

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	
Name	Karlou Westerbeek
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Private e-mail address	-

Studio		
Name / Theme	Urbanism Planning Complex Cities	
Main mentor	Rodrigo Cardoso	Spatial Planning & Strategy
Second mentor	Rients Dijkstra	Urban Design
Argumentation of choice of the studio	<p>Throughout my studies, I have developed an interest for the social and planning aspect of urban design: not just deciding what needs to happen, but also how to make it happen. I am most interested in the metropolitan- and regional scale. My ambition is in creating spatial strategies and coherent policies to implement the strategy.</p> <p>The multi-disciplinary approach, combining spatial planning and (institutional) governance planning, demonstrates in my perspective a high-potential way to define a desired situation and decide what needs to happen to get there. I would like to further develop my skills in the planning approaches and methods linked to this particular studio, for instance vision-making. The combination of planning and design, the regional scale and the inspiring group of teachers stimulate my choice for this studio.</p>	

Graduation project	
Title of the graduation project	Turning a city of walls into a city for all <i>a development strategy to reunite the urban core with the metropolitan region of Grand Paris</i>
Goal	
Location:	Métropole du Grand Paris (metropolitan region of Paris)
The posed problem,	<p>Throughout history, Paris has always been a divided city. The imbalance between the centre and the periphery has come to the point that the maladies in the city are not just contained in the affected areas, but spreading over the entire metropolitan region faster than ever. The differences between the wealthy core and the poor periphery are increasing rapidly. Tensions among inhabitants have led to confrontations, riots and a feeling of exclusion and dissatisfaction. Governance, spatial and social fragmentation hinder the possibility to resolve these issues. Next to that, economic objectives are prioritized in urban planning practices, leaving important societal and environmental challenges unaddressed. The metropolitan region needs to find a way to balance the global economic objectives and the local social and environmental objectives.</p> <p>The Boulevard Périphérique, Paris's concrete ring road, is the spatial and symbolic manifestation of the imbalance between the city and periphery and a central element in the previously described forms of fragmentation. First, it indicates the boundaries of the core city governance, which hinders the establishment of a metropolitan governance structure. Second, it determines real estate and land value contrasts, expanding socio-economic differences between urban parts. Third, it represents the social division between the two million Parisians and the ten million other metropolitan residents. Lastly, the structure itself serves as a physical exclusion mechanism, preserving the functions of the former city wall. The Boulevard Périphérique works as a mobility bottleneck at the regional scale, while locally it strengthens the perception of urban inequality by complicating access to the resources of the city centre. Transforming this infrastructure element does not involve only spatial and functional restructuring, but also interventions at the social and governance level.</p>
research questions and	<p>Main research question: How can the redevelopment of the Boulevard Périphérique contribute to transform its spatial, functional, social and symbolic roles in order to address the socio-spatial inequality challenges in the metropolitan area of Paris?</p> <p>Sub RQ1 [context]: What are the scope and characteristics of the imbalance in the metropolitan region?</p> <p>1A. What are the prevalent urban inequalities in the metropolitan region of Paris?</p> <p>1B. What are the socio-spatial structures in the region and how do they represent the inequalities?</p> <p>1C. What is the role of transport and connectivity in the growth of urban inequality?</p> <p>1D. What type of exclusion mechanisms are embedded in the urban fabric and how do they function?</p> <p>1E. What are the scales and scopes to address these problems?</p> <p>Sub RQ2 [diagnosis]: How do policy-making and spatial development contribute to the increasing inequalities?</p>

