



## Citizen tactics for the activation of underutilized areas: the case of the community gardens in Rio de Janeiro<sup>1</sup>

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### Abstract

Community initiatives to transform everyday spaces in a bottom up manner have been increasingly in large cities, responding proactively to the inability of governments to deal with urgent urban challenges by means of traditional urban planning. Dialoging with the theme of insurgent urbanism and urban activism, this paper discusses citizen tactics for the activation of underutilized areas, presenting, as referential cases, the community gardens in Rio de Janeiro. The paper starts with a discussion about tactical urbanism as an approach for conversion of underutilized areas into urban commons, followed by the analysis of the cases of Parque Sitiê (Vidigal) and General Glicério (Laranjeiras) gardens, community initiatives for the appropriation and transformation of underutilized spaces into urban commons that brought social, economic, urbanistic and environmental benefits to these localities. We seek to question how these actions could be multiplied, and what would be the role of public power in this process.

**Keywords:** Tactical Urbanism. Urban voids. Urban commons. Urban agriculture. Urban activism.

*An urban void is also a field that can be cultivated.  
(FOLKERTS, 2014, p. 56)*

## Introduction

**C**ommunity initiatives to transform everyday spaces have been increasingly frequent in large cities. They focus on urgent issues, such as the lack of or inadequacy of public spaces in needy areas, environmental degradation, the collapse of road mobility, lack of adequate housing, and other recurring themes in different cultural contexts. These forms of insurgent urbanism demonstrate citizens' ability to come up with small short-term solutions, in the face of the sluggishness or inefficiency of the public power to carry out long-term strategic actions.

These citizen actions operate at various scales, or in the engagement of neighbors to improve collective areas (domestic scale), in community attitudes to construct more livable environments (neighborhood scale), or in collective actions for the revitalization of public spaces (urban scale).

According to LEITE (2012), urban areas (usually those located downtown) have lost many of their

productive functions in the last decades, generating obsolete areas and available for other possibilities of occupation. These are the so-called "urban voids", wastelands, or brownfields. Insurgent actions present themselves as an opportunity, in a scenario in which sustainable development imposes and needs to reformulate the existing city, reinventing it intelligently and inclusively (LEITE, 2012).

Activist actions are spatial operations that criticize and question the city at its various scales (LIMA, 2014). These are insurgent actions of occupation of the citizen space that demonstrate the desire for a transformation and redefinition of the public environment, when new possibilities of understanding the urban spaces are demanded and new demands are placed in the agenda, for the benefit of public life and the landscape.

Giving visibility to these forms of urban activism, ROSA (2013, p. 18) suggests these initiatives are

1. The translation of the text was produced by the Model Translation Office of the USJT under the coordination of Nivia Marcello.

political , “proliferating as societal responses to the inability of today’s governments to deal with urban challenges through traditional planning and their instruments.” These responses therefore operate at the local level, filling micro-agendas through the direct action of citizens.

In Rio de Janeiro, the picture is no different. Within this context, if on the one hand we see a greater engagement and creativity in the appropriation and transformation of the public space for citizens’ use, on the other hand, we observe the proliferation of urban voids and residual areas of different natures, with the potential to host creative practices.

Urban voids are the “land and vacant buildings that contrast with the urban scenario by the conditions of use and occupation (no occupation, no use or underutilized) and because they do not benefit the collectivity. They do not fulfill their social function” according to BORDE (2006, p.5). Waste areas, underutilized or abandoned in this sense can be faced as opportunities for new common spaces where the void can be seen “not only as an absence, but also as a promise, as an encounter, as a space of the possible, as an expectation” (SOLÀ MORALES, 2002, p. 187), encouraging community participation and entrepreneurial spirit.

Based on such observation, we raised some questions: is it possible to turn these wasted,

underutilized and abandoned areas into common spaces through bottom-up tactical action? How can we use these tactical actions to achieve greater impact? How can these initiatives be incorporated into planning?

In this article, we will focus on the activation of residual, underutilized or abandoned areas through tactical actions related to the environment. We advocate in favor of community gardens as a form of urban activism that transforms underutilized areas and induces the development of urban commons. We will discuss citizen tactics to activate underutilized areas in the city of Rio de Janeiro, using the community gardens of the Parque Sitiê (in the district of Vidigal) and the General Glicério (in the district of Laranjeiras) as reference cases. They are community initiatives for the appropriation of underutilized areas which have brought social, economic, urban and environmental benefits to these regions.

We start from a reflection on the urban commons, followed by a discussion on tactical urbanism as an approach for converting underutilized areas into common spaces. After theoretical discussions, we will present the cases of community gardens of the Parque Sitiê (Vidigal) and the General Glicério (Laranjeiras) to reflect how these actions can be multiplied and what could be the role of the public power in this process.

### **About the urban commons**

The quality of public life has been analyzed and criticized from various perspectives and disciplines, especially when it comes to the impact of the physical characteristics of urban space on the behavior of citizens. As stated by SENNET (2002), public life and living in community have become a matter of more formal obligations and guided by the processes of commodification, forgetting the principles of conviviality, social contact and social interaction in the public space. Interactions with strangers, with others, are perceived, at best, as formal, distant, and cold. The urban space is thought of as a commodity of consumption and commodification, and no longer as a stimulating context for community life.

