

URBAN ENCLAVE

Affordable Housing on the Green Strip

Thesis Reflection

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Methods and Analysis

o. Introduction

Bogota is an extremely foreign country to me. Before this studio, I have never set foot on a Latin American country. It is part of my personal goal and also part of the philosophy of Chair of Method and Analysis to place oneself in a foreign urban setting where one cannot rely entirely on one's previous experience and start out, to some extent, fresh and new.

Typical of this Chair, the studio is characterized by an experimental attitude on the level of analysis of, and intervention in, a complex urban setting. The investigations are two-fold: the concrete architectural and urban figures; and the interrelated narratives of the city. The research and design aim to explore architectural project as a 'common enterprise' meant to favor citizens' attainment of "situation". An emphasis on human actions in relation to the built environment is placed in terms of meaningfulness, appropriation and integration.

II. Field Study – Comma, pause and the green strip

(Up till P1. In collaboration with Agnieszka Panasiuk and Isabel Ulbrich)

The project starts with a very direct phenomenology approach where we use mostly my first-hand experience and engagement to investigate the site. During the two-week field study in Bogota, an approach called "thinking through things" was practiced to throw ourselves into the foreign unfamiliar context of Teusaquillo Bogota. We used a domestic object, in my case a blind fold, to experience and perform actions within the site. The method is a provocative and active way of engaging with the site. It allows me to set aside any prejudices and rely on my intuition to uncover the uniqueness of the site.

After the initial stage of the data/experience gathering, the findings, with two other collaborators, is deducted and induced to achieve a certain level of abstraction that can be associated with the various moments that we identified in Bogota (green strip, campus boundary and intimate space). Those experiences can be perceived as a pause in space and human movement.

Extensive literature research is carried out in the field of linguistics, literature (experimental writing) and music to understand comma and pause. Another literary exercise is experimented to gain a subjective human experience of pause in literature reading. The experience of writing and reading with or without comma is then used to analogize a green strip. It is a spacial pause in experience in the built environment in Bogota, and in existence it is an urban enclave that doesn't belong to any part of its surroundings. Due to its autonomous and meaningless nature, the green strip presents great opportunity for spontaneous appropriation.

Based on the findings so far, how to treat this untapped resource of green strip has become the starting point of my individual architectural intervention.

II. S, M, L and informal public ground

(P1-P2. Individual research)

My research till P1 has been mainly focused on comma and pause at a rather conceptual level. The focus on green strip itself is very limited and only scratching on the surface. To move on to an in-depth contextual research of the green strip, I started with the historical origin of this separating device in the middle of the road. In Colombian road construction manual, *separador* is one of the ten components of road construction regulated by Colombian authorities. Earliest evidence of *separador* can be found in an historical map of Bogota from 1965. This historical research was followed by a morphological study of three selected green strips of different sizes – small (1.5 meters wide), medium (4-6 meters wide), large (double strip).

During the research of the green strip, the first idea of a possible intervention is to transform the strip into a public place to allow for more vivid street life, also to intensify the spontaneous public engagements which are already happening on site.

The medium strip appears to have the most potential in term of its scale and urban setting.

I was encouraged to achieve the maximum with the minimum. To be more precise in this case is to realize the transformation by manipulating the surface only. The manmade topography becomes an inductive tool here. The core idea is to have a formless surface that does not prescribe to any specific function but provide affordance for involuntary spontaneous public use.

In *Forget Heisenberg* by **Alejandro Zaera-Polo**, he wrote “*the very nature of the formless is ultimately its unlimited performability.*” This presented great encouragement in my early stage of the surface manipulation exploration. Different ways of surface articulation were investigated through case studies and site visits.

This phase of investigation is both thrilling and ambivalent. The various ways of creating unconventional surface (deform, fold, color, undulate) are useful tools however I had great difficulty in implementing different surfaces on site and make them coherent and convincing. “*The formless is only operative within a cognitive or critical mode, not with a productive mode.*” It was pointed out by my supervisor that the concept of formless can be very unproductive in the long term, which I personally had realized at some level. It was a crucial moment for me to re-evaluate my project and be self-critical.

III. Urban screen. Strata X? Housing for the common.

(P2-P3. Individual research-led design)

As hard as I tried to organize different themed zones with different surface along the strip in response to the surrounding context, the intervention of the informal public ground often failed to convince myself. I found it a bit arbitrary as an architect to say "if I render this section of the strip with painted patterns on the ground, people from the café or the restaurant from across the street will extend their activity to the strip". Despite my good will to reactivate green strip, people in the area don't seem to have enough reasons to extend their daily life onto the strip no matter how much makeup I put on the green strip. The intervention seems ad-hoc and superficial, as is suggested by my supervisor. Fundamentally it would not change the separating nature of the green strip or do much good for the citizens of Bogota.

