

# 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:

Personal information	
Name	Peishan Zhang
Student number	5090725

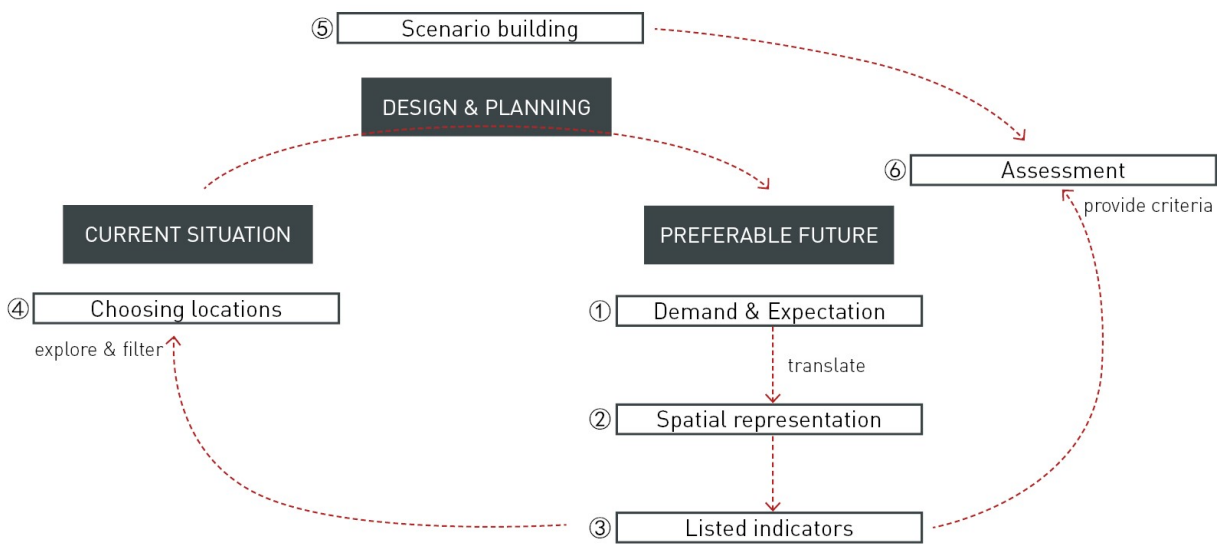
Studio		
Name / Theme	Planning Complex Cities	
Main mentor	Lei Qu	Spatial Planning and Strategy
Second mentor	Tanja Herdt	Theory and Methods of Urban Design
Argumentation of choice of the studio	<p>What motivates me to change my major from landscape architecture to urbanism is to look for the solution for housing problems in Chinese metropolis areas. This is a very practical issue and can never be solved by urbanists on their own. We need to work with governments, developers, and users to explore possible solutions. For urbanists, I believe that only by interpreting policies and understanding the operation of the (affordable) housing market can we play a greater role in this collaboration.</p> <p>Therefore, I would like to do a result-oriented project for my graduation: not only planning for the space but also planning for the system. The studio Planning Complex Cities is just what I need, combining spatial planning, governance, and civic engagement.</p>	

Graduation project	
Title of the graduation project	Regeneration for Youth: Promote Livability for Young Graduates through Urban Regeneration in Shenzhen
Goal	
Location:	Nanshan, Shenzhen, China
The posed problem,	Young graduates are facing housing difficulties in big cities. In order to ease the pressure, a new guideline was published by Chinese government to encourage urban regeneration as a provision for affordable rental housing. However, it is a challenge to spatial design and governance, as the existing built environment cannot meet the changing demands and expectations, and the

