

Reflection

A Meta-Field: The Coexisting Groundscape In Between

Introduction

This year, the graduation studio of the Chair of Methods and Analysis focus on the urban context of Bogotá, the capital of Colombia. Based on the experimental attitude of the intervening in the complex urban condition, our research choices have been conducted upon meaningfulness, appropriation, and integration¹. Furthermore, students will try to contextualize individual research within at least one of these three themes as the first key to further formulate the research questions. The research questions developed from multiple perspectives also responds to the idea of 'exploring the architectural project as a common enterprise.'

At the beginning of the two-week long excursion in Bogota, I confronted by difficulties finding a strategy to investigate this unknown territory. Thus, I decided to plan a route for each day and tried to explore the city with different time and space scales. More elements appeared repeatedly on my sketchbook over the following days. From this, I found the research objective of my graduation project: the ground surface. The layered ground surface is contributed by different agents, such as human, nature, animal, etc. It acts as the main stage to hold the actions which we seldom pay attention to. This preliminary understanding eventually turned out to be more comprehensive research aspects than I expected.

The Capacity of the Surface

After discovering the diversity of the urban surfaces, we² started to analyze the two major ones that define our journey along the street, namely the pavement and the frontyard facades, through the lens of affordance. James J. Gibson introduced this term in his book: 'The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill.'³ Through dissecting these ground surfaces with multiple sections and plans at different levels, the process illustrates how affordances are perceived from microscale to macroscale, helping us to read the complexity of the layered urban context. We acknowledged the notion of public realm which integrates the different groups within the city. That is to say, the affordances of the surface indicate the capacity related to the behavior of inhabitants. Reflecting the concept of affordance on my graduation project, I view the inhabitants are connected to the surfaces directly both with their visual and spatial perception through actions and postures, the ground starts to participate in our social everyday life. To consider the role that we, as architects, can play, we asked two questions: 1. How the urban surfaces support multiple affordances when being perceived by these different agents which coexist? 2. How could we communicate these usually masked affordances of other scales to the public in architecture?

Urbanization in Teusaquillo

From the fieldwork to my individual research, I investigated the urban development of Bogotá. The city began as a small one with approximately 100,000 inhabitants at the end of 19 century. After the Thousand Days War (1899-1902), the peace that followed the war stimulated the economic and population boom. In the meantime, a new diagonal pattern was imposed on the colonial grid layout. The 1930s marked as the turning point in the urban development of Bogotá when the Viennese architect Karl Brunner became the first director of the Municipal Urban Planning Department. It was Brunner planned the city expansion in several directions. Besides the diagonal pattern, the concept of frontyard was proposed for a few areas, including Teusaquillo. However, the irregular

1 According to the studio booklet of the Chair of Methods and Analysis, the further explanations of the following three terms are: meaningfulness, the communicative capacity of the built environment; appropriation, private-public-communal; integration, the city's ability to cater to multiple variables.

2 Hiu Ching Debby Lam (student number: 4717120) and I work in pairs for the fieldwork under the Chair of Methods and Analysis 'Position in Practice' studio. In the research stage, I am more focusing on the horizontal surface and she is working on the vertical surface.

3 James J. Gibson. *The ecological approach to visual perception* (Houghton Mifflin, 1979), P.127

pockets of land generated by a set of rules and fragmented type of urban expansion would take a long time to adapt the original context. I recognized the phenomenon resulted in a disarticulation between theory and reality. This preliminary conclusion inspired the first stage of the project: a manual. This manual of public paving not only provides general principles and examples but also seeks to facilitate the execution phase of work and achieve a more flexible system. It was at this moment, I took the propositions this project stands for: 1. Providing alternatives, not problem solutions, 2. Involving two-way communication, not one-way demonstration, 3. Embracing heterogeneity, not homogeneity.

