

## **PARTICIPATORY PLANNING, DESIGN AND SELF-BUILT STRUCTURES FOR PUBLIC URBAN GARDENS: COMMUNITY GARDENS AND CASITAS IN THE SOUTH BRONX**

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### **Abstract**

Since the end of the nineteenth century privately accessible public open space in low-income neighborhoods in densely build-up inner cities has been reduced to a minimum. At the same time collaboratively and privately used urban gardens emerged worldwide – public open spaces that were participatory in their planning and design of open and enclosed structures. By the global economic recession of the 1970s this led to the creation of community gardens in the urban centers of North American cities such as New York City by low-income residents. They cleaned up vacant property lots in the vicinity of their apartments and laid out and designed these spaces for collaborative use with self-built structures according to their and their neighborhood's needs and cultural context. The participatory planning and design for public gardens as influenced over the years by conflicting interests of various land use groups, residents and city planning agendas. Still, today there are about 600 community gardens in New York City that are participatory in maintenance, use and design [1]. In my paper I will first analyze this development of the community gardens in the South Bronx since the 1970s [2]. Then I will focus on the aspect of self-built structures in community gardens in the area and on the example of the “casita”, the garden hut built by low-income residents with Latin American and Caribbean cultural background. From my analysis I will draw the conclusion that there is a human need for common and private public space use and a commitment to the community garden land use form in the inner city that finds an expression in the participatory planning, design and self-built structures for public urban gardens.

### **Keywords:**

Participatory planning, public urban gardens, community gardens, self-built design, urban agriculture

### **INTRODUCTION**

The objective of this paper is to discuss aspects of my research and practical work as an architect relating to urban agriculture and urban gardening with the focus on the participatory design and self-built structures in community gardens in urban centers and in particular in the low-income neighbourhood South Bronx area of New York City. From my analysis I will draw the conclusion that there is a human need for common and private public space use and a commitment to the community garden land use form in the inner city that finds an expression in the participatory planning, design and self-built structures for public urban gardens. My paper is based on my work as an architect involved on a pro-bono basis with community-based projects in public urban gardens in New York City since 2007 and on my research for my PhD thesis published at the Berlin University of Arts in 2015 and my upcoming book with Springer in 2017.

[FIG. 1]

## DISCUSSION

With the economic, political, social and city-planning changes in the late nineteenth century following the process of industrialization and urbanization, public open spaces in urban low-income areas were reduced and low-income housing was built in as much density as possible to maximize profit. At the same time and parallel to this development commonly and privately used urban gardens emerged worldwide – public open spaces that were participatory in their planning and design and that featured self-built structures. Ultimately under the global economic recession of the 1970s, these changes led to the development of community gardens by urban residents in North American cities such as New York City. Especially in the low-income urban areas, residents answered the governmental “neglect” in infrastructural provision in their neighborhoods by creating so called community gardens: They cleaned up vacant property lots in the vicinity of their apartments and designed together, i.e. in participation of a group decision-making process, these open spaces for common use with self-built structures according to their individual and their neighborhood’s needs and cultural background. The “gardeners” intention was to improve their own and their community’s quality of life through self-help by creating a public space in the form of a garden. Over the next 40 years the self-built design and participatory planning for public gardens were influenced by conflicting interests of various land use groups, residents and city planning agendas, but community gardens remained as a land use form part of the urban environment of New York City. Today there are 600 community gardens, more than 150 gardens in the borough of the Bronx. [3]

[FIG. 2]

The study area of my analysis is New York City’s low-income neighborhood called the “South Bronx”. This is the area, located at the southern tip of the borough of the Bronx – today an low-income area enclosed by three highways, the Cross Bronx Expressway, the Major Deegan Expressway and the Bruckner Expressway.

[FIG. 3]

This area had, due to a construction boom following the extension of the elevated subway system north and into the Bronx at the beginning of the twentieth century, become by the 1920s a desired residential location, an urban district with six-story housing along business lined streets.

