REFLECTION

The project has shown interesting alternatives into how to deal with problems in the developing world. Taking the planning paradigm of infrastructural ecologies as a starting point has proven to be an effective tool. The proposal aims to be potentially executed in a context where the strength of local institutions is not abundant. The project aims to create a strategy for mitigating flood risk and mitigating spatial segregation at once. Personally, I believe one of the strongest points from the outlined strategy is that it has a low political cost. It aims to improve the conditions around these two problems, in spaces of schools, without affecting citizens; and creating interesting spaces for children.

The method used for analyzing the city and spotting the first areas of intervention had been diverse. Data processing and spatial analysis has been one of the most demanding steps in the way. The city of Guayaquil does not possess ample data available for the generation of the narrative/strategy. This lack of information has been understood and the project aims to provide enough insights for future research in the topic. Every analysis has been executed for the entire city.

The data processing and spatial analysis efforts have been the following:

A) The generation of socio-economic spatial data. The method used has been adapted from a method developed by the Ecuadorian institute of census and statistics. By using the methods and the national census available, data was weighted and added in order to obtain a socioeconomic mark per block. This approach has proven novel and interesting, since it could be applied all urban settlements in the country; at the same time, it provides valuable information about how the city is socially structured.

B) Using a grid of 200m by 200m based on the one used by Salvador Rueda and his team for Barcelona it was possible to determine the area of

intervention. The grid has proven effective for spotting spatial patterns and at the same time spotting thing happening in the smaller scales. Based in this grid the amount of people affected by flooding was obtained, and the areas in need of more urgent measured became evident. This analysis shows spatial patterns without being restricted by spatial morphology.

C) With the digital elevation model of the city, the direction of the flow of the water was generated. In the same way, the drainage streams where water gathers were also stablished which clarifies how the water moves inside the urban area.

D) Again, making use of the Digital Elevation Model developed by Sigtierras, a map of the direction of the water was elaborated, the map illustrates cells of 41,2m x 41,2m that show in which direction the water is likely to flow due to the topographic characteristics. This map is useful for designing green and blue infrastructure.

Those analysis could be understood as products by themselves. These four processes had enabled a clear reading of the city that influenced the design stage. In the design stage, schools had been chosen as potential spaces of action. Schools have an opportune spatial configuration, most of them have a central open space. For a strategy that aims to touch upon flood risk and spatial segregation 2 things are important; Potential groups for interaction and activities where this interaction can take place. Schools meet both criteria. Schools have open spaces where activities can take place and its most active users are children which is consider a human group with high capabilities for integration.

View in the situation of the city

Dealing with the flood risk situation in Guayaquil, has taken me to the ground level of the daily operation of this urban area. In Guayaquil, any situation seems to be influenced in a bigger or lesser degree by conflicts coming from the social dynamics. Conflicts of safety, segregation, exclusion, are tangible issues emerging daily.

Since Guayaquil possesses an important portion of commercial oriented businesses, the competence over the flow of money seems not to be equally beneficial for all. In addition, close to Guayaquil various agro-export business have their fields; bringing also this income to selected groups inside the city. It is hard to understand whether the socio-economic inequality in Ecuador (as may be in Latin America) has to do with a centralized distribution of the wealth, or with the single fact that the economic production is basically limited. Or perhaps both situations.

The central reason for doing this project as a master thesis is the fact that a change in the collective narrative is needed in order to start dealing with the core problem of Guayaquil's social disintegration. Social Disintegration represents a big problem because it becomes visible in many stages of planning and development. For example, several parks in Guayaquil possess big fences. Due to the feeling of insecurity during night time.

In the case of Guayaquil is clear to see how the objectification of the car has had an impact in space. The Car has become a sign of status; and therefore, space for cars is demanded everywhere. The city counts with several overpasses which hurt the urban livability where they settle. In relation to flood risk, this desire for the car has brought vast areas with impermeable pavement. If we have in mind that Guayaquil's weak soil absorbing capacity, demands bigger areas for filtering water; is not hard to see how vast impermeable pavements don't fit in the picture.

Summing it up, it looks as if Guayaquileños have a collective understanding of their spatial characteristics that does not have into account the natural conditions where the city sits. The desire for a modern city has put the real urban problems in the background and an alien development model in the foreground. This desire for modernity, is also driven by a socio-economic status, where lower classes are implicitly seen as part of the problem. I believe the core goal to achieve in Guayaquil (and in Latins America perhaps) is a shift into how the society understands its socio-economic groups and the social and power distance between them. It is not a problem of class struggle but one of unnecessary class distance that becomes apparent in cases of spatial segregation. This new narrative needs common goals shared by all social groups, one of them could be flood mitigation.