resists promoting their existence and maintains barriers to entry. Further, Harambee groups are compelled to act in ways that enable them to form legitimate relationships with the city. Garden groups (and nonprofit organizations that represent them) are beholden to DCD because DCD owns vacant lots and has the power to deny permission to each community garden. Groups must maintain positive relationships with the city because a community garden on a vacant lot has no tenure security without a land use permit from DCD. When citizens attempt to gain political support for community gardens, they tend to do so by bargaining with the city rather than contesting city policy directly or demanding concessions from the city. One Harambee garden organizer notes that in order to acquire support from the city, citizens are compelled to work with the city by making “appropriate” requests, or “requests for things that the city can say ‘yes’ to” (Personal communication).

This supports existing conceptualizations of conflicts between community garden groups and governments as confrontations between diametrically opposed actors making intrinsically antagonistic claims on urban space (Barraclough, 2009; Irazábal and Punja, 2009; Schmelzkopf, 2002; Smith and Kurtz, 2003; Staeheli et al., 2002). However, considering the relationship between the City of Milwaukee and community garden groups as a network connection, through which each actor partially benefits, complicates this conceptualization. Community garden groups may regard the city as an opponent in some respects, but in the context of community garden development they also frame the city as an ally. Community groups consider cooperation with DCD as a means to garden development, and thus seek to resolve conflicts within this relationship through compromise rather than contestation. Similarly, DCD outwardly promotes community gardens, rather than actively seeking their destruction. This support for community gardens is partially rhetorical, as DCD only supports the development of community gardens within a narrow range of specifications that serve the city’s interests. Thus, rather than outright confrontation between community garden groups and the city, there is conflict within the networks in which these actors are embedded. Garden organizers consistently express concern about land use policies that inhibit secure or long-term tenure and prohibit certain specific uses of land, but do not voice these concerns to the city or resist permit requirements.

Informal social networks also function as a constraint on community garden development. If a community group cannot acquire support of residents in the vicinity of the garden, it may be unable to build a garden in that location. Actual or anticipated opposition from residents stresses Harambee garden organizers and limits establishment of gardens. When selecting sites for the 5th Street and Grow and Play gardens, Groundwork sought vacant lots adjacent to residents that would support the gardens, because Groundwork finds that support essential to long-term garden stability. MUG concurs: “you cannot just put a garden everywhere...you need everyone to be on board” (Personal communication). VGI describes neighborhood outreach as one of the most important and challenging tasks in developing Concordia Gardens, particularly because VGI organizers are not residents of Harambee. In preparing to establish Concordia Gardens, they...
conducted extensive door-to-door outreach throughout Harambee. The perceived necessity of community approval poses substantial challenges to garden development. Many Harambee garden participants express concern about the perceived association (among non-participants) of community gardens with crime and property-value-loss. Accordingly, reluctance to damage relationships with neighboring residents drives most Harambee neighborhood community garden groups to prioritize the visual quality of garden spaces (by keeping the garden tidy) in order to appease residents who might view community gardens as nuisances. For example, organizers encourage gardeners to cut down tall plants, although this stymies food production.

In addition to revealing conflicts and constraints experienced by actors in positions of relatively weak power within networks, the Harambee case demonstrates that networks may be imbued with significant unevenness. This is apparent in the way that Harambee community garden networks are clustered around particular nodes—MUG, Groundwork, and DCD—to which multiple garden groups connect. Simultaneously, connections between Harambee garden groups are weak, as each operates independently. This configuration indicates a degree of hierarchy in the relationships: all garden groups interact with MUG, which then interacts with DCD. The concentration of linkages around few actors is due partially to the relative power that these actors hold and to the functions that these networks serve. Harambee gardens typically have minimal opportunity to collaborate because they are newly formed or have frequent turnover in participants, and because each group must focus on fulfilling its own needs and has few resources to share. Harambee garden groups form network connections principally out of economic and legal necessity. As general funding for community development projects in Milwaukee is scarce, nonprofit organizations have limited capacity to support Harambee gardens, and gardens compete for these limited organizational resources. Separate but parallel networks connect garden groups individually to city government and nonprofit organizations. This corresponds with Smith and Kurtz's (2003) finding that relationships between community garden groups remained fragmented due to localized competition, despite development of citywide community garden networks.