With the economic upswing during the postwar years, the population increased in the South Bronx, but the construction of the Cross Bronx Expressway, built starting in 1948 by Robert Moses, cut through the densely-built center of the Bronx, creating a rift between neighborhoods, pushing residents out as tenement buildings were demolished and many residents relocated.[4] At the same time the real estate market pushed low-income residents - mainly Latin American and Caribbean immigrants as well as African-Americans - across the Harlem River. Social tension and crime multiplied. Gangs dominated the streets in the 1960s and yet more residents left the district: of about 437,000 residents in 1950, only 386,000 remained in 1970, i.e. the population reduced by 50,000 in two decades. [5] “The South Bronx, in particular, went from being two-thirds white in 1950 to two-thirds African American and Hispanic in 1960”. [5] In New York during the 1950s and 1960s there was generally the trend that white people were leaving the inner city. “During the 1950s “a million whites moved out of New York City, including 200,000 from the Bronx. In the 1960s, when the number of whites leaving New York City stabilized, the number leaving the Bronx rose by a quarter, to 256,000”. [6] On the other hand, “the African-American and Latino poor, themselves displaced from urban renewal projects in other parts of the city, were ‘dumped’ into high-rise public housing constructed in predominantly white working-class communities”. [7]

The change in population and built environment caused a disruption of social networks and of neighborhood community. Social control reduced and criminality increased, while the global economic crisis left people without work. Drugs and gangs dominated the streets. In the Bronx, the crime rate was on the rise in the 1970s with a murder rate of 18 murders in 1961 increasing to 102 murders by 1971. [6] The financial crisis that had its peak in the middle of the 1970s and New York City declaring bankruptcy in 1974. The quality of housing and infrastructural elements in the South Bronx decreased due to a stop in maintenance and investment. By the middle of 1980 the number of population in the South Bronx of 1970 was cut almost in half, from 383,000 in 1970 to 166,000 in 1980. [8] The South Bronx was in 1980 census the poorest place in New York City. [10]

Next to crime, drugs and gangs fires contributed to the decline of quality of life in the area. "Between 1960 and 1980 ten thousand buildings were burned by arson-for-profit rings in response to 'redlining' by banks, which refused to make property-improvement loans in so-called blight areas. Two hundred thousand people were displaced from their neighborhoods." [9] During the time the South Bronx lost about 40 percent of its housing stock through fires while almost half of the population moved out and businesses fled. [11] Large tracts of open space, burned out ruins, trash and rubble characterized the area.

Those residents of the South Bronx that had remained living in the neighborhood began to improve their own quality of life, by organizing themselves to take over the maintenance "their" apartment buildings and to clean up lots next to them from burned down buildings and trash. Neighborhood groups were formed and community gardens started in a participatory planning and design process. In the middle of the 1990s crime rate in the South Bronx dropped by over two-thirds and the number of robberies and assaults in the area by over half. [11]

[FIG. 4]

[FIG. 5]

The residents' redevelopment efforts and creation of community gardens improved their own quality of life and attracted reinvestment in real estate, businesses and infrastructure as well as new residents and gentrification. While at first owner-occupied, suburban style bungalows with private gardens were constructed on the vacant lots to create low-density in the area soon high-rise residential buildings went up that once again maximized tenant density and reduced open spaces and endangered the community gardens of the area. In the central neighborhood Melrose of the South Bronx, residents' who had redeveloped their neighborhood since the 1970s, organized themselves in the group Nos Quedamos ("We Stay") to speak up and act up against city-planning proposals with high-rise high-density buildings. To demonstrate their interest in continuing to use community gardens while allowing redevelopment in the South Bronx, they participated in the urban planning process in their neighborhood and created with the Community board an advisory, so-called 197-a plan and with the community gardens group More Gardens! the Melrose Open Space Homes and Gardens Plan.

