

2.5D Playgrounds for Bogota

Stimulate ludic actions in public spaces

by redesigning ground surfaces into 2.5D architectural compositions

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Preface

“The city should be understood as the ultimate common: a collective social, cultural and material construct that is composed by and for its inhabitants.”

“The graduation studio wants to develop alternative design strategies that result in modes of intervention that are more punctual, supportive or accommodating.”¹

“Constructing the *Commons*”, “*Positions in Practice*”, “Bogota”, two big topics and a South American Capital far beyond my imagination, that’s where I started the graduation year last autumn.

What are the “commons” in Bogota? What kind of “commons” should I “construct”, and how? What “positions” should I take, as a Chinese student studying in the Netherlands doing the graduation project in Colombia? Burying these questions in mind, I wandered in central Bogota and surrounding areas during the field trip, trying to find my own answers by observing people’s actions in public spaces.

Problem / Research Question

According to my observation, there is a mismatch between rich “ludic actions” in Bogota citizens’ daily lives and the poor boring leftover public spaces. (Fig. 1/2)

From my experiences in Colombia, I feel a strong ludic nature embedded in Colombian people. They spontaneously make use of urban spaces and turn them into playgrounds wherever there is a chance, dancing on the street, skateboarding around the street corner, kicking football against the fence. Accordingly, when the part of Carrera 7 between Avenida El Dorado and Plaza de Bolivar becomes a pedestrian walkway, a series of strong “commons” is naturally generated. It’s a library of ludic actions: vendors selling, acrobats tricking, music bands performing, fake Michael Jackson dancing, rats racing, chess playing, street painting, skateboarding, etc., and of course more people play the role of the audience, wandering, watching, applauding, etc. Here, the architectural and urban actors (the walkway, the shopfronts, the squares and the landmarks along the way) stimulate spontaneous ludic actions performed by human actors, thus the spaces and social activities are so much intertwined with each other that a ludic commonality is established.

¹ Syllabus of 2016-2017 Methods and Analysis Graduation Studio “Position in Practice: Constructing the Commons in the Latin American Metropolis”, 3-4



Fig.1 Spontaneous “ludic actions” on streets, Bogota (Photos by author)

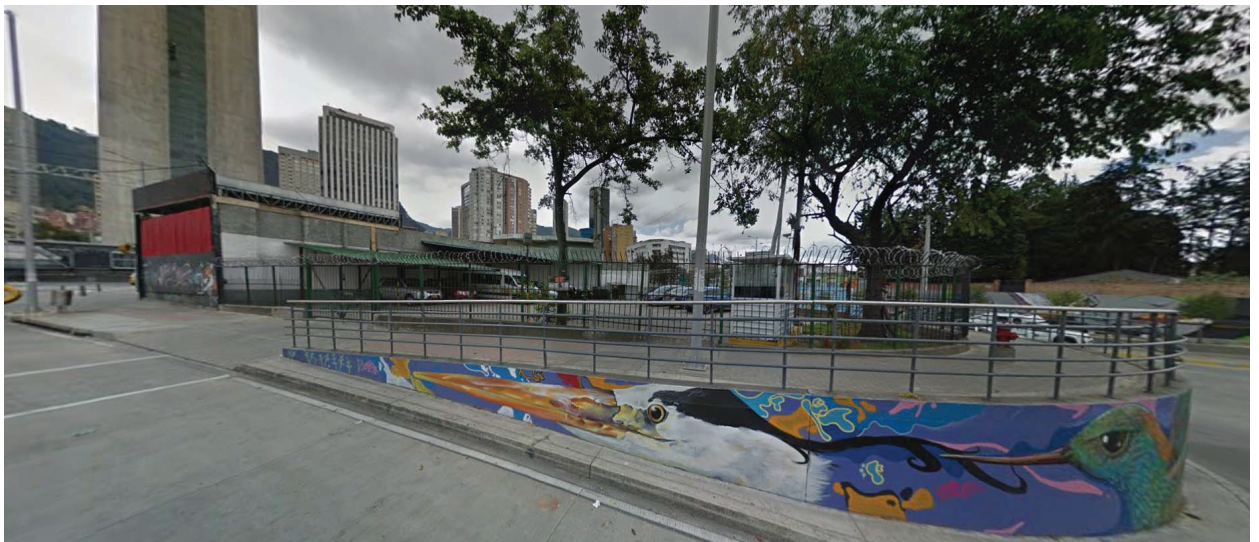


Fig.2 Leftover public spaces around the central Bogota area (Photos from Google Street View)

However, the quality of many existing public spaces in central Bogota area is too poor to bring people together, let alone stimulating ludic actions. Rapid development of skyscrapers and transportation infrastructure has claimed a lot of public spaces from the city, consequently the rest public spaces have become fragmental leftovers. Although some of them are well designed and contribute to the public life of citizens, many of them remain boring, chaotic, hidden, negative spaces where few people would go; the “commons” become weak.