In this scenario, discussing the theme of urban commons becomes important and necessary. It has gained relevance in the contemporary context approached by authors such as HARVEY (2014), FERGUSON (2014), STAVRIDES (2014), BRADLEY (2015), among others.

Bradley (2015) comments the terms “common good” or “common” have traditionally been related to natural resources such as pastures, rivers, and forests. Recent processes of commercialization of the public space have risen, or caused the rebirth, of urban commons’ interest. These spaces not primarily defined by their formal property, but by the way citizens make use of it, and whose development is manifested through the appropriation of private property, or abandoned spaces,

for collective uses, like urban gardens or places for entertainment and experimentation.

HARVEY (2014) discusses there is an important distinction between urban public and common spaces/goods. According to him, the first concerns the State and the public administration, a property subject, not necessarily a common one. The public becomes a commonplace when “the social forces take ownership of it, protecting it and improving it for mutual benefit” (HARVEY, 2014, p. 144), such as the case of streets and squares, public spaces frequently converted into commons through insurgent or activist social actions. What is necessary is the constant social practice of “communalization”, which presupposes a collective and a priceless relationship between the social group that appropriates space and its aspect treated as common. The common should not be understood as a static good, but as a malleable relationship between the active social group and the aspects of physical and social space, already which already exist or still need to be created.

The commons arise, or have the opportunity to emerge, when the public space is treated as a place for democratic engagement, and not as a business, as it is regularly done. FERGUSON (2014) sees the commons as an urban and civic platform, a space that is both real and symbolic, where the renegotiation of shared social and political values can gain a constructed form, a concrete physical space of exchanges.

STAVRIDES (2014) states the production of this common space is a process which must overflow the boundaries of a given community and neutralize areas of exclusivity to specific groups. It is a construction that should open space for the emergence of new subjects. These new subjects could be potential developers, capable of perceiving, thinking and changing this shared world. At the same time, it must be part of a rebellion of the creative doing, inventing new forms of human and social relations, against exploitation and inequality. The challenge is discovering creative ways of using the powers of the collective work for the common good, and keep the value produced under the control of the people who produced it (HARVEY, 2014).

These collectives, when organized, can confirm what SARGISSON (2004) defines as intentional communities: groups of people who choose to work together for some common purpose. The reason for these communities goes beyond the individual and family, having the ability to generate places where people experience an alternative life, from the experience of your dreams on a daily basis.

We would like to address the subject of community gardens as common urban, stemming from local actions from the bottom up, which can be framed within the approach of tactical urbanism. According to HARVEY (2014), if the public goods offered by the state diminish, or even disappear, only the self-organization of society will be a pos-

sible response to the development of common for the population. In such sense, tactical urbanism appears as a viable alternative.

### **Tactical urbanism: transforming underutilized areas into urban commons**

We will focus on the tactical actions activating these underutilized spaces and inducing urban commons. The concept of Tactical Urbanism is recent and it means the approach to build and activate a neighborhood, using short-term and low-cost interventions and policies, thus allowing immediate recovery, redesign or programming of the public space, aiming at future transformations.

The origin of the term comes from CERTEAU (1999) who defines and identifies differences between strategies and tactics. He calls strategy the calculation of power relations from the point of view of power, while the “tactic” would be a gradual reaction that takes advantage of “occasions” and the loopholes to act. It is recognized that tactics are determined by the absence of power and serve as the answer of the weak ones (citizens), or as “the art of the weak” (OSWALT, OVERMEYER & MISSELWITZ, 2013), while the “strategies are the formal tools of the powerful (public Power)” (LYDON & GARCIA, 2015, p. 9).

The term “tactical” refers to modest initiatives that have minimal resources to catalyze larger gains. Tactical Urbanism (LYDON & GARCIA, 2015) would

be an approach that uses quick and easy actions, through small interventions, to demonstrate long-term and large-scale change possibilities, which means a fast response to specific circumstances of the 21st century (DUANY, 2015, p. xi).

Tactical Urbanism is not a unified movement, but a general heading through which a wide range of emerging urban projects can be captured (BRENNER, 2018), an approach that can be used by a number of actors, including governments, companies, NGOs, groups of citizens, and individuals (LYDON & GARCIA, 2015) to start new spaces or repair existing spaces. “Do-it-yourself” actions (DIY), where citizens themselves demonstrate the possibilities of change, have been the most widespread. Some authors, such as BRENNER (2016), consider it the real form of mobilization of Tactical Urbanism. According to him

Tactical urbanism is mobilized “from the bottom up” through organizational interventions, cultural and ideological diversity to tackle emerging urban issues. Professional designers, as well as governments, developers and corporations, in general, can actively participate and stimulate tactical urbanism. Instead, their generating sources must be beyond the control of any specific ideology of experts or any specific institution, social class, or political coalition. (BRENNER, 2016, p. 9).

SASSEN (2014) evaluates defends that Tactical

Urbanism is sort of a practice involving occupation. “To occupy is to remake, even if temporarily, a piece of territory, remaking, also, the logics of power, generally undemocratic, impregnated in urban practices” (SASSEN, 2014, p. 44).