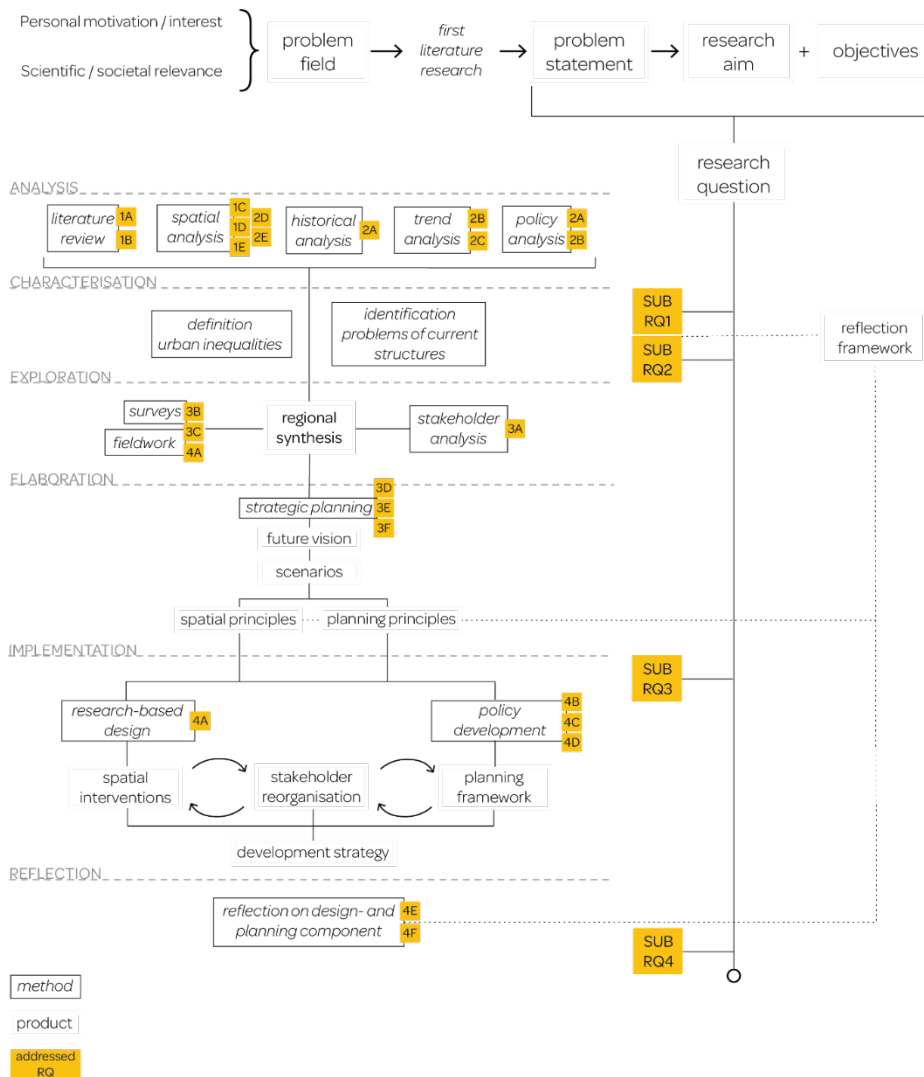
	<p>2A. How did policy-making shape spatial developments in the region throughout history?</p> <p>2B. What are the objectives of current policy-making and spatial developments? Which are prioritized?</p> <p>2C. What are future challenges for the region as a whole and the specific neighbourhoods?</p> <p>2D. Who are the actors and stakeholders related to the Boulevard Périphérique?</p> <p>2E. How does the real and symbolic structure of the Boulevard Périphérique contribute to increasing inequalities in the region?</p> <p>2F. In what way are the impacts of the Boulevard Périphérique related and in what fields do they come forward?</p> <p>Sub RQ3 [treatment]: What are the possibilities for change in the spatial- and governance structures in the case study of the redevelopment of the Boulevard Périphérique?</p> <p>3A. What are the potentials for change on the local and regional scale?</p> <p>3B. What is the perception of the involved actors, both the voluntary (stakeholders) and the affected (inhabitants), towards the exclusion mechanism and the growing imbalance between city and periphery?</p> <p>3C. How can this potential be translated into a development strategy for the metropolitan region?</p> <p>3D. What role has the deconstruction of the main exclusion mechanism, the Boulevard Périphérique, in this strategy?</p> <p>3E. How can the development strategy be translated in a spatial strategy for the redevelopment of the Boulevard Périphérique?</p> <p>3F. Which spatial- and planning principles derive from these strategies?</p> <p>Sub RQ4 [implementation]: What is needed for a just implementation of the proposed development strategy?</p> <p>4A. What are possible spatial interventions to deconstruct the exclusion mechanisms, and where can they be implemented?</p> <p>4B. What type of stakeholder organisation is necessary for the implementation of these interventions?</p> <p>4C. How can planning be used as a tool for implementation of the development strategy?</p> <p>4D. In what way are the proposed urban inequalities addressed by these interventions?</p> <p>4E. How are the identified problems addressed with this development strategy?</p>
<p>design assignment in which these result.</p>	<p>The project aims to show how the redevelopment of the Boulevard Périphérique could turn the tide in the increasingly divided city. In this project, the Boulevard Périphérique is not just perceived as a physical barrier, but also as a manifestation of the social and planning structures in the region. The project will reveal the possibilities for spatial- and planning interventions in order to create an equal and well-connected urban area, with a strong metropolitan identity and a high quality of life.</p> <p><u>The research aim</u> is to reveal the roles of the Boulevard Périphérique in the increasing imbalance between city and periphery.</p> <p><u>The design aim</u> is to show how the redevelopment of the Boulevard Périphérique can contribute to a better balance between the city core and its periphery.</p> <p>Intended outcomes:</p> <ul style="list-style-type: none"> • a regional-scale development strategy that shows the possibilities for the future of the region

