

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), 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:

| Personal information | |
|------------------------|------------------------|
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| Studio | |
|---------------------------------------|--|
| Name / Theme | Complex Cities: Inclusive Cities of the Global South |
| Teachers / tutors | First mentor: Luiz M. de Carvalho Filho Second mentor: Dipl.ing. Birgit Hausleitner |
| Argumentation of choice of the studio | <p>The research group “Inclusive Cities of the Global South” is driven by complex situations in least developed countries. Specifically, questions of governance, social inequality, informality and spatial segregation, are located in the core research of the studio. The core problematic of my research involves multiple aspects that are addressed are central problematics in the research studio.</p> <p>My research is focused in Rio de Janeiro and more specifically, in the west zone of the city. Following the lines of the studio group, my research intends to articulate on the issues that influence on the multidimensional fragmentation of the city. In other words, problems of social inequality and spatial segregation, that are reflected in the polarization of formal and informal communities.</p> <p>In fact, the rapid urbanization processes, driven by a market-oriented development and ineffective planning systems, are responsible for the continuous intensification of the fragmentation in the city. Furthermore, other questions elaborated in the research are focused in the program of the studio. For instance planning systems, lack of property rights, unstable economy and market driven development.</p> <p>An analysis of former programs and initiatives that attempted to integrate the favelas with the city in Rio de Janeiro, has shown that urban policies were not effective in their goals. In fact, the strategies regarding the informal settlements in the city, have been shifting from eradication measures to integrative strategies. Therefore, the research will not elaborate on formal planning structures as they have been shown ineffective due to private interest and governmental corruption. In fact, a bottom-up approach, regarding the co-production of spaces, is define as the central strategy to promote the integration and empowerment of favelas in Rio de Janeiro.</p> <p>Finally, as its central to the topic and gives the name of the studio, the aspect of inclusiveness occupies, along with resilience, the central concepts and objectives of this research.</p> |

| Graduation project | |
|--|---|
| Title of the graduation project | Permeable Borders: addressing multidimensional conflicts between polarized communities in Rio de Janeiro |
| Goal | |
| Location: | Rio de Janeiro, Brazil. Case study: Planning Area 4 – formed by the neighborhoods: Barra da Tijuca and Jacarepaguá. |
| The posed problem, | The multidimensional fragmentation of Rio de Janeiro, transcends institutional, administrative, spatial, economic, environmental and social levels. The malpractice and inefficiency on slum-upgrading and housing policies, intensified by the lack of governance, aggravates the socio-spatial segregation as well as the discrepancies between formal and informal systems of the city. |
| research questions and | Main research question: How can formal and informal systems co-produce spaces that enhance social resilience and promote integration in Rio de Janeiro? Sub research questions: SRQ1 - How did the urban evolution of Rio de Janeiro influence the social, spatial and environmental segregation within the city? SRQ2 – How can the implementation of decentralized strategies, benefit from the knowledge derived from precedent initiatives and policies developed in the city? SRQ3 – How can planning mitigate gentrification processes in slum-upgrading projects? SRQ4 – How can collaborative networks help construct a mutually beneficial relationship between formal and informal dwellers? SRQ5 – What are the vital conditions to promote an endogenous self-organization process in informal settlements in Rio de Janeiro? |
| design assignment in which these result. | The design assignment is driven by the definition of a strategic approach to conduct an alternative development of integration and resilience within the polarized communities in the city. Furthermore, the expected outcomes are distributed through four scales of intervention |

- **Macro - City scale: Rio de Janeiro**

- Strategic plan towards socio-spatial integration of vulnerable areas of the city. The plan would promote, among other aspects, incentives for the co-production of spaces, flexible regulations and integration between urban form and natural structures.

- **Meso - Basin scale: Jacarepaguá hydrographic basin**

- Water management plan for the west zone
- Rehabilitation of the marshlands landscapes and integration with the built environment

- **Micro - Neighborhood scale: Barra da Tijuca and Jacarepaguá**

- Structure the network of local stakeholders
- Design strategies for densification
- Development of a public space network that integrates formal and informal carriers.

- **Nano - Local scale: Highest vulnerability areas**

- Design of public space typologies.
- Local scale resilience strategies
(endogenous process of co-creation)
- Local scale water management strategies

Process

Method description

- **Literature review:** This method is defined by the collection of a body of information, pertinent to the topic of the research.
- **Documentary observation:** It emphasizes on the analysis of documents, related to the research, to promote the explanation and urgency of the phenomena in study
- **Field work:** It elaborates on a ground research, emphasizing on the observation of local interactions and structured through participant-observations. This method is also mentioned as ethnography.
- **Explanatory case study:** This specific case study is intended to explore a specific phenomena in a contextual location. Furthermore, this explanation might address other cases in different areas.
- **Stakeholders analysis:** Identification and understanding of the stakeholders and actors related to the area.
- **Statistical analysis:** Involves a collection of statistical data, followed by its critical interpretation, regarding the research in study.
- **Transcalar mapping:** Informs the contextual relationships that are reflected on the built environment, as well as their systematic dependence to other scales of analysis.
- **Scenario construction:** Elaboration of specific trends as future scenarios, in order to investigate on the 'real' and 'possible' (Lefebvre, H. 1970), and inform the strategies and design of the outcomes.