Oswalt, Overmeyer & Misselwitz (2013) see tactical actors as individuals who operate through small reactive maneuvers, working with what is available in that place. It relies on time, cooperation and engagement, explores opportunities, a complete knowledge of the field, mobility, and speed. The tactical planning, according to them, has a goal, look at the people who are already active and support these activities. These authors argue that tactical actors are the pioneers of non-institutional life forms, types of “garage DIY” which operate in the gray zone of non-profit activities, contributing to the social stabilization of neighborhoods and functioning as catalysts of innovation processes.

The ability of tactical activators, according to them, is both in the discovery of the place, and in the formulation of the program for its activation. Once a place and program have been defined, space is adapted through low-cost initiatives, using available materials, often reused, and by establishing partnerships with various social actors that can work collaboratively. In this way, the common space arises from the experience of collective “doing”. We will study how this happens in the case of community gardens in the city of Rio de Janeiro.



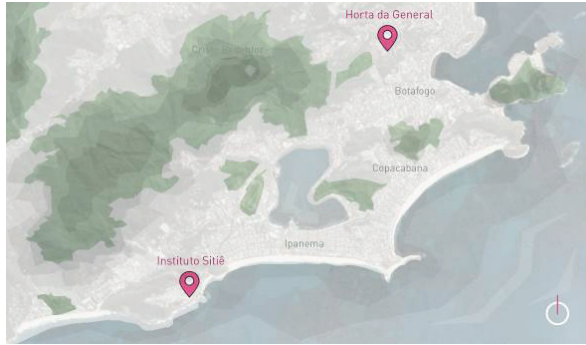


Figure 1. Location map of community gardens Parque Sitiê, in Vidigal, and General Glicério, in Laranjeiras. Source: Horta da General (2017).

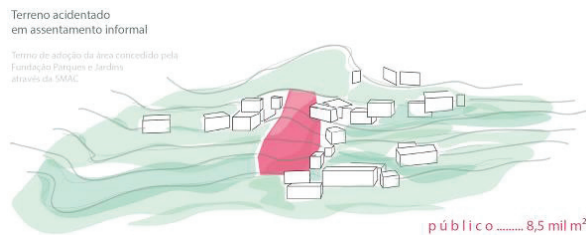


Figure 2. Schematic diagram of land characteristics of Parque Sitiê. Source: Parque Sitiê, 2017.

## Citizen tactics: two community gardens in Rio de Janeiro

In recent years, we could observe a great growth and diffusion of the subject of urban agriculture in the world. According to BISHOP & WILLIAMS (2012), the practice became a significant movement of occupation of land surpluses in urban environments, assuming different configurations and temporalities, such as guerilla landscaping, temporary vegetable gardens and more permanent cultivation areas.

We would like to present an example of the state of the theme in Rio de Janeiro, articulating the community gardens with the process of production of urban commons. As case studies, we will focus on gardens names Parque Sitiê, in the district of Vidigal, and Horta General Glicério, in the district of Laranjeiras. These are two examples of different or contrasting situations of underutilized areas transformation into productive areas: the Parque Sitiê is a garden that occupies a public land in an informal and needy area, as for the Horta General Glicério occupies a private lot in a formal and more affluent neighborhood of the city (Figure 01).

### Parque Sitiê

#### 1- Context and characteristics of the land

Parque Sitiê is located in the favela of Vidigal; it belongs to the Fourth Administrative district in the city of Rio de Janeiro. It occupies the area of 8.5

thousand square meters in a rugged public land and dense vegetation, characterized by degradation and negligence. It was developed because of the community need for green public spaces and protection from invasions. Today, the garden has a term of adoption of the area granted by the City Department of Environment (SMAC) (Figure 02).

The area is a land of natural characteristics of the Atlantic Forest, which had not undergone interventions by the local community until the mid-1980s, named as “Sítio”. With the lack of free spaces, it was used as a leisure area, especially by children who visited it to pick up fruits, and play in the woods. Due to community expansion, the place was occupied by residences with precarious sanitation, initiating a process of vulnerability of the place through the accumulation of garbage and sewage, which persisted for decades (QUINTANILHA & CRISTO, 2015).

The City Hall, through the Favela Bairro Program (Favela District program), started a series of interventions of urban infrastructure in the 1990’s and in the control of settlements in risk areas in the communities. In this process, families which were occupying the land received compensation because their houses were demolished. However, the debris from the demolition was not removed. Thenceforth, residents began to use the land as an irregular waste disposal more intensively, which reached 16 tons, aggravating the environmental situation of the place (PARQUE SITIÊ, 2017).



Figure 3. Sign, access to Parque Sitiê, made by one of its collaborators. Source: Parque Sitiê, 2018.

## 2- Implementation process

The musician Mauro Quintanilha, born and raised in the district of Vidigal, a resident of the surrounding area started removing the debris and garbage as an attempt to recover the place in 2006. He was supported by his friend Paulo Cesar de Almeida, known as Paulinho, neighbor and member of the Community. They formed the first partnership in the transformation of the place.

The period of removal of garbage and debris was a time of inconstancy and difficulties. Even with the help of local and external volunteers, the support was irregular and there was no actual support from formal organizations such as the residents' association and Comlurb (garbage and cleaning department). Thus, they had to clean the land. During the process of transformation of the area, action leaders and some volunteers faced the difficulty of raising community awareness, which insisted on maintaining the inadequate disposal of garbage in the local.