- urban-scale design proposals for the transformation of the Boulevard Périphérique to show how the urban core can be opened up and reunited with the surroundings
- a planning framework to show how to balance economic, social and environmental objectives
- a collaboration model to reveal how a metropolitan identity can evolve through governance reform and stakeholder reorganisation

Process

Method description

The approach for this research proposal will be based on mixed methods, with a focus on qualitative research methods. The focus on qualitative data collection is based on the fact that this method is highly suitable for the exploration of new themes and for discovering possibilities. A case study poses the possibility to define and explore the dynamics within a certain setting. In this research proposal, a case study will be used to explore possibilities for change in a specific spatial setting, namely the Boulevard Périphérique in the high-density agglomeration of Paris. On the next page, the specific methods and techniques per research phase are described.



Analysis phase:

Methods – literature review, historical analysis, spatial analysis, trend analysis, policy analysis
Techniques – reading, documentary data analysis, statistical data analysis, online news analysis, mapping

Exploration phase:

Methods – surveys, fieldwork, stakeholder analysis
Techniques – online questionnaires (Google Forms), transect route (mapping/ photography/verbal description/drawing), Cleland's stakeholder chart

Elaboration phase:

Methods – synthesis, strategic planning
Techniques – mapping, verbal description (diagnosis), vision-making, scenario-building

Implementation phase:

Methods – research-based design, stakeholder reorganisation
Techniques – mapping, urban design, develop alternatives and test towards established principles, planning recommendations

Reflection phase:

Methods – reflection framework

Literature and general practical preference

The body of knowledge that forms the theoretical framework consists of social context, spatial context and governance context.

Social context

- Angéil, M., & Siress, C. (2012). THE PARIS BANLIEUE: PERIPHERIES OF INEQUITY. *Journal of International Affairs*, 65(2), 57–67. Retrieved from https://www.jstor.org/stable/24388218?seq=1#metadata_info_tab_contents
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- Cassiers, T., & Kesteloot, C. (2012). Socio-spatial Inequalities and Social Cohesion in European Cities. *Urban Studies*, 49(9), 1909–1924. <https://doi.org/10.1177/0042098012444888>
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- Montagné Villette, S., & Hardill, I. (2007). Spatial peripheries, social peripheries: reflections on the "suburbs" of Paris. *International Journal of Sociology and Social Policy*, 27(1/2), 52–64. <https://doi.org/10.1108/01443330710722751>
- Musterd, S., & Ostendorf, W. (2011). *Urban Segregation and the Welfare State: Inequality and Exclusion in Western Cities* (1st ed.). Routledge.
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- Sennett, R. (2018). *Building and Dwelling*. Farrar, Straus and Giroux.

