

## RESEARCH ARTICLE

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# Urban Pockets Design: Reclaiming Third Landscape Through Participatory Processes and Game Theory

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## Abstract

Urban pockets are small semi-public spaces located inside urban blocks, also known as third landscapes. This typology of urban spaces is usually neglected and underused, due to the lack of maintenance, or the transformation of the residential area overall. Pocket parks, albeit small in size, can be considered a real potential in sparking livability in the respective communities, if they are transformed through participatory actions. In this context the main focus of the research is to emphasize the potential of urban pockets, through a comprehensive participatory approach. To achieve this, a series of pocket parks have been identified and transformed, by redesigning the space and, most importantly, analyzing the third landscape, as the residual green micro-areas in-between buildings, that serve no real purpose to date. The process of transformation was led by the inhabitants, through a series of workshops and design of scenarios through gaming. This allowed the community to take ownership of the product, both in terms of design, financing, and later on implementation and maintenance. This research highlights the importance of preserving and reclaiming the third landscape and underlines the benefits of conducting participatory, gaming processes to co-create sustainable, long-lasting designs..

**Keywords:** urban pockets; participatory process; game theory; third landscape

## 1. Introduction

Albania's rapid developments after the 90's, brought many drastic changes to both rural and urban areas (13,16). These changes were more evident in the urban fabric of many Albanian cities, with Tirana leading (7, 14). As migrants from the rural areas headed into the city to quickly find land to build their new informal "private" homes and settle within their "4 walls", they neglected common infrastructure such as electricity, water and together with it, the common public space. This neglect was not a pure cultural feature, but it mainly emerged from the lack of tenure security, and the lack of financial means to design and implement them (12).

Indeed, public places in Tirana have gone through major physical, social and environmental changes through different time periods. Before the 90's, the management of public places was done through a so-called top-down approach, as was all urbanization with all other sectors of economy, centrally controlled (3).

Usually political leaders organized public events in open, large scale public places that typically featured a long walk or 'promenade' (17). Such is the case of Mother Tereza and Skenderbeg squares, where the public could gather in large groups to hear their speech, then stroll along after it, a phenomenon started after the 90' and continues to nowadays. After the 90's, the physical form of public places started to "shrink" due to the high and intense urbanization and informality that was following at that time. Social life in these public places was becoming insecure, and as a result citizens were not frequenting them as they used to. While on the other side, a new typology of potential urban places between buildings was emerging throughout the urban fabric of the city.

Though, in the last decade (at least since 2009) a land use controlled development is taking place due to the reinforcement of the Urban Planning Law<sup>1</sup> (amended several times since 2007), already built developments, especially condominiums, have created urban pockets between buildings which hide within them the potential

<sup>1</sup> Law no 107/2014 "For Planning and Territorial Development"

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to be transformed into pocket parks<sup>2</sup>. These places, which vary in size as small as a 50 m<sup>2</sup>, serve as a recreational, social space, with considerable environmental impact.

## 2. Theoretical framework

This research explores ways into which communities can be mobilized to transform residual urban pockets into sustainable pocket parks. Participatory processes have been present in Albania in two main forms: as practices of community mobilization in co-creation of space (bottom-up)<sup>3</sup> but non-formalized way, and as institutionally defined mechanisms of citizen feedback applied in the whole planning process (3). Nevertheless, the increased activity in territorial planning and dynamics over the last years, has brought to discussion the challenges of establishing and reinforcing cooperation and participatory approaches. Participatory planning, as a case for participatory democracy, is indeed a paradigm that emphasizes the involvement of the entire community in the strategic and management processes of urban/territorial planning. It encourages citizens to take part in decision-making in planning aspects that affect or are of interest to them (1). And of course, an area of particular interest is public space, and the entirety of space between buildings, including urban pockets.