In 2009, the place was renamed Parque Sitiê, in reference to the memory of the "Sítio" and a native bird, in Portuguese, Tiê-sangue (Site + Tiê) (Figure 03). Between 2009 and 2011, agents realized that making the land a productive through the cultivation of vegetables would prevent inappropriate occupancy and garbage disposal. In addition, it would recover the land, making room for a new perception of the place and the possi-

bility of new uses of space by the residents. Then, the garden started to exist.

Community involvement in cleaning and space maintenance was expanding, therefore, from the opportunity of building a productive place of collective use in a region lack quality green spaces. The transformation of the place has motivated a cultural transformation in the community, making it an active collective group in the protection and construction of the place.

Driven by the collaboration and broad support of the local community Parque Sitiê reached public recognition in 2012. It was awarded with the title of the first urban agroforestry of Rio de Janeiro, due to the increasing production demand and the socioeconomic allocation of food distribution in the community. The people involved attended the United Nations Conference, the Rio +20, where they met Pedro Henrique de Cristo, an architect, business graduate and who hold a master's degree in policy development, who has become one of its main agents of transformation.

Pedro's perception over the efficiency and potential of the park was what originated the partnership between them, despite the lack of technical support for its construction and development. Pedro quickly became involved with the project, starting the construction of a concept, an urban design and a strategic development planning.





Figure 4. Construction of spaces and furniture with materials found on the land, in a site-specific design and architecture work. Source: "deleted to preserve the author's identity"

Pedro became the technical and strategic responsible of the park and he brought professionalization to the project. His actions developed physical and institutional space and strategic partnerships to explore the maximum potential of the place together with the importance of the community.

Pedro and Mauro left the park and the community after four years of partnership in 2017. According to them, this was due because the UPP police stations were closed in the district of Vidigal, in 2016. Paulinho, the current leader responsible for keeping the place running, do not see it in that way, and suggests that there are divergences among the leaderships. The park still works, despite its lack of infrastructure. The park's headquarters is now called Parque Educacional Popular Sitiê and has a series of contributions.

### 3- Uses and functions

Parque Sitiê emerges from a development marked by the community's collaboration as the owner of the process of change (QUINTANILHA & CRISTO, 2015). The community works in the transformation of an underutilized space into a cultivable area, through the planting of more than 50 plant species to preserve the environment.

The garden spaces are the result of a site specific design and architectural work, respecting local characteristics and materials available. According to Mauro (QUINTANILHA & CRISTO, 2015),

during the process of garbage removal, a large quantity of tires were found. Their transportation was difficult and they were used in the space. This material was recycled and retaining walls were built. Other recycled materials, such as bicycle rims, were responsible for one of the park's most creative solutions, which are the guardrails of the slopes (Figure 04).

The partnership between the Parque, Studio +D and Pedro de Cristo's office improved existing practices and developed the previously unexplored potentialities. These potentialities include the maintenance and qualification of productive and leisure areas, the establishment of the area as a space for discussion of community issues, a center for teaching and development of educational activities focused on the environment, technology, and arts.

### 4- Actors and partnership

As already mentioned before, the first partnership formed to transform the place was the union of Mauro and Paulinho, combining the work of landscape, design and recycling (Mauro), with knowledge about urban agriculture and reforestation (Paulinho). This meeting was strengthened with the support of the residents of the district of Vidigal in the volunteer work of cleaning and cultivation.

The successful production of the garden strengthened the park's involvement with the community



Figure 05. Set from the garden seen from above. Source: SANSÃO (2018).

from the distribution of production to the population. The inclusion of the garden in Rio de Janeiro's city hall project, which provided the distribution of production in community's kindergartens and schools, known as Hortas Cariocas, was never in fact made official. Instead, leaderships say it was autonomous and integrated with the community (CRISTO, 2017).

Pedro's involvement in the coordination and direction of the park made possible the incorporation of new institutional partnerships, investors, and specialized agents. Through workshops, seminars and announcements, institutions such as FGV, Arq Futuro, Instituto Moreira Salles and the Resident's Association contributed to the production and exchange of knowledge, and the strengthening of community involvement with the park during its operation. Partnerships such as Studio +D and Harvard Graduate School of Design, contributed to the production and exchange of knowledge, and invested in the development of Parque Sitiê through infrastructure projects and resources. The contribution of specialized agents such as Alejandro Echeverri (Medellin), Joshua David (High Line), Elizabeth Rogers (Central Park), Regina Myer (Brooklyn Bridge Park), Pablo Lazo (Arup), Cláudia Moreira Salles, was given by the sharing of design experiences and effective public policies, who achieved positive results in their projects (CRISTO, 2017).

It is worth highlighting Parque Sitiê's contribution

in the social inclusion of the youth of the community, through the insertion in productive and training activities.

Today, despite all external articulation coordinated by Pedro, what one can see is a place with a lack of support, working precariously. Four people, with formal jobs in other institutions, work in the maintenance of the place, in a system of volunteer work.