Spatial context

- Cesafsky, L. (2017). How to Mend a Fragmented City: a Critique of 'Infrastructural Solidarity'. *International Journal of Urban and Regional Research*, 41(1), 145–161. <https://doi.org/10.1111/1468-2427.12447>
- Fol, S., & Gallez, C. (2014). Social inequalities in urban access: better ways of assessing transport

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Michelutti, E. (2010). An analytical framework for urban fragmentation analysis in the Global South city . Questioning urban planning practices through an institutional approach. Retrieved 18 November 2020, from http://n-aerus.net/web/sat/workshops/2010/pdf/PAPER_michelutti_e.pdf

Savini, F., Majoor, S., & Salet, W. (2015). Urban peripheries: reflecting on politics and projects in Amsterdam, Milan, and Paris. *Environment and Planning C: Government and Policy*, 33(3), 457–474. <https://doi.org/10.1068/c13132>

Sieverts, T. (2003). *Cities Without Cities: An Interpretation of the Zwischenstadt* (1st ed.). Retrieved from <https://ebookcentral-proquest-com.tudelft.idm.oclc.org/lib/delft/detail.action?docID=178868>

Young, D., & Keil, R. (2009). Reconnecting the disconnected: The politics of infrastructure in the in-between city. *Cities*, 27(2), 87–95. <https://doi.org/10.1016/j.cities.2009.10.002>

French metropolitan governance

Allmendinger, P., Haughton, G., Knieling, J., & Othengrafen, F. (2015). *Soft Spaces in Europe: Re-negotiating governance, boundaries and borders (Regions and Cities)* (1st ed.). Routledge. Retrieved from <https://ebookcentral-proquest-com.tudelft.idm.oclc.org/lib/delft/detail.action?docID=2038979#>

Desjardins, X., & Geppert, A. (2020). Governance rescaling and regional planning in France: is big really beautiful? In V. Lingua & V. Balz (Eds.), *Shaping regional futures* (pp. 121–132). Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-23573-4_9

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Geppert, A. (2017). Vae Victis! Spatial Planning in the Rescaled Metropolitan Governance in France. *Raumforschung Und Raumordnung*, 75(3), 225–241. <https://doi.org/10.1007/s13147-017-0492-1>

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Le Galès, P. (2001). Urban Governance And Policy Networks: On The Urban Political Boundedness of Policy Networks. A French Case Study. *Public Administration*, 79(1), 167–184. <https://doi.org/10.1111/1467-9299.00251>

Nadin, V., Maldonado, F., Maria, A., Zonneveld, W., Stead, D., Dabrowski, M., Piskorek, K., Sarkar, A., Schmitt, P., Smas, L., & Cotella, G. (2018). *COMPASS - comparative analysis of territorial governance and spatial planning systems in Europe*. ESPON. <https://repository.tudelft.nl/islandora/object/uuid%3A455267fb-e77f-43ee-91a1-dc6b9298ed38>

Nicholls, W. (2005). Power and Governance: Metropolitan Governance in France. *Urban Studies*, 42(4), 783–800. <https://doi.org/10.1080/00420980500060426>

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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 relation to the *Planning Complex Cities* topic comes forward in the quest to define aspects of a suitable metropolitan governance structure and the interplay between spatial design and policy-making. The expertise of the mentors (*Spatial planning & strategy* and *Urban design*) relates to the two intended outcomes of the project: a regional (re)development strategy for the Boulevard Périphérique and urban-scale design proposals.