Such a mismatch between ludic actions of Bogot citizens and boring leftover public spaces motivates me to come up with the following research question:

“How to construct the commons with the power of play?”

To be more specific, **“how to reactivate the leftover public spaces in central Bogota by architectural interventions that stimulate ludic actions?”**

Theoretical Reference / Precedents

1. PIP Principle, by Liane Lefaivre

Liane pointed out that “in order to be successful a playground must be implanted into the living tissue of a neighborhood in an integrated, organic way.”² Her PIP principle becomes the guideline of my intervention in the central Bogota area. PIP stands for:

- a. **Polycentric**, playgrounds become a network system instead of a single big one;
- b. **Interstitial**, playgrounds fit into leftover/in-between spaces instead of cleared area;
- c. **Participatory**, playgrounds result from dialogue with users of a particular site.

In my intervention, I try to apply the PIP principle by defining a series of public spaces that scattered across the central Bogota area as sites for future playgrounds, connecting them with each other with pedestrian walkways and designing each of them in a site-specific manner.

2. Amsterdam Playgrounds, by Aldo van Eyck

PIP principle is closely related to the analysis of the playgrounds in Amsterdam designed by Aldo van Eyck. Liane Lefaivre and Alexander Tzonis described him as a

² Liane Lefaivre, “The PIP Principle”. Accessed May 5, 2017, <http://thechildthecityandthepowerofplay.weebly.com/-the-pip-principle.html>

“Humanist Rebel” against the mechanic approach of Modernism³, and his 734 playgrounds in Amsterdam designed in 30 years became his humanist manifesto. Aldo replaced the 734 leftover/bombsites with ground pavement, sandpits, climbing frame and jumping stones, and magically they became a constellation of simple yet elegant urban playgrounds which brought children and parents together again to the public spaces (Fig.4). This constellation of playgrounds becomes the most important precedents of my intervention in Bogota. Beside the playgrounds, I am also much influenced by Aldo’s thoughts, including:

- a. In-Between, according to Martin Buber’s idea of “*Ich und du*”, design as means for creating relations between people rather than as goals in itself; as dialogue for the “great number”;
- b. Site specific/Path-based design, design has to respond to unique situations, to improvise;
- c. Surface intervention like the snow: when snow falls, the city is taken over by children and becomes a big playground, and snow is the intervention. Architectural intervention just needs to be more permanent than the snow;
- d. The relationship between an individual and the bigger system it belongs to should be like leaf and tree: “tree is leaf and leaf is tree / a tree is a tree but it is also a huge leaf / a leaf is a leaf but it is also a tiny tree”. (Fig.3)

3. *The Ludic City*, by Quentin Stevens

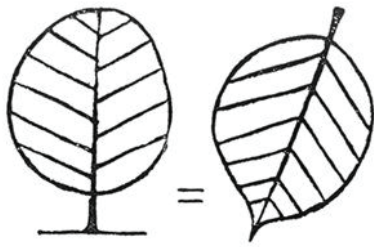
This book helps to legitimate my decision to use “play” as means to stimulate the potentials of public spaces. In this book, Quentin points out that “Play is an important but largely neglected aspect of people’s experience of urban society and urban space...Play reveals the potentials that public spaces offer.” He describes the play activity as

- a. non-instrumental,
- b. unpredictable/contingent,
- c. controversial expenditures of time and energy
- d. an escape from instrumental social relationships/everyday serious routine

Further, he elaborates play behaviour in 5 kinds of urban public spaces, namely paths, intersections, boundaries, thresholds and props. Also, in his article *Why Berlin’s Holocaust Memorial is Such a Popular Playground*⁴, he summarized 4 forms of play, including competition, simulation, chance and vertigo, which have different

³ Liane Lefaibre and Alexander Tzonis, *Aldo van Eyck, Humanist Rebel*, (010 Publishers, 1999)