#### 5- Space transformation

Considering the lack of public spaces in the community, Parque Sitiê represents 57.6% of free public leisure area in the district of Vidigal, currently (PARQUE SITIÊ, 2017) (Figure 05). Their activities fostered new socio-spatial relations in the community from the agricultural production at first, to the activities of teaching, research and practices of citizenship actions, after the development of the Instituto Sitiê, during Pedro's office. The recovery of the land resulted in a public and leisure area for the community, agricultural production with the collective maintenance of this space, the distribution of vegetables to the population. Income generation is a potentially not explored yet.

In a second moment, the institutionalization of the Park added socio-political values to existing environmental issues. The strengthening of these values occurred from educational activities, ena-

bling a cultural transformation of the residents, these being the protagonists of these changes.

As advocated by MELLO & VOGEL (2015), for the successful development of an appropriation of space, first it is necessary that it make sense for people. According to the authors, a space that does not stimulate appropriation indicates that it probably does not carry cultural, or even productive and economic values, when we consider that this space can also generate income. In Parque Sitiê's case, it is possible to perceive that a sense of belonging was gradually developed. The management aimed the recovery and appropriation of an underutilized space, a fundamental aspect for the conformation of urban commons.

In this context, the place is characterized as a "loose space" (FRANCK & STEVENS<sup>2</sup> apud SELDIN & VAZ, 2017), which would be a place that shelters spontaneity through unplanned activities. In Parque Sitiê's case, such "looseness" comes from the spontaneous appropriation of space by the local community, who saw new possibilities for its use (SELDIN & VAZ, 2017).

We can consider the conversion of an underutilized area into an urban common as its main transformation. Gaining scale and the opportunity to develop policies that foster "bottom-up" processes would be the next step.

Therefore, it is important to notice professional

urbanism, as it is known today, had its origin in the needs of the inhabitants. The vast majority of cities, as indicated by GEHL (2006), emerged and developed out of necessity, configured by its inhabitants in a direct action of urban construction, evolving during centuries in a slow process, allowing adaptations and continuous adjustments of the physical environment and the urban functions. The city was not a goal in itself, but a tool shaped by use. The result of this process were spaces that offer positive conditions for community life even today. Therefore, the dynamics observed in cases such as the Parque Sitiê can contribute positively to traditional planning and urban policies.

## 6- Developments

According to Parque Sitiê's page (PARQUE SITIÊ, 2017), a series of actions were taken during the years of operation of the Institute under the coordination of Pedro de Cristo. Among them, we can highlight (1) the strengthening of the community's appropriation of the place; (2) the development of action plans related to the collection of garbage, the revitalization of the forest area, the delimitation and protection of the park; integration and social development, and the lack of representation at the municipal level; (3) the development of environmental education strategies; (4) the transformation of degraded spaces into green public spaces, with the introduction of urban agriculture and reforestation, with distribution of fruits and

2.Reopening of Horta da General. Video about the difficulties and the new project, celebrated with a picnic. Available at <<https://www.youtube.com/watch?v=JPT4898GwJw>>.



Figure 06. Current headquarters of the park, insufficient size. Source: SANSÃO (2017).

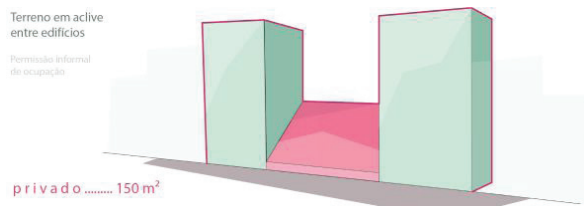


Figure 7. Schematic diagram of the characteristics of Horta da General. Source: SANSÃO, 2017.

3. FRANCK, K.A.; STEVENS, Q. Tying down loose space. In: \_\_\_\_\_. (ed.). Loose space: possibilities and diversity in urban life. Londres/Nova York: Routledge, 2007. p. 01-33.

vegetables to residents and local organizations; (5) the landscape architecture as a solution for soil containment and for the construction of a public space; (6) the use of the park as a model and catalyst for social policies; (7) the development of an architectural project incorporating urban infrastructure systems for water collection, filtration and storage for the use of the park itself<sup>3</sup>; (8) the development of the project for the construction of the headquarters of the Institute and the extension of the park to include the Caminho do Céu (ecological trail connecting the Parque Sitiê to Morro Dois Irmãos); and finally (9) the signature of the term of area adoption, granted by the foundation Fundação Parques e Jardins for two years.

Despite all these achievements, most projects were not set up and the physical space still has many needs. Among them, the lack of infrastructure, a “headquarters” with restrooms and a sheltered space for various activities such as meetings and workshops for children. The existing construction is precarious and does not meet the needs and expectations (Figure 06). In this sense, the leaders expressed their desire for greater collaboration with the Architecture School (FAU-UFRJ), as some students have showed interest in the park.

Finally, another great challenge for the leaders today is the constant work of replanting the vegetable garden, away from areas of dense vegetation and places with intense sunlight. This work is one of the activities to which Paulinho dedicates

himself daily, in the constant struggle to keep the initiative alive.

## Horta General Glicério

### 1- Context and characteristics of the land

Horta General Glicério is located on Rua General Cristóvão Barcelos, in the district of Laranjeiras. It belongs to the Fourth Administrative district (the district of Botafogo) in the city of Rio de Janeiro. It has 150 square meters of an acclivitous empty private lot, between two buildings, and is the result of the initiative of a small group of residents of the region. The vegetable garden is a community work with informal permission to occupy private land (Figure 07).