The master track of Urbanism combines "urban design, landscape architecture, spatial planning and engineering" (TU Delft, 2020). This graduation project brings together social, spatial and planning aspects of the built environment and therefore combines the fields of urban geography, urban transportation/mobility and urban governance. This project will focus on the man-made conditions and elements and to a lesser extent the natural conditions. The project will shift between different scales throughout the process and in the final results: an important skill that was taught during the master track. Topics from the education program that come forward in this project are: urban geography, mobility, densification, sustainability and urban renewal. The project links mostly to the Q3 R&D studio "Spatial Strategies for the Global Metropolis", but also uses knowledge generated during the Q1 and Q2 studios "Analysis and Design of Urban Form" and "Designing Urban Environments". During Q4, I followed the elective course "Urban Geography". In this course, I developed a critical perspective towards urban demographics and social geography and its causes/consequences. This has sparked my interest for this project. Another important element of the master programme is the focus on "ethical spatial planning and -design". The lectures by (among others) Roberto Rocco changed the way I position myself in the research- and design assignment. The ethical considerations are a very valuable aspect of the process and project.

Throughout the entire education program (BSc and MSc) the combination of spatial design, social sciences, engineering and planning has taught the student a multidisciplinary perspective towards design- and research assignments. This multidisciplinary focus comes back in this project, which aims to touch upon the variety of topics within the master track. Throughout my masters, I have enjoyed elective courses from other master tracks, for example the "The Urban (Re)development Game" from MBE. The knowledge and literature gained in this course is very useful for this graduation project. Therefore, I feel like all the knowledge that I was able to collect during my education programme at the TU Delft and in practice, comes together in this project. Next to that, one of the key values of the master track is (social, economic and environmental) sustainable development. This project focuses on the balance between these three forms of sustainability and reveals the necessary spatial and governance changes to (re)develop the area in a sustainable way.

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

Social framework

Many cities in Europe have to rethink their urban infrastructure, because of the demand of space and the mobility transition. This project could serve as an exemplary project, because it addresses one of the most prominent examples of disrupting infrastructure in European cities. Next to that, it reveals how socio-spatial inequalities also play a role in (Western) developed metropolitan regions. With that incentive, it links to several global agreements and -reports (for example: Divided Cities (OECD), Sustainable Development Goals (UN)). The four SDGs that are leading in this project are:

- 10 – Reduced inequalities
- 11 – Sustainable cities and communities
- 13 – Climate action
- 16 – Peace, justice and strong institutions

Professional framework

This project could contribute to several research groups within the department of Urbanism, for example Metropolitan Spatial Structures and Regional Design. The case study will expose

possibilities for change that, through further research in for example another case study, could lead to more general theories.

The documentary data analysis creates a link with real-life governments and organisations that are currently working on this region as well. The knowledge generated in this research project could therefore be useful for the real project, or shed a different light on the challenges.

A more personal notion to the relevance for the professional framework is my ambition to work on similar projects in European metropolitan regions in the future. I would like to realize this ambition by looking for a job in the metropolitan region of Paris after my graduation.

Scientific framework

Two important knowledge gaps derived from the first literature review: *the potential of intra-urban connectivity in addressing socio-spatial inequalities* and *how to balance global economic objectives and local social and environmental objectives*. Some general theories on these topics have been explored, but the practical side is missing. Therefore, this project aims to demonstrate how these knowledge gaps can be addressed through a case study of a specific location and project. Especially the planning framework and stakeholder reorganisation could deliver some interesting insights for (re)development projects of large urban infrastructures. The research proposal also aims to develop planning ideas and -tools to implement in similar cases.

Besides that, the project also explores the cultural and historical conditions for spatial planning in France. Most of the literature on this topic is in French, so this project could contribute to an overview of the French planning system in the Anglo-Saxon research portfolio.