⁴ Quentin Stevens, *Why Berlin’s Holocaust Memorial is Such a Popular Playground*, *OASE* 77 (2008): 71-79



tree is
leaf and leaf
is tree - house is
city and city is house
- a tree is a tree but it
is also a huge leaf - a
leaf is a leaf, but it is
also a tiny tree - a city
is not a city unless it
is also a huge house -
a house is a house
only if it is also
a tiny city

Fig.3 Aldo van Eyck's
"leaf-tree/house-city" diagram

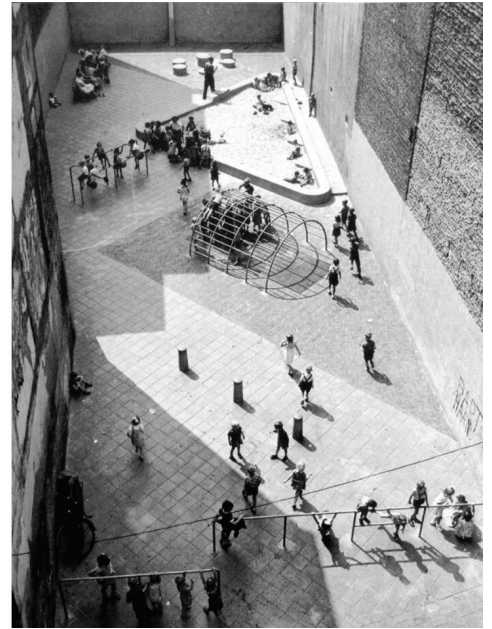


Fig.4 One example of Aldo van Eyck turning leftover space into popular playgrounds in Amsterdam



Fig.5 Proun 12E, 1923, El Lissitzky



Fig.6 Untitled, 1968, Mark Rothko

emphasizes on play that provides escape from the seriousness, conventions and limits of everyday behaviour.

4. *Homo Ludens*, by Johan Huizinga

In this book the author makes the hypothesis that play may be far more important than people thought: “Play” might be the origin of many aspects in human culture, such as law, war, knowledge, poetry, art, etc. He emphasizes the importance of play element in human culture by naming the human species “*Homo Ludens*” (man the player) instead of “*Homo Sapiens*” (wise man) or “Homo Faber” (man the maker). The book helps me to realize that I have the chance to take the position of an urban playground designer caring about citizens as “*Homo Ludens*”, as an alternative position to economically mechanical urban developers.

Architectural Position / Methods

The architectural position of my intervention in central Bogota area will be:

Stimulate ludic actions in public spaces by redesigning the ground surface into a constellation of 2.5D architectural compositions.

Here, the “2.5D architectural composition” refers to a series of manipulation to the ground surface, including composing different ground materials on the planer dimension (2D), and create minor vertical level difference by sinking, elevating, folding and undulating (0.5D).

Personally I had the problem of excessive design: many ludic objects and patterns came into my mind and I thought the ludic quality could be achieved by overlaying, accumulating them. However, both my tutors and I found them loose and chaotic. After that my challenge has become how to achieve the ludic quality in public spaces with an implicit and elegant intervention; to achieve the most complex inter-relationship between form, space and the users by reducing my design tools and ingredients to the least. That’s how I came up with the “2.5D architectural composition” as the primary strategy for designing the playgrounds.

The process of analysis and design consists of the following methods:

1. Observe public spaces across the central Bogota area when wandering in the city.
2. Map the urban axes and define a series of leftover/hidden public spaces that are potential to be integrated into a future playground network.
3. Analyze the existing situations on each site and decide what local elements should remain (trees, playgrounds, paths, landmarks, etc.).

4. Integrate the remaining local elements into a 2D composition by adding new surface, curve and point elements to the ground surface. Inspired by the abstract compositions like El Lissitzky's Proun series, the plans of different sites will be designed in an universal compositional language (Fig.5). The purpose for doing this is to enable citizens to feel that the individual playgrounds belong to a network, a bigger system, when they have recognized the similarity between different sites.
5. Based on the 2D composition, create minor vertical level difference by sinking, elevating, folding and undulating the ground surface in a site-specific manner, turning each site into an universal yet unique 2.5D architectural composition.
6. Apply local materials (lawn, concrete, brick, tile, etc.) to the 2.5D compositions, making them into materialized playgrounds. To create a subtle transitional change between play areas, some edges are blurred with transitional forms and materials, inspired by Mark Rothko's color field painting series (Fig.6).
7. Establish pedestrian connections between different playgrounds. The connections should be less obvious, mainly implied by neutral pedestrian pavements and limited amount of point elements (lights, trash cans, benches, etc.)