The importance of public space in encouraging sociability and community development has been confirmed continually in theory and practice: these spaces provide opportunities for individuals to engage in high-level social interaction (2,8,9) defines sociability as per formative exchange among strangers and as a main feature of modern urban society. Co-design and participatory processes which aim to encourage sociability, might turn out to be a key component in training users to coordinate with the rest of the community, teach them design techniques as well as to collect possible funding for transforming an urban pocket into a pocket park. Whyte (18) underlines 3 main moments in analyzing public space and their 'success': focus on social life; bottom-up place design; and observation. He emphasizes that social life in public spaces contributes fundamentally to the quality

of life of individuals and that we have a moral responsibility to create physical places that facilitate civic engagement and community interaction. Moreover Jacobs and Whyte (4, 18) advocated for a new way of designing public spaces - one that was bottom-up, starting with a thorough understanding of the way people use spaces, and the way they would like to use spaces. Thirdly, by observing and by talking to people, Whyte (18) underlines that we can learn a great deal about what people want in public spaces and can put this knowledge to work in creating places that shape livable communities.

The second key element that facilitates community engagement in design of pocket parks is use of gaming methods, or 'Game Theory'. Rosenmüller (10) define Game Theory as the theory that describes human interaction in all its forms, including conflict resolution, cooperation and competition. The process defined by this theory is uncertain, and the actors involved cannot be considered rational when entering into negotiation. The approach is based on scenario development and option analysis, and relies heavily on time, persistence and built trust. Rosenmüller and Trockel (11) also argues that game theory deals with lack of information about the state of the environment, the state of the interpersonal decision process and the state of the opponent's incentives and abilities. Therefore, the outcome of this process is left unknown, and the expectations should not be rigid, but rather probabilistic. Another important aspect of this theory is that the strategic behavior of the players cannot be influenced, or may be influenced randomly. Kockesen (4) states that "*Humans cannot survive without interacting with other humans, and ironically, it sometimes seems that we have survived despite those interactions*".

## 3. Materials and Methods

A series of 5 representative urban pockets within the city of Tirana, Albania, were identified and selected based on their location, usage, and future users' willingness to participate in transforming an urban pocket into a pocket park through community participation. The first step was to make a series of

<sup>2</sup> Small spaces, designed and built by ordinary people with a very strong social vocation, have an outdoor space of aggregation to enjoy moments of daily life with the others in order to know each other to exchange ideas and things. A space where people could exchange the knowledge of the habits and customs of the others, not be afraid of being influenced by other cultures to the point of suffering the loss of their own identity (Taylor 1993)

<sup>3</sup> The first examples of this top-down co-design approach were implemented in the informal areas of Bathore and Keneta, where central and local governments, in cooperation with the World Bank, supported a local initiative that created conditions for citizen engagement in participatory planning, through the technical assistance of a local NGO (Co-PLAN Institute for Habitat Development). (Shutina & Sloopweg, 1998)

### Reclaiming third landscape in Tirana

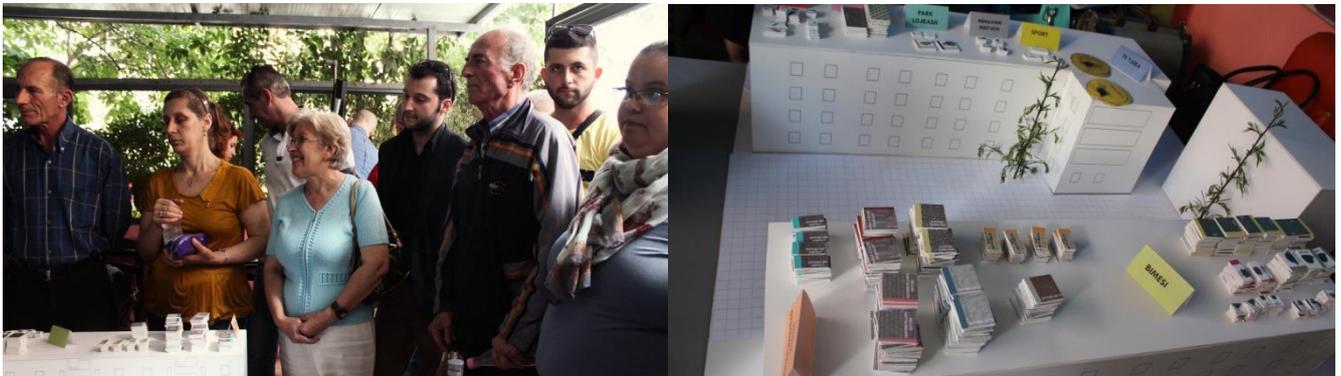
questionnaires, approximately 130 per urban pocket. Local inhabitants living in close proximity to the urban pocket, mostly within a 500m radius and those who passed by the urban pocket at least once a day were the chosen participants for these questionnaires. Times of data collection was spread evenly across the five locations and represented different times of the day (morning, lunchtime and afternoon) split between work days and weekends.

