

# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



## Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners ([Examencommissie-BK@tudelft.nl](mailto:Examencommissie-BK@tudelft.nl)), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

| <b>Personal information</b> |                                |
|-----------------------------|--------------------------------|
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| <b>Studio</b>                         |  |
|---------------------------------------|--|
| Name / Theme                          | [Complex Cities / Developing countries and Emerging metropolis]  |
| Teachers / tutors                     | First Mentor: Dr.ir. Diego Sepúlveda<br>Second Mentor: Prof.ir. R.J. Dijkstra  |
| Argumentation of choice of the studio | Complex Cities research group will allow me to build up a speech, concepts and analytical instruments as a way to understand the accelerated urban expansion that has been going on in the past seven decades in Bogotá, broadening existing tensions in the social, spatial and economic sphere. The pressure imposed by a vast internally displacement process, result of a 60 years civil armed conflict, coupled, with the constrains of a metropolization project under a financial neo-liberal model, has widening the gap between the poor and the rich in a historically unequal territory. This visible and tangible gap that has permeated in multiple levels the local society, in terms of poverty, insecurity and lack of accessibility will be revisited with the Complex Cities researches in order to promote socially-fair and sustainable strategic models, as a way to counteract the current threats and enable positive future scenarios. |

| <b>Graduation project</b>       |   |
|---------------------------------|---|
| Title of the graduation project | <i>Bogotá   The movement in movement</i><br>Engaging an integrated public transport system, as an instrument to constrain the spatial fragmentation and sustain the social mobility |
| <b>Goal</b>                     |   |
| Location:                       | Bogotá, Colombia  |

|                               |   |
|-------------------------------|---|
| <p>The posed problem,</p>     | <p>Bogotá's urban condition, unfortunately, has become the product of countless isolated vernacular developments promoted by an empowered real estate market, due to political instability and the absence of a unified city model between the transport infrastructure and the urban structure. As an outcome, this has led to an even more spatially fragmented and socially segregated city.</p> <p>The urban sprawl has surpassed the point where individual planning and isolated design strategies are relevant, due to its high density and informal urbanization trends. With 9.3 million in the metropolitan area and 8 million inhabitants in the urban fabric, this phenomenon has resulted in a series of challenges that could be addressed through the formulation of the first Metro Line, inasmuch as it engages the potentialities of an integrated public transport system with the opportunities of an urban sustainable regeneration development. But until what extent can the definition of an Integrated Public Transport System (IPTS), reinforced by the development of the first Metro Line, contribute to the transformation and consolidation of Bogotá's urban structure? And how could the existing urban structure in return, nourish the potentialities of this project, in social, spatial and economic terms?</p> |
| <p>research questions and</p> | <p>How can an Integrated Public Transport System foster a transformation in terms of spatial and social cohesion, by recognizing the value of the journey, in relation to the daily system of the</p>   |

|  |   |
|--|---|
|  | multiple actors?  |
| design assignment in which these result. | <p>This Thesis aims to contribute to the definition of a comprehensive and integrated vision for Bogotá, Colombia, in terms of urban regeneration and social cohesion, with the intent of facilitating the construction of civic meaning, institutional cooperation and spatial revitalization, in a historically unequal territory. By analyzing and recognizing the disparity between Bogotá's urban transport and urban structure city models, this Thesis will revise the role that the first Metro Line will have as part of an Integrated Public Transport System (IPTS), in order to evaluate its impact in the existing urban patterns and social dynamics, and its influence in the spatial cohesiveness and social mobility. The objective is to formulate an operational strategic platform, as an instrument that could deal on one hand, with the uncertainties of possible affectations, and on the other, encourage a sustainable and innovative socio-spatial transformation. The outlines are established under a systematized urban revitalization model engaged by the potentialities of a Transit-Oriented Development, as a way to promote new urban conditions and new forms of the state in the social, spatial and economic domain. The articulation between the strategic planning and the mobility guidelines from the local to the metropolitan level, will become the basis for the implementation of a strategic design in the City Center of Bogotá, as a bald statement, of a competitive, genuinely democratic and socially-fair emerging metropolis model.</p> |
|  |   |
| <b>Process</b>                           |   |
| <b>Method description</b>                |   |
|  |   |

The principles that were revisited along the theoretical approach will set the foundation for the analytical framework, where we will evaluate the different trends that have ruled the actual city model of Bogotá. This framework will indicate the existing condition in social, spatial, environmental and economic terms in order to reveal the possibilities for further interventions in the urban structure. With the extent of determining the particularities and differentiations at multiple levels, a multiscale approach will be promoted at a metropolitan, urban and local scale. These insights in return, will provide the guidelines needed to define the practical concepts, as the starting point of the planning and design phase.