The area was formerly occupied by residential buildings that collapsed in a tragic accident when, in early 1967 due to flooding in the neighborhood of Laranjeiras (PAINS & MAZZACARO, 2016) (Figure 08). In the area, a rock slid from the hillside, between the streets Belisário Távora and General Glicério, causing the destruction of a house and two buildings, which had their foundations dragged through the ground. The accident left more than 100 dead and many wounded. It was possibly caused by the exposure of the soil and dumping of rubble, at the top of the hill, by a construction company. After this, the Instituto de Geotécnica (Geotechnical Institute) carried out a work of containment of the soil and, since





Figure 8. Photo of the landslide in 1967. Source: O GLOBO (2013).



Figure 9. Set of vegetable garden seen from the street. Source: Google Street View (2017).

then, the ground remained abandoned, conserving only trees and vegetation (O GLOBO, 2013).

Almost 50 years later, in 2014, a resident of the neighborhood, Ícaro dos Santos, began to idealize the use of that non-utilized space. From small gatherings of friends came the idea of transforming the place into a space of community production, social integration, and urban garden.

The land, abandoned almost 50 years ago, gained new meaning for the residents, acquiring space in the daily life of the neighbors. The place has become not only a place of cultivation and encouragement for healthy eating, but also a meeting place, of events and of integration of the neighborhood, remaining active until today (PEIXOTO, 2016) (Figure 09).

## 2- Implementation process

A group of residents came together to transform the land. In 2014, part of the land was cleared and seedlings were planted. This was limited to a small part of the land due to limited sunlight, labor, financing. Gradual construction of the beds took place through available resources, as well as the construction of compost. Everything was done with the financial resources from the project's own designers and some residents (SANTOS, 2017).

Over time, some difficulties came up: discontent neighbors, communal occupation of a private lot

generated strangeness and rejection.

Residents of neighboring buildings were opposed to the project because, according to them, thanks to the compost, the garden attracted insects to the apartments, and generated noise because of the events and gatherings. In retaliation, they even put coarse salt and cleaning products over the plants to kill crops (SANTOS, 2017).

Today this picture is changed. Few residents still resist the project, while the vast majority accept the garden and recognize its benefits to this once abandoned space. Despite some occasional discontent, one of the active participants in the garden comments on the joy that the biggest reason for divergence is the noise, after all, the garden's main purpose is precisely to generate gatherings, picnics and meetings that can bond people of all ages and bring children closer to land work.

Another difficulty concerns water supply. The creators tried to enter into an agreement with the heirs of the land in order to formalize their occupation, assuring its temporary use, and that the garden could be vacated as soon as the owners requested the land. However, there was no interest of the heirs to establish such an agreement. Thus, the occupation of the land is illegal, and it is not possible to request water supply for the city water company (CEDAE) (SANTOS, 2017). The lack of water has therefore become a serious problem for the development of the garden. Dur-



ing the encounters, the residents had to provide gallons of water from their own homes to allow watering, cleaning, washing, and cultivating<sup>4</sup>.

The theft of tools and materials have been a problem in the four years of operation, as well as damages caused by Comlurb (garbage and cleaning department) in the upper part of the land. In 2015, by clearing the land and pruning the trees, the Comlurb (garbage and cleaning department) team damaged the land only surrounded and demarcated by logs. The vegetable garden went through the same problem twice in three months. This did not discourage the neighbors who recovered the space. (MAIA, 2015).

In order to improve living areas, improve the integration of neighbors with the project and solve the water issues and the damages of Comlurb (garbage and cleaning department), a crowdfunding project began through the platform Benfeitoria.com (PEIXOTO, 2016) in 2015. Through this platform, anyone could fund the garden and still earn a reward for it. The contribution value varied from R\$ 20 to R\$ 500 . The ones who donated the latter amount were named the “friends of the garden”, deserving a plaque in its “adopted” flowerbed. The project set the goal of raising R\$ 20,000 in 90 days and use the resource: to build a well powered by human pedaling; implement multi-purpose furniture for coexistence and workshops with schools and permaculture; install bike rack and place solar energy panels to provide light-

ing for the whole environment. The crowdfunding also counted on Natura’s “match”. For each real donate, the company Natura would donate one real, doubling the contribution and also the rewards for donors. The crowdfunding raised R\$ 22,444 with 181 donors

The resource was invested in more integrated, high and resistant beds, made of bricks, soil containment and leveling with tires, planting of flowers, grass and new species of plants. Also, the biggest problem was solved: a water tank, with a direct connection with irrigation hose. The supply of this water tank has faced difficulties today, since it captured a waste of street water generated by the city water company (CEDAE), which no longer exists. In addition, the well project could not be implemented due to difficulties in obtaining a technical evaluation of the soil, aggravated by the remaining foundations of demolished buildings. Therefore, the water challenge for the garden remains.

To celebrate the crowdfunding, in November 2016 a picnic was organized with the donors and caretakers of the garden. An occasion when everyone observed the investments, celebrated in community in an integrated way and received the rewards for the support. Today, there is still a cash value generated by collective financing, money that is used for maintenance and for any other need.

