# Neighborhood regeneration and vulnerable youth engagement through micro-level gardening interventions

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ABSTRACT: Can local, micro-level design and cultivation of shared, urban spaces foster stronger intrasectorial and inter-community links and elevate youth participation levels towards the improvement of the quality of social life of neighborhoods? This paper provides an affirmative answer through the examination of a participatory action research applied in a vulnerable neighborhood in the City of Toronto. This article begins by briefly discussing the context as well as the methodology. Then, it proceeds by presenting the research process and framework, community involvement and participatory design. Finally, it concludes by reporting on the results, thus far, of this project.

#### 1 INTRODUCTION

Alongside numerous large cities around the world at various scales (e.g., Birmingham and its riots, Paris and the "banlieue" unrest, etc.), Toronto has also recently been shocked by cases of indiscriminate youth-related violence in underserved communities.

Studies have found that these vulnerable neighborhoods are characterized by higher levels of youth unemployment and crime, as well as lower levels of family and community integration that together can increase the likelihood of depression and violent behavior. Another factor that impacts communities is health equity. Besides access to jobs and health facilities, residents also need safe recreation spaces to feel less isolated and to have opportunities to interact. Often the remedies discussed involve largescale, infrastructure-related transformations, which are costly, structure- rather than individual-centered and have a long-term (often unrealized) time horizon. This paper suggests an alternative strategy of targeted micro-level urban interventions, by way of designing and creating participatory gardens in selected locations of a neighborhood with higher levels of youth unemployment, social inequities, and crime. It focuses on the case of the Flemingdon Park in Toronto and the ongoing urban regeneration project that a team of designers, community workers, neighborhood leaders and engaged youth initiated in 2013.

The renaturalization of cities can take different forms—from the development of large scale parks like the Bois de Boulogne and the Parc de Vinciennes in Paris which were considered lungs for the city of the 19th century—to planted avenues and planned urban green spaces like those designed and implemented under Alphan who improved the quality of public spaces in the French capital. These strategies contributed to the beautification of Paris and adopted a planned top-down approach.

Recently, we have witnessed an increase in citizens taking action to turn their neighborhoods into more inclusive spaces and attempt to regain access to areas overtaken by vehicular circulation. An interesting exhibition and book that displayed such initiatives was *Actions, What Can You Do with the City* curated by the Canadian Centre for Architecture (Borasi & Zardini 2008). At the local scale, the Flemingdon Urban Fair Committee has been raising awareness about the importance of green spaces in the neighborhood, has been looking for alternatives to activate them, and has been advocating for a community-based farmers market.

This paper focuses on a pilot project that uses a participatory action research approach to engage youth in envisioning and contributing to the renaturalization of parts of their neighborhood by way of gardening. It builds on earlier studies like *Paysage Solidaire* undertaken in vulnerable neighborhoods in Montreal (Farah

& Bhatt 2013) initiated by pioneers like V. Bhatt and other members of the Minimum Cost Housing Group of McGill University.

## 2 PARTICIPATORY ACTION RESEARCH (PAR)

Studies from a variety of fields have been using the PAR methodology. According to Baum et al. "Participatory action research seeks to understand and improve the world by changing it. At its heart is collective, self-reflective inquiry that researchers and participants undertake, so they can understand and improve upon the practices in which they participate and the situations in which they find themselves (2006 adapted from Minkler 2003 and Wallerstein and Grinch 1999)." (Baum et al. 2006).

When undertaking participatory action research in communities, the researcher helps set a framework and enable participants to contribute to addressing an issue or to a visioning session. Hence, as noted by Gumucio-Dagron (2001), the researcher plays more of a facilitator's role rather than a guide. Overall, the PAR methodology is well suited to engage communities, which is why it is becoming increasingly popular with urban planning, urban design and landscape projects (Deming et al. 2011).

#### 3 FLEMINGDON PARK: A CASE STUDY

### 3.1 Background of flemingdon park

Flemingdon Park is a vulnerable neighborhood, with 30% of its population considered low-income – a high number compared to the City of Toronto's overall average of 19% in 2011 (City of Toronto, Neighbourhood Demographic Estimates, 2014) and the fifth highest unemployment rate (15.3%) out of the 140 neighbourhoods of the city (Centre for Research in Inner City Health, 2014). Since 2014, Flemingdon Park was included in the City of Toronto's *Neighborhood Improvement Areas* (31 neighborhoods have received this designation), and prior to 2014, it was considered a *Priority Neighborhood* (City of Toronto, NIA Profiles).