The Methods that are going to be used along the process are:

Theoretical\_ 1. Literature Review 2. Academic Paper

Analytical\_ 1. Data Analysis 2. Mapping, 3. Observations 4. Sketching 5. Comparisons

Practical\_1. Scenario Formulation 2. Design Models 3. Concepts

### **Literature and general practical preference**

The literature review and the analysis of already existing projects, concepts, and principles will deliver theoretical, analytical and practical results, as the common ground for the definition of a planning and design, vision and strategy.

The following key topics will be revisited along the process:

Emerging Metropolis, Spatial Cohesiveness, Strategic Planning, Urban Regeneration, Transit-Oriented Development, Social Mobility.

### **Reflection**

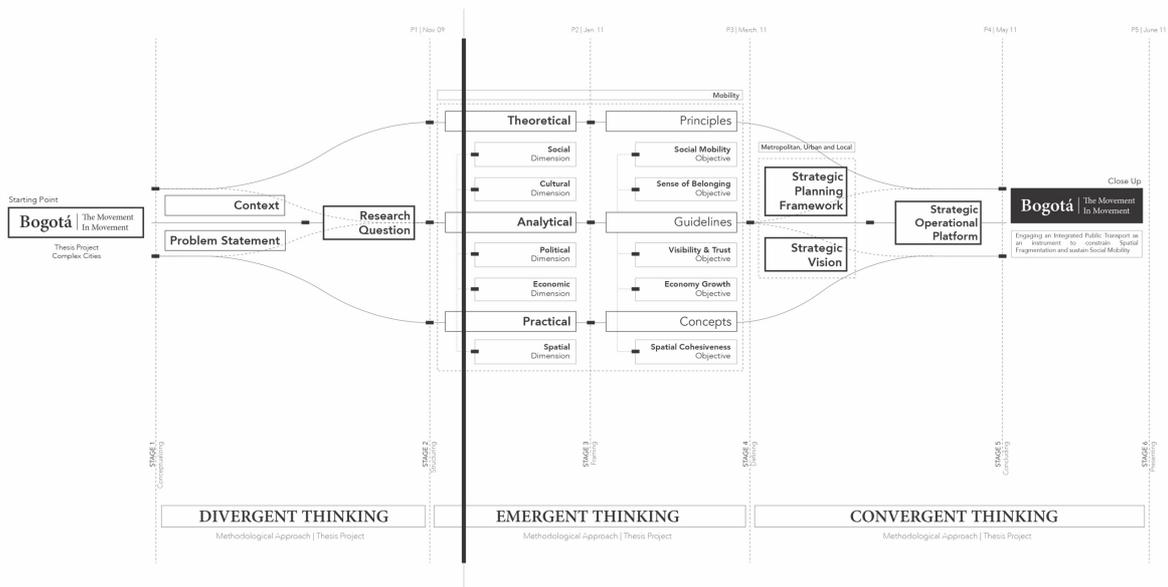
#### **Relevance**

The definition of the first metro line in Bogotá under an urban perspective, will certainly establish a solid foundation to a more accessible and connected city model. As an outcome, this will re-position Bogotá within the international framework and promote it as an innovative emerging metropolis. However, because of the urgency of the measure and the discrepancies along the process (the Metro should start its fully operation in 2022), the focus have been centered in the more general aspects at the technical and economic level. This could promote a development model of high-level services based exclusively on the interests of the powerful economic actors, ignoring the necessities and aspirations of the most vulnerable society sectors.

The implementation of this general metropolitan vision, under miss-led governance practices, policy planning processes and urban renewal models, could jeopardize the

sustainability and stability of the territory strengthening existing undesirable phenomenon such as economic polarization, spatial fragmentation and social segregation at the more local levels. For this reason, the objective of this Thesis is to analyze and metabolize the impact that a Transit Oriented Development could have in Bogotá's urban patterns in order to formulate a socio-spatial regeneration process, articulated under the principles of a strategic planning and design framework. This will provide a platform for envisioning Bogotá D.C. in the close future as a competitive, sustainable and socially-fair emerging city model.

## Time planning



5 stages in total, along 3 thinking processes:

1. Stage 1 (Sep. 2016 – Nov. 2016) | Conceptualizing  
Definition of the context, problem statement and research question.
2. Stage 2 (Nov. 2016 – Jan. 2017) | Structuring:  
Formulation of the theoretical framework, current trends, general data analysis (5 human dimensions).
3. Stage 3 (Jan. 2017 – Mar. 2017) | Framing  
Definition of the theoretical principles, analytical guidelines (socio-spatial strategies) and the practical concepts.
4. Stage 4 (Mar. 2017 – May 2017) | Defining  
Formulation of the Strategic Planning framework and Vision, as the basis for the Strategic Operational Framework (Final Outcome).
5. Stage 5 (May 2017 – June 2017) | Concluding  
Refining last details and preparation of final document / presentation.