The space is of public use, without fences or barriers of access, open to any person (Figure 10). The

4.Reopening of Horta da General. Video about the difficulties and the new project, celebrated with a picnic. Available at <<https://www.youtube.com/watch?v=JPT4898GwJw>>.



Figure 10. Reception sign at the entrance of Horta da General. Source: SANSÃO (2017).



Figure 11. Sign of Horta da General, seen from the sidewalk. Source: SANSÃO (2017). ]

garden is maintained by means of weekly meetings of an open group of volunteers, in charge of cleaning, planting, watering and caring for plants (PAINS & MAZZACARO, 2016).

### 3 – Uses and functions

The garden is made up of cultivated beds, a compost, a place for materials and tools, in addition to benches, a scarecrow and some signs of plants and areas. An artistic panel on the access wall attracts visitors to get to know the place (Figure 11).

Among the cultivated foods are fruits, vegetables and seasonings, such as pepper, parsley, peumus boldus, lemon balm, basil, lettuce, arugula, okra, papaya, and many others. The neighborhood can feel free to harvest and cultivate, free of charge, respecting the space organization. There are still residents who do not participate in the joint efforts nor harvest the products, but they help the compost, leaving their organic garbage there.

To organize the gathering, there are instructions on how to contribute and act: with tools, with the recycling of waste produced in their homes and the generation of organic fertilizer to enrich the soil of the garden. Effectively, the compost is what works better in the garden.

The place still operates as a space for socializing and leisure activities, such as small events, picnics and parties that integrate the neighborhood.

### 4- Actors and partnerships

The actors involved are basically internal. Besides Ícaro dos Santos, initial creator of the project, the German landscape artist Manfred Bert, another resident of the region, integrated the project of the garden and helped its growth through technical knowledge on the subject (PAINS & MAZZACARO, 2016).

Today an assiduous group of six people are in charge of the project, responsible for the organization, support of the residents, both in the cleaning of the land and maintenance of the garden as in the financing. About sixty others collaborate freely, without so much commitment (SANTOS, 2017). It is a volunteer work<sup>5</sup>.

According to Ícaro, the residents feel embarrassed to participate or even to pick up the products of the garden, because it is small and does not grow large quantities of produce. But, he says they always encourage it and are satisfied when they attract the local community or outsiders.

Since the development of the garden, the group has changed and some original members remain and new members are always welcome

No partnership was established with institutions, NGOs or with the public power. All project funding was made only by private contributions, the creators and collaborators of the community, and



Figure 12. Weekly meeting of a small group to maintain the garden. Manfred Bert picks up fruits to share with members and visitors. Source: SANSÃO (2017).

4. *Reinauguração Horta da General*. Vídeo sobre as antigas dificuldades e sobre a realização do novo projeto, celebrado com um piquenique. Disponível em <<https://www.youtube.com/watch?v=JPT4898GwJw>>.

5. *Horta da General - Vídeo about volunteer work done by the neighborhood*. Available at <<https://www.youtube.com/watch?v=TFDjOcfvTeE>>

the donors of the crowdfunding (SANTOS, 2017).

#### 5- Space transformation

On a small scale, Horta General Glicério benefits the residents of the region. This is not only because of the collaboration with physical health and healthy eating habits, but for the important role of integrating the neighborhood, creating a coexistence between neighbors and visitors, in a space that used to be abandoned.

The garden gave new meaning to the space, leaving its tragic and unhappy history in the past. Creating ties between the neighbors and motivating the integration, whether it is between the community or between the community and the land (Figure 12).

In addition, the vegetable garden collaborated with increasing security by transforming an empty lot into an active area. The garden's use is temporary, while the landowners do not use it for any other purpose. It serves as a test of this area and its possible permanence in the place. BISHOP & WILLIAMS (2012) say these temporary actions add value to the area and offer advantages of the occupation because they (1) generate security, occupying a non-utilized space once dangerous to the public space nearby; (2) generate a possible income, as a vacant lot is expensive for the landowner and; (3) attract other uses, including stores, valuing the neighborhood. In such sense, the authors encourage the establishment of partnerships between creators, community

and landowners to join efforts in improving the area for mutual benefits.

This reconversion of the space, even though a private land and a temporary action, has a positive impact on the relations of inhabiting of the place. The act of inhabiting is the most fundamental and basic form of relationship with the world (PAL-LASMAA, 2017). Inhabiting is an interchange in which the inhabitant adjusts and fits the space, and, conversely, the place itself responds to this accommodation and becomes the externalization of the being and the meaning that the inhabitant attaches to the place. Collective and insurgent actions have the capacity of recognizing and integrating these senses, enabling changes in the landscape in a sustainable and inclusive way.

#### 6- Developments

The plans are to maintain the garden, always strengthening the space of integration, having more meetings and attracting more people, allowing the community to feel more comfortable to contribute and participate in the project (SANTOS, 2017).

There are no concrete projects for the physical expansion of the garden, only intentions. In contrast, there are many difficulties, and if the expansion happens, it will happen in a slow motion, since the garden is restricted to exclusively private financing, without partnerships and with a small group of leaders. There is still a limitation in

the occupation of the land due to the insolation, where the top part does not receive enough sun for cultivation, as it does in the lower part. In addition, the upper part would need an investment in the cleaning and removal of rubble, a resource that does not exist today (SANTOS, 2017).