Literature and general practical preference

Main literature reference – Theoretical framework:

The theoretical framework elaborates on the conceptual variables that define the framework of the research: social resilience, ideological systems, spatial integration, economic models, ecological adaptability and governance structures. Specifically, these variables have been supported and address resilient strategies.

Social resilience:

Taşan-Kok, T., Stead, D. & Lu, P. (2013) "Conceptual Overview of Resilience: History and Context". In: Eraydin A., Taşan-Kok T. (eds) Resilience Thinking in Urban Planning (p.39-51). GeoJournal Library, vol 106. Springer, Dordrecht

Ideological systems:

Lefebvre, H. (1996). Writting on Cities. Oxford, UK, Blackwell Publisher Ltd.

Harvey, D. (2003). "The Right to the City." International Journal of Urban and Regional Research 27(4): 939-941.

Spatial integration:

Habraken, N. J. (2000). The structure of the ordinary: form and control in the built environment. MIT press.

Economic models:

Avelino, F., et al. (2017). "Transformative Social Innovation and (Dis)empowerment." Technological Forecasting and Social Change.

Ecological adaptability:

Holling, C. S. (2001). Understanding the complexity of economic, ecological, and social systems. Ecosystems, 4(5), 390-405.

Governance structures:

Rauws, W. (2016). Civic initiatives in urban development: self-governance versus self-organisation in planning practice. Town Planning Review, 87(3), 339-361.

Practical references:

In this case, the practical references promote an overview of former initiatives and public policies, that have been realized to attempt on integrating the favelas with the city in Rio de Janeiro.

Fernandes, E. (2011). Regularization of informal settlements in Latin America, Lincoln Institute of Land Policy Cambridge, MA.

Gomes, M. d. F. C. M. (2013). Favela-Bairro e Morar Carioca: mudanças nas estratégias políticas, espaciais e institucionais para promover novos modos de regulação pelo mercado. VI Jornada de Políticas Públicas. São Luís, MA, Universidade Federal do Maranhão.

Leitão, G., et al. (2014). Projeto Mutirão, Programas Favela-Bairro e Morar Carioca: três décadas de urbanização de favelas na cidade do Rio de Janeiro. III ENANPARQ. São Paulo, SP.

Leitão, G. and J. Delecave (2013). "O Programa Morar Carioca: novos rumos na urbanização de favelas cariocas?" O Social em Questão XVI(29): 265-284.

Perlman, J. (2010). "Favela: four decades living on the edge in Rio de Janeiro". Oxford, UK. Oxford University Press.

Rolnik, R. (2011). Democracy on the edge: limits and possibilities in the implementation of an urban reform agenda in Brazil. International Journal of Urban and Regional Research, 35(2), 239-255.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

The current planning systems and city making tools can be seen around cities on the Global South to be inefficient and inappropriate. The Euro-American tools of urbanization, have been failing to provide equal and fair conditions of living in many cities on developing countries.

“Instead of being a focus for growth and prosperity, the cities have become a dumping ground for a surplus population working in unskilled, unprotected and low-wage informal services industries and trade.” “The rise of [this] informal sector,” they declare bluntly, “is a direct result of liberalization.” (Davis, M. 2006, p. 175).

My project engages with the field of urbanism and the selected studio, through a research that promotes an alternative understanding on development tools for cities in the Global South. Specifically, my research engages with co-productive processes to engage an integrative and capacitating process in informal settlements. Actually, both of the topics of co-production of spaces and informal urbanization, are little or no elaborated at all in the current master track of urbanism. Therefore, the research thesis represents an opportunity to explore the topic and demonstrate the awareness and complexity of the issue.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

The project becomes essential for the scientific community once it engages with different concepts of urbanization, collaborative, adaptive, independent and unpredictable. Furthermore, the research also builds upon the discussion of public policies and programs that have been used in Rio de Janeiro. Finally, it increments the discussion on topic by counteracting formal policies and planning mechanisms, through the proposal of a strategic bottom-up approach: co-production.

This research is extremely important for future urbanization processes in the world. The fast pace that cities are expanding without properly addressing the housing issue has led to the worldwide growth of informal settlements. According to the United Nations (World's Cities Report, 2016), the majority of the urban population already lives among informal conditions.

Therefore, this thesis intends to convey a set of frameworks and actions that intend to provide solutions to overcome the conflicts, that many times accompany informal urbanization. Finally, through the proposal of an alternative development, the research intends to give strength to vulnerable communities, to self-construct their resilience and claim for their space in the city.