This particular social network configuration also reflects the neoliberal context, where community development has become predominantly a place-based strategy for urban revitalization (Newman and Lake, 2006). Heightened resource competition and demands for social services have led to depoliticization of community development, because community organizations must focus on survival, and greater variation in outcomes of grassroots organizing (Perkins, 2009a). Unevenness in network embeddedness among Harambee community garden groups reflects this tendency for localized, competitive, and depoliticized forms of community development, as each Harambee garden group builds network connections differently on the basis of its own capabilities. Uneven network formation underlies variation in the structure and quality of Harambee gardens. According to LISC’s Program Officer, “there is no infrastructure connecting [gardener]s together. So, in every neighborhood, it plays out differently, and the resources every neighborhood has are different” (Personal communication). This is true within Harambee, because the resources available to each garden depend largely on each group's ability to form fruitful network connections. Yet community garden development also reflects what groups consider to be practically feasible with scare resources (Newman and Lake, 2006): residents improve vacant lots and gain access to green space through volunteerism, while nonprofit organizations are able to oversee community development projects that produce tangible results with relatively minimal investment.

According to multiple Harambee garden organizers, successful garden development depends on consolidating citizen groups that can take leadership. While this sentiment reflects belief in the social value of community gardens as spaces promoting democratic control, it also reflects the extent to which network formation is necessary in the context of resource scarcity. Networks are formed to leverage resources for marginalized groups, but these networks also (re)create unequal power relations. Groups that can effectively engage in networks are likely to have greater access to resources than those that cannot. Yet, those who engage in these networks are also likely to be constrained by the priorities of more powerful actors, which may conflict with the interests of garden participants.

6. Conclusion

Our case study indicates that social networks are an important mechanism by which community groups overcome barriers to community garden development. Through the formation of networks social movements can expand the scale of conflict and create alternative spaces of engagement in which to defend interests (Cox, 1998; Smith and Kurtz, 2003). In Harambee, individual citizen groups utilize network relationships strategically to create spaces of engagement to leverage power in order to develop community gardens on vacant lots. Existing Harambee gardens have developed and survived through network connections between garden participants and external actors.

This case study also indicates that community groups must meet particular criteria in order to participate in these networks, and that these networks entail unequal power relations. The unevenness of networks within Harambee suggests that network formation may not be equally effective for all groups as means to overcome constraints on community garden development. Networks contain power hierarchies that reinforce difference on the basis of socioeconomic status (Ghose, 2007). Network formation is a strategy that allows actors to leverage resources and political power, but not all actors are equally able to navigate these hierarchies. In networks involving the City of Milwaukee, nonprofit organizations, and Harambee garden groups, garden groups are the least powerful, and are, therefore, constrained by the priorities of other actors. This does not imply a rigid distinction between empowerment and marginalization. Despite the constraints entailed, community garden groups utilize networks strategically to ensure their survival.

Examining the process of community garden development through the lens of social network theories enriches understanding of urban community garden geographies and expands the analytical reach of network theories. Network embeddedness theories emphasize the political and uneven nature of social networks, and can thus enable analysis of the complex and challenging community garden development process. While other studies find that social networks are important in the defense of existing community gardens against external threats (Smith and Kurtz, 2003; Staeheli et al., 2002), we argue that Harambee residents have utilized networks to establish community gardens. Harambee citizen groups have engaged proactively in networks in order to overcome numerous barriers to community garden development, including material resource scarcity and complicated land use permitting procedures. This suggests that networked spatialities may be fundamental to the everyday activities of social groups, whether they are actively engaged in contentious politics or struggling for material survival.
References