[FIG. 6]

[FIG. 7]

The Melrose Commons Urban Renewal Plan was developed between 1992 and 1998 by the municipality with participation of community organization Nos Quedamos for the Melrose neighborhood of the South Bronx to provide housing as well as accessible public open spaces. During the plan's development, the construction of two- and three-story, owner-occupied row houses in the Melrose neighborhood was discussed that would have endangered further community gardens, which led ultimately to the revised Melrose Commons Urban Renewal Plan that changed the original plan of the City to preserve community gardens while others such as the community garden Centro Cultural Rincon Criollo had to move to a site one block away from the original site. Redevelopment of the South Bronx continued and by 2000, the South Bronx had become again attractive as a residential location and population increased and reached 1.3 million. [5]

[FIG. 8]

Due to the continued organizing efforts of community gardeners citywide and after set-backs under the administration of Mayor Rudolph Giuliani in the late 1990s, finally in 2002 the community gardens settlement was reached with active input by community gardening advocates that eight years later, in 2010, led to the enactment of Community Garden Rules. Consequently some community gardens were preserved immediately while others were transferred to alternate sites or where opened up to development for so called affordable housing. Among the gardens that had to move to an alternate site was the community garden Centro Cultural Rincon Criollo and the gardeners had yet again to pack up and start anew. In 2007 the gardeners of Rincon Criollo moved whatever was movable of their original garden site to the new location at 157<sup>th</sup> Street and Brook Avenue.

[FIG. 9]

[FIG. 10]

Despite the new construction in New York's low-income districts and due to the active participation of gardening residents in local planning there are about 600 community gardens in New York City and 44

gardens in the South Bronx that remain maintained, used and designed as a participatory group effort as in the 1970s. [1; 2]

### **Community gardening and the casita**

The use and design of a garden reflects the specific constellation of a gardening group in regard to their own and their neighborhoods interest, their cultural background and the changes in this constellation over time is reflected in the layout, the design and management of a community garden.

In the South Bronx, the residents who created community gardens starting in the 1970s and who are using them until today are of Latin American and Caribbean cultural background and have been building in tradition of their homeland. Looking at the Puerto Rican tradition as an example, landless low-income urban residents there have been taken over marginal public land on the urban periphery since the 1950s to create a garden and constructed a wooden “casita” in it. In the 1950s, the agricultural economy of Puerto Rico was transformed into an industrial economy and consequently the rural population was pushed to urban centers. In need of housing and food, the impoverished, landless urban population began to take over parcels of land to construct small wooden houses with gardens inext to each other on under-used public land n the urban periphery.

Working-class residents of Puerto Rico brought this tradition of casita building with them when they immigrated to New York City in search of employment. This immigration was triggered by the global economic situation in general and the economy of Puerto Rico in specific. In New York City’s Latin American or Caribbean neighborhoods, the word casita, “small house” in Spanish, became used to describe the site of a community garden by residents by referring to the small house within it as it is the central commonly used feature of the garden, the enclosed social gathering space within the open social gathering space of the community garden. In community gardens that are situated in neighborhoods with a Latin American or Caribbean population, casitas are built in a group effort often under the lead of an experienced gardener out of salvaged materials and are used by the group throughout the year.

One of those gardens had been the community garden Centro Cultural Rincon Criollo and its casita that was re-constructed again after each time the garden had to be moved to a new site. After the last move of the community garden Rincon Criollo in 2007, the new casita had to comply to the Citywide regulations for structures in community gardens registered with GreenThumb issued by the Technical Affairs and Borough Commissioners in February 2006 as an addition to the Department of Building’s regulations for temporary structures and thus the gardening group of Rincon Criollo designed the new casita built to be a maximum of 150 S.F. in size and with larger windows than in the traditional design.

[FIG. 11]

To provide community gardeners with advice on how to design and construct casitas that responded to the new citywide structural guidelines in 2006-2007 a manual for the construction of a wooden structure called “Gardenhaus” was developed in a team of builders and architects and my lead for GreenThumb. This structure was designed as a variable kit based on the traditional community garden elements such as the casita, the greenhouse and the stage, under the use of affordable, standard materials and for construction by only a few tools. The development of the Gardenhaus design kit allowed community gardeners to continue to construct affordable, self-build structures such as casitas as residents’ group have done in community gardens in New York City’s low income neighborhoods like the South Bronx since over 40 years.