Due to time restrictions and as a result of the questionnaire responses, only three out of five urban pockets were chosen for this specific research. Their

locations were as follows: First urban pocket- is near the intersection of Kavaja Street and Bajram Curri Boulevard (Figure 1); Second- in Lapraka District (Figure 2); Third urban pocket is at Vaso Pasha Street (Figure 3). The choice was based on the level of interest and willingness of the inhabitants to participate in transforming the spaces from urban pocket into a pocket park. These urban pockets belong to Tirana administrative units 5 and 11 which according to a previous study (15) have an area of green space lower than Tirana City average and its distribution is highly heterogeneous..



**Figure 1.** The Urban Pocket near the intersection of Kavaja Street and Bajram Curri Boulevard. - Before and after the intervention.



**Figure 2.** The Urban Pocket at Vaso Pasha Street. - Co-design process and application of gaming theory.



**Figure 3.** The Urban Pocket in Lapraka District. - Environmental sustainability was reached through the usage of recycled materials, such as old car tires and wood pallets throughout the park's design.

All three urban pockets have similar social and site conditions; such as informal parking, no night lighting,

no urban furniture, usage of similar group ages, and conflicts between neighbors. Yet, 97% of them

responded to the questionnaires that were willing to contribute and participate in transforming the urban pocket into a pocket park. Through visual surveying and meetings on all three urban pockets, a local “leader / community representative” was chosen. Later, the process of participatory co-design, as well as game theory, was used, to better implement the pocket parks in the respective areas.

The game theory was explored throughout this research through the use of gaming tools. “Play the Neighborhood”, co-designing with the community, graphic posters and scaled models of the urban pockets are the main games extracted from the theory and tested with the residents of the transformed urban pockets.

#### 4. Results and Discussions

This study focused on highlighting the potential of urban pockets through a participatory approach. For this three urban pockets were identified and transformed into pocket parks, redesigning the space and analyzing the third landscape: the remaining green micro-zones between buildings that did not serve any real purpose. The intervention was preceded by a series of questionnaires (273 in total), which gave an interesting overview of the situation of ‘belonging’ to the space:

The typology of respondents was as follows:

- 45% male, 55% female, aged between 18-65 years with a dominating group age between 31 to 45;
- 36% had kids less than 10 years of age,
- 43.3% worked in the city center and have been living on the site for more than 18 years on average

This allows understanding a general profile of the users of the space and the future users of the pocket parks. The average participant lived within the 500m radius of the urban pocket on which they were interviewed.

- 69% of respondents used the public space more than 2 days a week while 88% passed by the space more than 3 days a week,
- 169/273 of the respondents were willing to contribute in transforming the space into a pocket park, out of which:
  - a. 7% willing to contribute in donating urban furniture and other materials;
  - b. 72% were eager to contribute through voluntary work;

c. 21% were willing to contribute financially. The transformation process was led by the residents, through a series of group discussions and co-design processes through the practice of games. This allowed the community to take ownership of the product, both in terms of design, funding, and later in implementation and maintenance. The research and approaches underlined the importance of preserving and recovering the third landscape, as a key component of urban pockets, and underlined the benefits of carrying out participatory processes to jointly create sustainable and long-lasting projects. The pocket park typology of public space in Tirana, remains completely unexplored, but such approaches which not only train its user to coordinate with the rest of the community, they also offer orientation in design techniques as well as possible funding methods to transform an urban pocket into a pocket park to better serve its residents.