I decided to take a step back and approach the green strip from a different angle. The most efficient way to engage the people with the green strip is through solid program.

During the study trip in Bogota, I was told about the strata system and was briefly fascinated by it before it could turn into an architectural research. At this moment of pivoting, I revisited the social segregation issues in Bogota and researched further into the spacial inequity that resulted from the strata system. One of the biggest spacial conflict is the low density, informal, unplanned urban sprawl in the periphery of the city VS the low population density but high employment opportunities in the center. Residents in the peripheral areas of the city have insufficient infrastructure

At the same time, it was brought to my attention that the current mayor Gustavo Petro had initiated a series social housing project in the well-off neighborhood to help the misplaced citizens as well as to encourage social integration. However, the project was suspended due to objection from the higher social class.

The green strip offers a good opportunity to be critical of this situation and introduce affordable housing in the city center.

Several strategies are identified to make this housing complex suitable for the context and beneficial not only to the residents in the building but also people around the area.

1. Elevated ground: active public ground, penetrable, retain certain trees on site
2. Visual portal at different levels: allowing for views beyond

3. Modular unit: low cost, easy fabrication
4. Small unit: minimum living
5. Outdoor living: opportunity to extend living space to outdoor space
6. Shared facility: to compensate for the limited space in each unit

The turn I took in this phase, to be honest, was not an easy decision. However, I am glad that I took the leap and experience has taught me to self-critical and make appropriate adjustment in time. The trajectory of the research is very unpredictable and a bit twisted, yet it is very fruitful in that I have arrived at a strong and solid position that I am confident in. And I believe the investigations and works that I parked aside will not go to waste. It is part of the revelatory process and trial and error.

IV. A system

(P3-P4. Individual research-led design)

With a clear set of goals, a variation of formal tests is made. It began with the focus on developing one single living unit that can be stacked and duplicated on site. The building is firstly stacked up then extracted at moments to create the visual portals. However, the single-unit design is very limited in reaching out to larger population and catering to different needs thus making the system rather rigid. A bottle-rack system where a frame is provided, and people have the freedom to “plug-in” their own custom units was examined. Sadly, given the tight site configuration, the shelving system proved to be difficult in resolving the circulation and appear structurally redundant.

The single unit design was developed over a rather long period with many rounds of revision until at one point, a bay division within the unit emerged. This was the time when the focus was shift from developing on homogeneous unit to developing a system with different bays (bedroom bay, kitchen bay, balcony bay, etc) that allows people to mix and match (based on certain logic) and custom make their own units. And the visual portal will be an empty bay with no occupancy. As the architect, I will fix the locations of the terrace bays (visual portal) and the residents can assemble their units in the rest of the bays.

Later, to resolve the technical ducting problem that I encountered during testing the system, a separate servant bay was introduced into algorithm (before the servant space was incorporated into the kitchen and bedroom bay). In this new system, the servant bays are allocated by the architect (me) and the residents can design their units around the servant bays. And the bays left over will be the vista portals and the number of them are controlled at average 2 per floor.

I specifically like this system for that it has a rather rigid frame of allocating certain components, but within the frame the residents have a lot of flexibility to assemble their desired units. In this case, the housing project is not just for the single bachelors anymore (which was the case before), but appears for more groups of people including couples and couples with young children.

In parallel to the design of the flexible unit system, a lot of thought was given to the materiality of the building. I finally landed on CLT (cross-laminated timber) under the encouragement of my building technology tutor. I had heard of CLT a lot before that but was not entirely knowledgeable of it. I don't want to casually pick a material just because it sounds sustainable and is the trendy thing to do. After much research, I found that CLT can fit into my design goals very well. And the most important of all advantages of using CLT is that it allows for a clean and fast construction on site which can minimize my interruption on the surroundings while erecting a building in the middle of the road.

IV. Thoughts

The intervention seeks to address the social/spatial inequity in Bogota where a high percentage of the population is driven to live in the less resourceful urban fringe while the well-off upper class hold on to the prime locations with far better infrastructures and more job opportunities. The TransMilenio system is introduced to tackle the problem and transport more people in/out of the city center. However, the congestion and pollution it has caused may have outweighed its benefit. And it is merely a scratch on the surface as people who are less resourceful remains in a position with disadvantage.

The affordable housing project recognizes the untapped resources of green strips and tries to mediate between different social classes. The green strip is essentially an enclave as it is not the road that surrounds it. The housing project will also be an enclave in a sense that it is in a district of strata 4 but it is de facto strata X. It is an opportunity for the socially/financially distressed young people to get more resources to develop themselves without being hindered by the geographical distance.

The housing project, as a system, can be extrapolated to the sliver strips in other affluent neighborhoods, and which can hopefully push forward the social integration in the whole city.