With regard to its physical layout, Flemingdon Park is niched between two ravines systems (on the West, South and East) and a main road to the North (Eglinton Avenue), hence disconnecting it from the rest of Toronto's urban fabric. Moreover, it is further subdivided due to the passing of the Don Valley Parkway (a major highway running North/South) as well as by the presence of an unbuilt strip that hosts the Hydro Corridor (an infrastructure comprising of elevated electricity transmission poles).

The question we asked was how to engage youth in this socially and geographically underserved location to envision improved pedestrian links-with increased activity as well as natural surveillance of public spacesbetween selected community hubs, while also growing food.

#### 3.2 The research and iterative design process

In 2015, the design process in Flemingdon Park included the following activities:

- Meeting with the design team, Youth Outreach Workers and Public Health staff members from the City of Toronto as well as potential partners to discuss the research scope,
- 2. Creating an inventory of potential sites that could be used to renaturalize the neighborhood and site visits to select a number of eligible sites (shown in figure 1),
- Collecting data related to the physical environment of the neighborhood (property plans, maps, building heights) through field work and geospatial data.
- 4. Analyzing the data and preparing visual materials (maps to share information about the site and facilitate the participatory process, as well as selection of urban agriculture (UA) case studies to enrich participants' understanding and illustrate the variety of possibilities),
- 5. Beginning to meet youth for:
  - Discussions regarding their needs, challenges they faced and their aspirations associated to the neighborhood in general and to specific sites.
  - Broadening their understanding of UA and generating ideas regarding possible implementations on the sites,
- Engaging and including youth in the participatory design process through design charrettes,
- Summarizing participants' ideas, elaborating their visions, visualizing the design,
- Presenting to the community through data visualization, incorporating their feedback and further discussing ways to improve the proposal,
- Revising the proposal following feedback from community members,
- 10. Following-up on the project status

Overall, the process was iterative: facilitated by the design team, community members expressed their aspirations; these were digitalized and the design team further illustrated them with the use of renderings, sections or photomontages which were represented to the community for additional feedback and revised accordingly.

As depicted in Figure 1, eight sites were selected because they were key gathering hubs for residents like the community centre, a recreation centre, schools, or the commercial centre. More specifically, they included: 1) Flemingdon Community Centre and Playground Paradise; 2) a city-owned unattractive community park adjacent to the Hydro corridor; 3) the lot of the Dennis R. Timbrell Recreation Centre and Flemingdon Park Library; 4) the Ontario Science Centre; 5) Flemingdon Park shopping centre; 6) the Valley Park Middle School; 7) Marc Garneau Collegiate School; and 8) a health centre with a food bank as illustrated in figures 1 and 7.

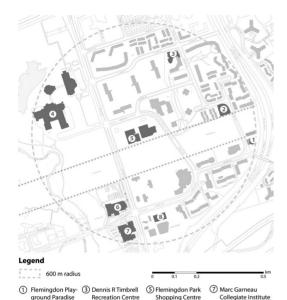


Figure 1. Map of the area of study within the Flemingdon Park neighborhood.

(6) Valley Park Middle

Flemingdon
 Health Centre

(4) Ontario Science

(2) Community

Sources: This map is based on data from the City of Toronto Property Data Maps (2013) available through Ryerson University's Geospatial Map & Data Centre.

The aforementioned sites were lacking a clear connection, hence, we investigated how to link them through pathways and an improved pedestrian realm by way of both gardening and integrating urban agriculture.

The first charrette included seven youth participants from the community. Volunteers were shown examples where urban agriculture was incorporated to public spaces. Then, they were divided into two groups and were asked to make a collage to improve the attractiveness of the park (identified with the number 2 on the maps figure 1 and 7). They were provided with a plan of the park, elements (benches, compost bins, tree bags, growing containers, picnic tables and raised beds), scissors, glue and colours as shown in figure 2. Following this participatory design charrette, youth presented their proposal to each other and we discussed how to move forward. The design team further developed the proposal based on ideas generated through this process, presented the working project for more feedback and then finalised it.

The second charrette combined a background introduction about gardening, urban agriculture and pedestrianization with a visual presentation based on the outputs of the first charrette, as well as an individual drawing exercise. A total of 25 youth participating in the school's summer camp joined this meeting and provided feedback on the working proposal. Their comments on work to date were taken into account towards improving their experience and responding to their interests.

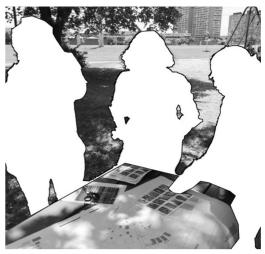


Figure 2. First charrette with community youth envisioning the future of the community park identified with the number 2 in figures 1 and 7.