##### *3.1 Case study 1 - The transformation of an urban pocket into a playground, through the usage of recycled materials*

The first project was implemented in the Administrative Unit no. 11, namely the area of Lapraka an area known for its high density, and mixture of informal dwellings of diverse typologies. The proximity to the inner ring of Tirana, the center and its central services is high, though the socio-cultural conditions of the population living there are vulnerable, due to the lack of amenities inside the area, and the general low income of households (*Municipality of Tirana, 2015*).

The intervention was framed under a joint project<sup>4</sup> between Polis University, Co-PLAN Institute for Habitat Development, and the Slovak Governance Institute, which focused on reclaiming livable public spaces through community-led actions. Indeed, the scope of the intervention was to realize low-cost public spaces, through a co-design process, specifically for children. The project was designed based on children’s wishes, and incorporated playground elements made of recycled materials, such as tires, wooden pallets, concrete slabs, etc. The expert team, joint by students of urban planning, architecture, and design from Polis University, provided for a final, colorful layout for the playground, which proved to be very successful among youngsters.

<sup>4</sup> Cities for Citizens, financed by EU, 2013-2014

The intervention lasted 3 weeks and was preceded by questionnaires with the inhabitants and 2 community workshops. The findings from the questionnaire suggested that the community of the area was eager to participate in the implementation of the project, but reluctant to finance it. They offered in kind payment, through recycled materials. Considering the time constraint, it was not possible to organize more community mobilization processes. As a result of this, a few months later the playground was vandalized and the recycled elements were stolen. The space returned into the former state: an improvised parking lot. This case underlines a very important factor in community processes: the need to create a real involvement of the inhabitants, to ensure longevity and sustainability/maintenance of the project in the future. Moreover, the socio-cultural situation of the neighborhood, and the real needs, had to be studied at a more in-depth level.

*3.2 Case study 2 - The transformation of an urban pocket into a Pocket park, through participatory process and gaming theory.*

The second project was implemented in the Administrative Unit no. 5, namely the area of “*Pallati me shigjeta*” (the building with arrows). This area is known for its high density dwellings typology, including those 4-5 floors high, built before the 90’s and those of 7-14 floors built after the 90’s. The proximity to the center and central services is high as it is located between the intersection of Kavaja street and Bajram Curri Boulevard. The socio-cultural conditions of the population living there are vulnerable, due to the ongoing conflicts between neighbors for parking spots, and the general low sense of community and lack of communication, as most households comprise of migrants from other cities of Albania (Municipality of Tirana, 2015).

The intervention was framed under a joint project<sup>5</sup> between Polis University, Co-PLAN Institute for Habitat Development, and the Municipality of Tirana, which focused on reclaiming livable public spaces through community-led actions. Indeed, the scope of the intervention was to instill among citizens the participatory culture in city-making processes, increasing city-citizen interaction, through means of urban activism and structured interventions through a co-design process. The project was designed based on

the needs of the community, and it aims to achieve its objectives through a practical participatory approach, close step-by-step and consultations with the community. The expert team, joined by the citizens, students of urban planning and architecture from Polis University, provided for a final, strategic public place design, which proved to be very successful among the community of all group ages.

The discussions and planning process lasted 3 months (while the intervention just 2 weeks) and were preceded by questionnaires with the inhabitants and 9 community workshops. The findings from the questionnaire suggested that the community of the area was eager to participate in the implementation of the project, as well as co-finance it. Participants that were not able to co-finance, offered in kind payment, through taking part in the building process and providing water or electricity from their houses. As a result of high levels of involvement in all phases of the project, including design, financial and implementation, all components of the projects (greenery, lighting, vegetation and sitting areas) are maintained by the user. The chosen caretaker is paid for their service by the inhabitants.

This case emphasizes a key element of co-design, namely the importance of time. Even though the scale of intervention is small, the allocated time to communicate with inhabitants, organize events, and allow them to fully participate, was relevant. This ensured a sustainable outcome in the end.