In addition to the physical integration between neighborhood, creators and garden workers, there is an important means of communication, dissemination and sharing the project, the Facebook page “Horta da General Glicério”. Through it, the group shares the meetings, news from the project, photos and videos of events and cultivations. The responsible group also publishes news, articles, videos and links on urban gardens, types of cultivation, sustainable development, among other themes encouraging such socio-environmental actions.

In such sense, the garden is also an integration device, perhaps one of the main conditions for the existence of the common, since integration means that various categories and types of people can interact. If segregation implies the separation of functions and groups of people, integration, on the contrary, implies the articulation of different functions in the public space. Therefore, it allows the people involved in these functions to act together, stimulating and inspiring, also, other people. Finally, the important thing is people who, working and living in different places, use the same spaces and meet to take actions that positively impact these areas.

## **Final considerations**

Looking at the gardens and socio-economic relationships, one can see which characteristics are beyond what the traditional consider an urban risk. Such initiatives emerge as new dynamics that operate alongside the official services and administration. LEITE (2012) refers to sustainable and intelligent cities as ones that have the capacity of stimulating and taking advantage of the emergence of a number of new services linked to the knowledge and culture economy. These cities highlight the idea of productive restructuring, as possibilities that go beyond the usual territorial configurations. According to him, new productive arrangements may be combined with new spatial arrangements in the construction of new territories that add productive and urban functional value.

Similarly, LERNER (2011) argues that planning is a process and, no matter how good it is, it cannot generate immediate transformations. According to him, a small action may trigger the propagation of other actions, calling this process a good urban acupuncture. Both in Parque Sitiê and Horta General Glicério’s cases, we recognize community and insurgent actions, of small scale, corresponding to actions of tactical urbanism, that we can consider sustainable, inclusive and democratic urban acupuncture.

We identified that to meet a particular need one group or another, taking control of an area has

made it really public through their actions (AESCHBACHER & RIOS, 2008): a common urban in both cases. “Acting as members of a community start to be more effective in their roles as citizens” (AESCHBACHER & RIOS, 2008, p. 87), in this case, performing small actions to recover underutilized areas with concrete transformations in the city.

At the beginning of this article, we asked the following questions: is it possible to turn these wasted, underutilized and abandoned areas into common spaces through bottom-up tactical action? How can we use these tactical actions to achieve greater impact? How can these initiatives reach a scale and be incorporated into planning?

After analyzing the cases, we can see that urbanism from the bottom up was effective in transforming underutilized areas into urban commons. Tactical actions filled usage gaps, valued what had no value, “being present where before there was only silence and absence” (SASSEN, 2014, p. 46) and tested the collective use of the areas, showing a great potential still to be explored. At an early stage, the gardens have proven their relevance, and today they reveal that there is still much to grow economically in both contexts. It is important, however, that the pioneer groups maintains the leading role in the management of these areas, in a collective and non-commodified process, always bearing in mind that according to HARVEY (2014), the common’s problem is their appropriation for private benefit. This does not

mean that part of the production cannot be commercialized to economically benefit the collective.

To answer the other two questions, it is necessary to consider that, for the gain of scale, actions from the bottom up are not enough. LYDON & GARCIA (2015) argue strategies and tactics have great and equal value and can act together, driving more effective transformations: “strategy formulation is half the battle”, and tactics should incorporate measures, “lubricating the gears for implementations from the inside out and vice versa.” (LYDON & GARCIA, 2015, p. 9).

Planners should “learn” from bottom-up actions to put into practice the formulation of strategies. It is necessary to observe the tactics to allow the design of more durable structures, improving and formalizing what already happens in an informal way.

We have proposed the inclusion of public power in the process, which is not limited only to resources, but rather to efforts to catalyze such actions. We can suggest (1) the provision of a booklet of underutilized public lands that require activation by the public authority; (2) the development of rules to tactical actions to activate these spaces; (3) the training of community labor for productive work in these places; (4) the improvement of existing programs; (5) the reduction of red tape for licenses for temporary actions to test spaces; (6) the development of tax break programs to help underutilized areas; among other suggestions.



Regarding the community gardens, Rio de Janeiro City Hall already has the Hortas Cariocas Program, from the Environmental Department. The program is present in 30 communities and in the city schools. The program is focused on creating job positions among residents and people connected to schools. The idea is to cultivate, in a partnership system, to distribute part of the production to schools and to the poor population. Part of the production could be sold to generate profit for the partners and be reinvested. Both gardens analyzed in this article are not part of the program: Parque Sitiê, for undisclosed reasons, and Horta General Glicério, because it does not fit into the program (community and public schools). We believe that there could be an effort to improve the program, considering that there is a real supply of cultivated areas around the city, a demand for the program which deserves greater attention.

The challenges for tactical actions for underutilized areas are present from the motivation of local communities to community participation and collaborative work (local scale); through the search for partnerships and the design of management models (local scale with articulation with external actors); to the development of policies to scale up actions (global scale), connecting the basic actions with the top actions. Thus, tactical urbanism could be understood according to SASSEN (2014), as a *modus operandi* which is both local and multi-located.

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