This initiative by GreenThumb acknowledged the importance of participatory planning and design in community gardening. In 2012, again the role of residents taking on and participating in design, development and maintenance of community gardens was at the center of the community gardens program GreenThumb of the New York City Department of Parks and Recreation and Mayor Bloomberg’s office’s Obesity Task Force’s “Gardens for Healthy Communities Initiative” from 2012-2014 that I organized as a Project and Design coordinator. Under this initiative, GreenThumb secured open land usable for urban agriculture and developed an application process for fifteen new gardens. The new garden groups were encouraged to participate in design charrettes to lay out the site with the garden elements that were available, that they envisioned and that could be installed with the \$400,000 in total of “one-shot” money that GreenThumb had received from the City. With the support of the non-profit organization GrowNYC these residents groups then developed and constructed thirteen the gardens in the five boroughs. Next to a prefabricated storage box, standard

raised beds also a “winged” rainwater collecting roof structure was installed that allowed for future adaptation for cultural expression through the gardeners.

[FIG. 12]

## CONCLUSION

The participatory design of community gardens and self-built structures creates urban sustainability on a neighborhood scale and supports regenerative and resilient urban environments in a larger scale. Urban community gardening has the capacity to influence the built environment and provide social, economic and environment sustainability as is proven by 40-year history of community gardens in low-income neighborhoods in New York City and the will of the people to continue to use open space for community gardening in the city.

To ensure the continuation of privately used public gardens in future urban centers and to manage the influences of the various public and private interest groups that anticipate future challenges and roadblocks, I recommend that the (1) human right to garden needs to be anchored in legislation as urban institutions in comprehensive land, (2) a public agency needs to be created that coordinates urban land use for privately used public gardens in order to foster communication among the various public and private interest groups and that (3) zoning of public open spaces used for urban gardening needs to be created and supported by a participatory planning process to include public gardens as urban institutions in comprehensive land use plans.

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## FIGURES

*Fig. 1: The Garden of Happiness in East Tremont, South Bronx, was created in 1989 and received a new casita in 2010. Photo: Carolin Mees, 2010.*

*Fig. 2: Map of community gardens in New York City including council districts and highways, 2010. Cartographer: Mara Gittleman, 2010. Based on data by GrowNYC, NYS GIS Clearinghouse, NYC Department of City Planning, StreetMap USA. Courtesy: GreenThumb, 2010.*

*Fig. 3: Map of South Bronx, 2014. Google Maps, [www.google.com/maps](http://www.google.com/maps). [accessed April 9, 2014]*

*Fig. 4: A trash and rubble filled lot in the South Bronx in the 1970s. Courtesy: GreenThumb, 2009.*

*Fig. 5: Community Garden in New York City in the 1970s. Courtesy: GreenThumb, 2009.*

*Fig. 6: The Melrose Open Space Homes and Gardens Plan, 1996. More Gardens!*

*Fig. 7: The Melrose Commons Urban Renewal Plan, 2010. Map: HPD, Office of Development.*

*Fig. 8: Community gardeners demonstrating in front of City Hall, New York City, 2010. Photo: Carolin Mees.*

*Fig. 9: Casita of the community garden Centro Cultural Rincon Criollo in 2000. Courtesy: GreenThumb.*

*Fig. 10: Casita of the community garden Centro Cultural Rincon Criollo after relocation to the new site at East 157th Street and Brook Avenue, 2007. Photo: Carolin Mees.*

*Fig. 11: The plans of the Gardenhaus are to be found in the Gardenhaus guidebook on GreenThumb's webpage, [www.greenthumbnyc.org](http://www.greenthumbnyc.org). [accessed March 14, 2014]*

*Fig. 12: Mayor Bloomberg's Office's Obesity Task Force supported the participatory development of new community gardens – one of them the Garden of Life and Health at Melrose Avenue and 157th Street. Photos: Carolin Mees, 2015.*