*3.3 Case study 3 - The co-designing process of an urban pocket into a pocket park through gaming theory*

The third project was implemented also in the Administrative Unit no. 5, namely the area of “*Juridiku*” (the Faculty of Law), known for its high density dwellings typology as it is in close proximity to the city center. The socio-cultural conditions of the population living there are well established, and so is communication between neighbors.

<sup>5</sup> Performing Democracy: Urban Activism for Civic Democracy, financed by Democracy Commission Small Grants, 2014-2015 (Second Pocket)

**Table 1.** Summary of findings for all three case studies.

Indicators	Process						Results				
	willingness to participate	willingness to finance	most common group age involved	application of game theory	visualization techniques (posters, video presentations, etc)	No of participatory events (presentation, meetings)	Longevity / Sustainability of the project	Co-financing	adaptation of final design with the ideas of inhabitants	environmental sustainability	management & maintenance
<b>Pocket</b> - at Lapraka District	80%	20% 80% in kind	15-18	none	none	2	vandalized, all urban furniture has been taken, it has turned into an illegal parking site	Low -only in kind, group age involved between 15-18	100% the place was completely turned into a playground as requested by the participants.	High	Unknown
<b>Pocket</b> - near the intersection of Kavaja Street and Bajram Curri Boulevard	97%	90% 10% in kind	31-55	master-plan/model		9	All components of the projects, including greenery, lighting, vegetation and setting areas are maintained by the user. The chosen caretaker is paid for his service by the inhabitants.	High	80% - the northern part of the urban pocket had an underground parking and it was left untreated with vegetation as requested by the participants.	Medium	The participants the mself
<b>Pocket</b> - at Vaso Pasha Street	94%	75% 25% in kind	35-60	model		13	N/A	High	60% - as the remaining 40% more wanted parking spots which impacted the cost of the project.	N/A (medium in the project)	It was never finalized, as the costs were higher than expected.

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The intervention was also framed under the same joint project<sup>6</sup> between Polis University, Co-PLAN Institute for Habitat Development, and the Municipality of Tirana, which focused on reclaiming livable public spaces through community-led actions. The project was designed based on the needs of the community, and it consisted of a total of 13 participatory events such as presentations, meetings and gaming to agree upon a common design. The expert team, joined by the citizens, students of urban planning and architecture from Polis University, provided an architectural model of the pocket park. The discussions and planning process lasted a month and were preceded by questionnaires with the inhabitants and 13 community workshops. The findings from the questionnaire suggested that the community of the area was eager to participate in the implementation of the project as well as co-finance. Potential design elements such as lighting, benches, different kinds of paving material and vegetation's, part of the architectural model, were all presented in the form of scaled cards. The cost of each element represented on the cards was printed on the back. Therefore, while playing, participants could also be aware of the costs involved in any given design scenario.

Though community mobilization processes were very efficient, it was not possible to successfully implement the final design project due to high cost. Municipal staff joined the design process at its ending and well after the participants of the community had selected the final design of the pocket park. As a result, new site analysis was represented, which affected the overall costs of the intervention. The potential pocket park had buried underground two concrete bunkers from the communist era, their removal was a complex process from a financial and legislative point of view. The intervention was put to hold.

This case provided a very good basis of co-design, incorporating all elements of game theory and option analysis. Nevertheless, the process was not carried out fully, so the sustainability of the project and the maintenance are impossible to evaluate.

To give a more thorough overview Table 1 summarizes the findings of the questionnaires in all the 3 case studies selected.

## 5. Conclusions

Preservation and recovery of the third landscape is an important element of improving housing conditions in urban areas. Taking ownership of the product from the community, both in terms of design, financing, and later during implementation and maintenance increases the long-term sustainability of these projects. The pocket park typology of public space in Tirana, remains completely unexplored, but such approaches which not only train its user to coordinate with the rest of the community, they also offer orientation in design techniques as well as possible funding methods to transform an urban pocket into a pocket park to better serve its residents.