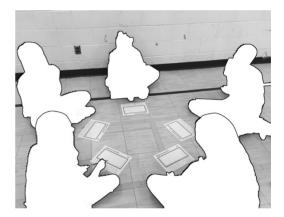


Figure 3. Second Charrette: youth from the community designing the layout of a plot along the Hydro Corridor.

Further, for the charrette component of this meeting, each youth selected a 3 by 6 meters site along the hydro corridor where they could intensify urban agriculture based on their preferences. Then, they gathered in smaller groups as illustrated in Figure 3.

Their ideas were expressed through marker drawings on a sheet comprising of a rectangle (illustrating the plot) and a list of 30 vegetables suitable for cultivation in the area.

## 3.3 Designing the connecting trail

Similar to the large vacant lots in the Flemingdon Park neighborhood, streets and pathways are in general very wide and rather uninspiring due to their scale, the lack of activity, programming and their single use. The envisioned connecting trail, illustrated in figure 4, aimed to improve the natural and social connections in the neighborhood through an enhanced public realm,



Figure 4. Schematic illustration of the proposal for a connecting trail.

Sources: This view is based on data from the City of Toronto Property Data Maps (2013) and Building Height Data (2015) available through Ryerson University's Geospatial Map & Data Centre.

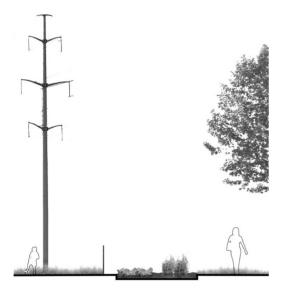


Figure 5. Section of a portion of the hydro corridor illustrating the inclusion of vegetable gardens.

by way of integrating urban agriculture, natural shading and creating an identity to the area engaging both residents and visitors.

To illustrate some proposed connecting pedestrian paths, sections and perspectives, as shown in figures 5 and 6 were used.

Trees, shrubs and ferns were selected based on a list of Toronto native plants (City of Toronto, Tree Planting); in addition, fruits and vegetables were also included.

While the hydro corridor is already used by youth for sports activities, we proposed to further intensify its usage and activate it by way of incorporating a community garden along the northern perimeter as illustrated in the section, Figure 5.

Further, to revitalise the Flemingdon shopping centre area (identified with the number 5 in figures 1 and 7), a wide outdoor space between two key commercial buildings was rethought. Taking advantage of an existing raised bed, we proposed to plant vegetables



Figure 6. Perspective illustrating a proposed aromatic garden in the Flemingdon shopping centre. Illustration by Chenqi Zhu and Chu Li.

such as tomatoes, cucumbers and peppers (based on youth preferences) as well as crab apple trees – also found along the hydro corridor. As illustrated in figure 6, shaded gathering spaces were introduced under the trees. These urban sitting areas, initially inspired by a bench developed by Cox Architects, address a desire expressed by the youth to have more outdoor community spaces.

Overall, the value of these interventions is not only found in the greening and renaturalizing of part of the neighborhood; they have already engaged youth in the visioning process, and continue to involve them in the implementation. In 2013, our team developed a garden in Vendome Place, a noteworthy Modern housing project developed by Irving Grossman. In 2016, youth inaugurated another garden in front of the Flemingdon Playground paradise. We have also reached out to the Councillor and are in the process of investigating ways to further consolidate this work.

As illustrated in the map Figure 7, by connecting education, community and commercial hubs in a neighborhood, gardening activities can and already do have a larger impact when linked, contributing to a stronger sense of inclusion, cooperation, security and neighborhood identity.

#### 4 CONCLUSIONS

The results from this PAR empirical case illustrate that such gardens can not only improve districts and re-naturalize the city, but also help towards repairing the social and urban fabric in numerous ways. First,

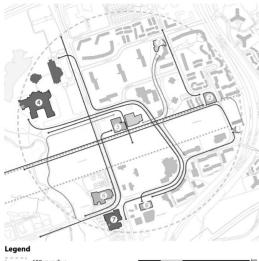




Figure 7. Map showing how a variety of existing and added practices related to gardening and urban agriculture in the neighborhood.

they can distinguish one's neighborhood. Second, the joint element of this effort presupposes, and therefore fosters a community spirit. Third, the building and operating of such a community garden re-engages younger with other community members (allowing for knowledge and advice to be transmitted), benefiting both; fourth by way of channeling some of their energy and time towards a productive and fruitful activity they can be proud of, it ultimately empowers the young.

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