The Manual

I analyzed the existing manual issued by Alcaldía Mayor Santa Fe de Bogotá, Andenes. It includes the quantitative and qualitative specifications of public pedestrian, as well as the indicative examples whose purpose is to serve as a guide to the designers. The construction system is based on prefabricated pieces of industrial production which seeks a better condition of durability and maintenance. However, the public pavement is not simply constructed for predictable actions, but as a stage where local practices converge. The reality reveals that the limitation of the prefabricated system somewhat does not acclimatize to the dynamism in making of the city. I was contemplating how to shift the rigid implementation of the prefabricated system to a more negotiable one. I struggled in the way of classification until I read *Style in the technical and tectonic arts, or, practical aesthetics* by Gottfried Semper. I translated his understanding of the interrelations inherent to the construction process and came up with the research objective: joints and edges, which take on the relationship in between and act as an interface when two things meet (or be separated). I further combined his theory with Tim Ingold's idea of *the ecology of materials* that understands the generation of things as an episode of the whole. I proposed a role of architect that follows the sequences from the beginning of the raw materials into the becoming of something in order to know the actual process in between, as well as the cognitive experiences incorporated in it. Moreover, this position allows me to develop this manual through multiple aspects, from technical specifications to the description regarding spatial experience and sensory perception.

The Intervention

From the manual to the urban project, I aimed to keep the constant focus on the relationship between different groups. The idea of relationship has many scales, I did not only refer to the physical condition in relevant to materials. At the same time, I projected the knowledge of joint and edge that I have learned from the previous stage to an urban project. I recognized a site-specific phenomenon in Teusaquillo: the conventional public spaces are large and only serving for certain group of users. Yet there are also lots of random encounters in urban corners which form micro public spaces. I believe it is a good idea to provide pocket public spaces for the neighborhood which perfectly complement these two extreme scales. From this came to the choice of working on the public sidewalk and the unbuilt plot within an urban block, my project is meant to be a model for future interventions on two conditions that give guidelines on how to enrich the type of public spaces and characterize the community through the medium of landscape.

One of the key concepts of the intervention was to introduce a new geometry of paving unit. I aimed to find a basic geometry which can be easily included in the existing system, while compromising the two opposing sides. At last, I opted for circle. When replacing linear rectangular tiles with non-directional circle pavers, the fixed boundary could be diluted with a diverse range of dimensions. At the same time, the empty spaces with random widths between circle pavers give a perfect environment for grass to grow. Naturally, this step became the first phase of the entire intervention.

In order to consolidate the two-way communication between different groups, I developed the project in an episodic way. I viewed this series of spatial sequences as performative actions which provide opportunities for unexpected encounters. Through further analysis of daily behaviors and the construction process of making the landscape, I abstracted some moments, turning them into performances that are perceived based on

observing the fragmentary work, bringing people together. It is important to underline that the process of making groundscape is not only constructing a horizontal layer of urban tissue but also closely intertwining with the flow of knowledge by making the construction process visible. Meanwhile, this material-based narrative concretely culminates in an atmosphere that is quite distinct from the original, finding alternatives of keeping and altering part of the existing ground surface. We can therefore understand cultural, social, and technical relations through this composite picture with assorted textures which transcends our received knowledge about function and aesthetics.

Conclusion

I have so far faced many challenges yet gained a fruitful learning process. I believe that the intellectual role of the architect is to link cross-disciplinary knowledge and has the ability to work on different scales. It is crucial that the architect act as a mediator that articulates the public tendencies and advocates the social equilibrium. I found my interests in this social role, thus tried to follow the ongoing logic of the site and assemble the multiplicity through the medium of the ground surface.

From the initial research of the public paving as a horizontal layer consists of several materials leads to the manual in response to the disarticulation between theory and reality, to the urban intervention that reveals the incredible richness of the most common groundscape, collaborating with the in-situ construction process to participate in civic life. I have convinced how powerful this often-overlooked architectural dimension is. I enjoyed every stage of the process and gained technical, theoretical knowledge, and a broader perspective of thinking. I also discovered my interests, as well as my faith as an architect.

This project of groundscape, more than being an end in itself, was a process of questioning the relation between maker and designer, searching for alternatives to provide a softer background for both human and nonhuman activities to flourish. I have inspired by multiple aspects from daily observation to professional precedents, experimenting possible answers back and forth that explored how could architects formulate a public space coexists with the complexity of the city.