In terms of participatory processes, this research shows that the need to develop robust networks of stakeholders is crucial, even in smaller scales. Building trust in small communities and ensuring bottom-up citizen engagement is possible and perhaps the best mechanism to enable territorial development. Nevertheless, what gaming theory shows in practice, is that the outcome is uncertain, and no level of influence and trust can ensure the longevity and sustainability of results, if the process is entirely led by communities. This opens up a lengthy discussion on the bottom-up and top-down approaches to be intertwined in territorial development.

## Acknowledgements

*The interest in researching public spaces, especially the urban pocket typology, and their potential in becoming public places, started during my Diploma thesis at Polis University, Tirana. It was later on, reinforced with the realization of 3 urban pockets with the involvement of the community, during that time period I was part of Co-PLAN staff, which allocated the necessary funds for the pocket parks compilation.*

## 6. References

1. Arnstein, S., 1969. **A Ladder of Citizen Participation.** Journal of the American Planning Association, 35(4), pp. 216-224.
2. Crankshaw, N. 2009. **Creating vibrant public spaces: Streetscape design in commercial and historic districts.** Washington, DC: Island Press.

<sup>6</sup> Performing Democracy: Urban Activism for Civic Democracy, financed by Democracy Commission Small Grants, 2014-2015 (First Pocket)

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3. Imami, F., Dhrami, K., 2019. **‘Strengthening cooperation for spatial planning: A case study on participatory planning in Albania.’** in "Annual Review of Territorial Governance in Western Balkans", 1, Co-PLAN and POLIS press.
4. Jacobs, J. (1993). **The death and life of great American cities.** Vintage Books.
5. Kockesen, L (2007) **An introduction to game theory.** EA Ok - University Efe A. Ok New York University.
6. La Pietra, U. (2011). **Abitare la città,** Allemandi & C., Torino.
7. Lekaj E, Teqja Z: **Investigation of green space changes in Tirana-Durres region.** Third International Conference "Challenges in Biotechnological and Environmental Approaches", Agricultural University of Tirana, ALBANIA, April 23 - 25, 2019. *Albanian J. Agric. Sci.* (Special Edition).
8. Lekaj E, Teqja Z: **Users evaluation for public parks: influences of location, season, gender and age.** *European Academic Research*, 2019, VII(1), 603-624.
9. Madanipour, A. (2003). **Public and private spaces of the city.** New York: Routledge.
10. Rosenmüller J, 2000: **Game Theory, Stochastics, Information, Strategies and Cooperation,** Springer Science+Business Media Dordrecht.
11. Rosenmüller J, Trockel W. 2001: **Game theory.** Working Papers. Institute of Mathematical Economics. Vol 321. Bielefeld: Center for Mathematical Economics.
12. Shutina, D. & Sloomweg, S., 1998. **Bathore, Pilot for an Urban Self-Development Program.** In: IHS, Co-PLAN, eds. *City Made by People.* Tiranë: Co-PLAN, pp. 119-135.
13. Teqja Z, Beka I, Shkreli E: **Albanian agriculture- dramatic changes from a very centralized economy to free market. A strategy for future development.** Published in "Medit" no. 1, 2000, pages 21-29.
14. Teqja Z, Lekaj E: **Land cover changes evaluation of Tirana region.** *Albanian j. agric. sci.* ISSN: 2218-2020, Volume 16, Special issue (2017).
15. Teqja Z, Lekaj E; Libohova Z; Bardhi N. (2020) **Assessment of the green space of Tirana city and its impact on some public health indicators.** *Albanian j. agric. sci.* 2020;19 (3): 1-13.
16. Teqja Z; Lekaj E; Karaj A. (2020) **The dynamics of urban area and green space in Albania.** *Landscape Forum 2020*, 21-24 April 2020, Bratislava, Slovakia.
17. White, C., 2006, **'Promenading and picnicking: The performance of middle-class masculinity in nineteenth-century Sydney'**, *Journal of Australian Studies* 30, pp. 27-40.
18. Whyte, William H., Jr. 1980. **The Social Life of Small Urban Spaces.** Washington, D.C. Conservation Foundation.