After such series of interventions, I expect that some boring, leftover and fragmental public spaces in central Bogota area will be reactivated by a constellation of exciting "2.5D playgrounds". These playgrounds should be unconventional as the ludic quality is achieved by manipulating the ground surface instead of adding playful objects, yet humble as the minor level difference and familiar materials enable them to merge into the local context. I expect that these "2.5D playgrounds" will bring Bogota citizens together, stimulate their ludic actions, and enable them to recognize the scattered playgrounds as a whole constellation of "ludic commons". (Fig.7/8)

Further, the constellation of 2.5D playgrounds should be an "open work" described by Umberto Eco⁵, meaning there should be a continuous interactive process between the playgrounds and their users. Some out-of-time playgrounds can be adapted due to new requirements, some not-in-use playgrounds can be deleted for other use, and some other public spaces with high play need can be converted to similar playgrounds and join into the ludic constellation. As the 2.5D playgrounds can be achieved with low technology and cheap local materials, all these future modifications are highly possible to happen in a spontaneous bottom-up manner.

⁵ Umberto Eco, *The Open Work*, (Harvard University Press, 1989)

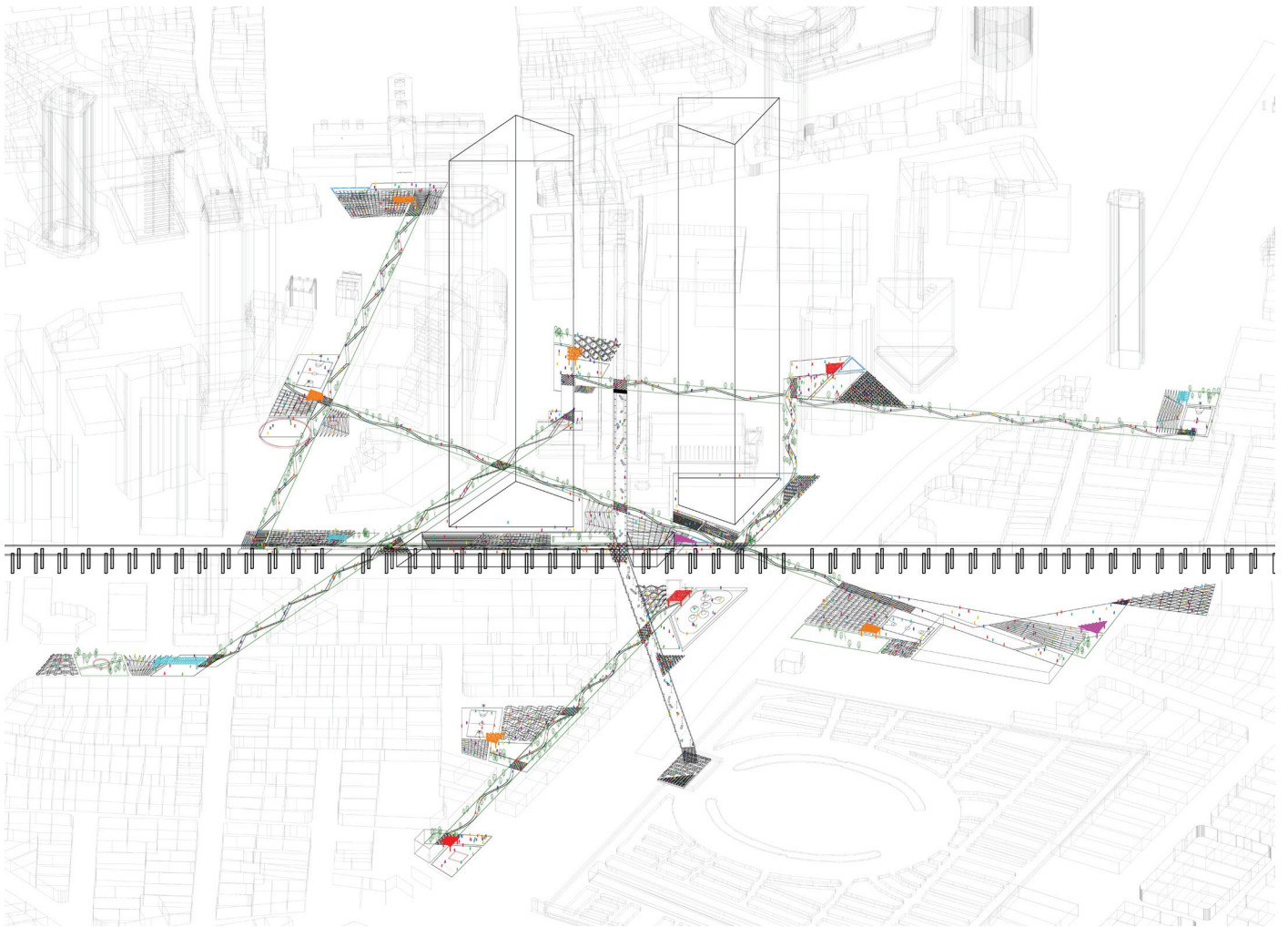


Fig.7 Concept of the constellation of playgrounds across the central Bogota area (Drawing by author)

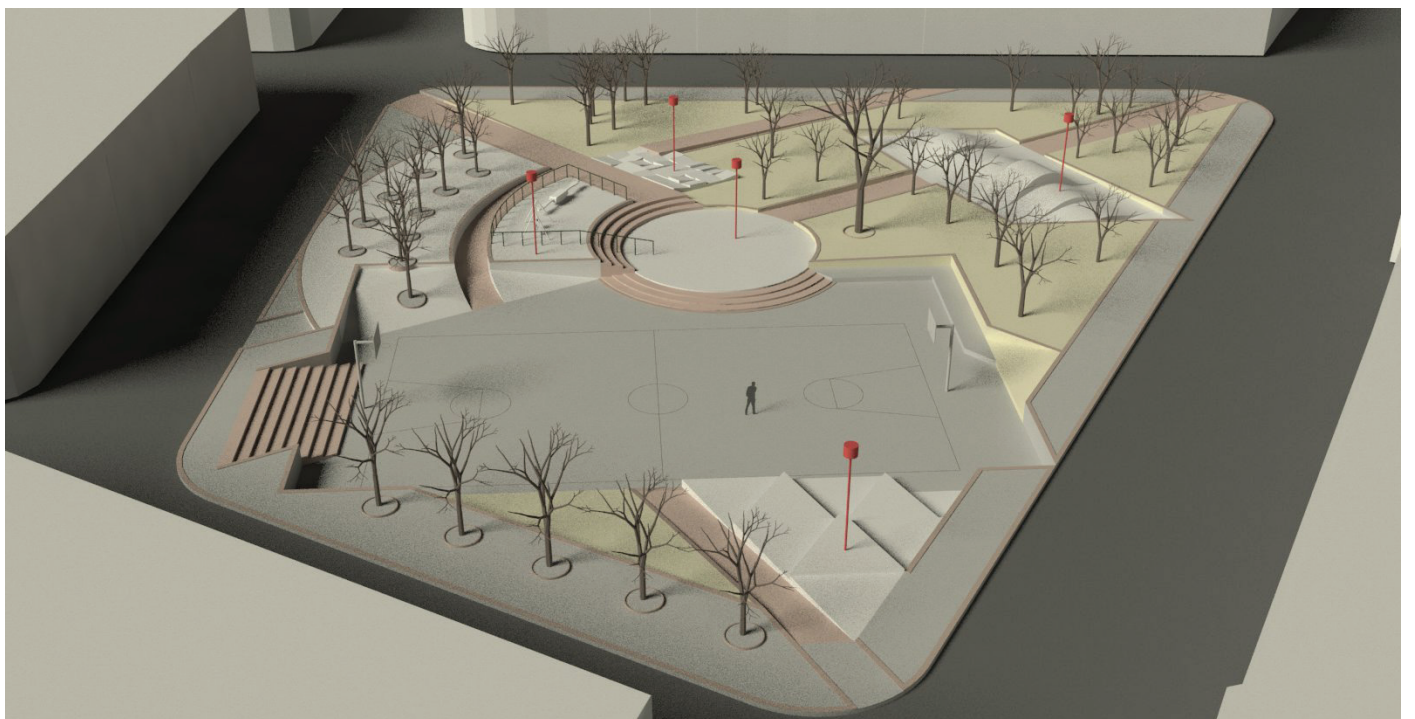


Fig.8 One of the 2.5D playgrounds, on the site of Parque Armenia (Drawing by author)