	<p>current governance model cannot balance the interests among different stakeholders. Moreover, the urban regeneration projects are often accompanied by social problems such as residential displacement.</p>
<p>research questions and</p>	<p><b><u>Main question:</u></b>  How to facilitate the implementation of urban regeneration in an inclusive approach to enhance livability for young graduates?</p> <p><b><u>Sub questions:</u></b></p> <p><u>Spatial aspect:</u></p> <ul style="list-style-type: none"> <li>· What kind of urban areas have the potential to be regenerated as affordable rental housing provision?</li> <li>· What are the spatial conditions that contribute to the livability for young graduates?  (What are young graduates' expectations and demands for housing and living environment?)</li> <li>· How can the existing spatial condition be transformed to adapt the expectations and demands of young graduates?</li> </ul> <p><u>Governance aspect:</u></p> <ul style="list-style-type: none"> <li>· How to balance the interests among different stakeholders and get necessary stakeholders on board?</li> </ul> <p><u>Social aspect:</u></p> <ul style="list-style-type: none"> <li>· How to promote inclusiveness for other vulnerable groups to reduce residential displacement while enhance livability for young graduates?</li> </ul>
<p>design assignment in which these result.</p>	<p>The assignment consists of three steps: imagine the preferable future, understand the current situation, and make use of planning and design tools to achieve the preferable future. See the diagram below.</p> <p>To imagine the preferable future is to ask 'what' questions and analyze young graduates' demands and expectations ①. Then, these demands and expectations need to be translated into spatial representation ②, which can be listed as indicators ③.</p> <p>To understand the current situation is to use the indicators to explore and filter the potential areas ④, and</p>

then understand which indicator can be met and which needs to be improved.

Making use of design and planning is to ask 'how' questions. Based on the understanding of the current situation, the scenarios can be built based on the principle that the preferable spatial quality needs to be saved while the deficiencies need to be improved ⑤. With building some experimental scenarios, design and planning can be tools to test whether the preferable future can be achieved. The last step will be the assessment which use the indicators as the criteria ⑥.



**Process**

**Method description**

Aspect	Questions	Outcome	Method	Purpose	End product
Spatial	What kind of urban areas have the potential to be regenerated as affordable housing provision?	mapping; filtering the opportunity-rich area	literature review	understand the concept of affordable housing	spatial adaptation strategy pilot project
			policy document review	understand the criteria for choosing the potential regeneration area	
			demographic analysis	explore where young graduates gather	
			mapping	highlight the critical area	
	What are the spatial conditions that contribute to the livability for young graduates?	understand the spatial quality that contribute to young graduates' livability	policy document review	understand the regulation for affordable housing construction	
			literature review	understand the concept of livability for young graduates	
			rental market report review	understand young graduates' demand and expectation for rental housing	
	How can the existing spatial condition be transformed to adapt the expectation and demands of young graduates?	explore the relative elements; save the desirable quality and improve the deficiencies	multi-scale mapping	map the elements that formulate the spatial quality on different scales	
			historical review	understand the historical development of the area; explore the opportunities for adaptation and transformation	
			scenario building	explore different possibilities	
case study			refer to the design and planning interventions in other projects		
design			test different scenarios; evaluate the performance of the strategy		
Governance	How to balance the interests among different stakeholders and get necessary stakeholders on board?	new governance model (engagement strategy)	stakeholder analysis	understand the relationship among different stakeholders; their capacity and interest; understand the existing governance model	engagement strategy
			comparative case study	learn from good practice; the pros and cons of other governance model; get knowledge for optimize the existing governance model	
Social	How to promote inclusiveness for other vulnerable groups to reduce residential displacement while enhance livability for young graduates?	complement the spatial and governance outcome	literature review	understand the concept of inclusiveness	
			stakeholder analysis	understand the roles they play in the process	

## **Literature Review**

Literature review means looking up the academic paper to gain an understanding of the theoretical notions. In this project, this method is mainly used to understand the notion of 'livability', 'inclusiveness', and 'affordable housing'. By reading the relative academic paper, the indicators of different notions are collected and compared.

## **Policy Document Review**

Policy document review is looking up policy documents to understand the relative regulation and the criteria for assessment, which could become the reference for the project. In the project, this method is used to understand the criteria for exploring potential regeneration areas and the regulation for affordable housing construction. The purposes are 1. To get the reference for choosing site(s); 2. To see to what extent can the project challenge the existing regulations.

## **Rental Market Report Review**

Rental market report review is to understand young graduates' demands and expectations for rental housing and living environment through collecting and analyzing the data from reports and surveys conducted by China's mainstream rental companies. As the field trip and face-to-face interviews are unavailable during the coronavirus pandemic, reviewing the rental market report is an efficient and helpful alternative.

## **Demographic Analysis**

Demographic analysis is to collect the demographic data and link it with the spatial object, so as to see the distribution of the specific group. In this project, the data is from the 7th national census of Shenzhen, and QGIS is used to visualize the data on the map of the city.

## **(Comparative) Case Study**

The case study is used to get references for the project. The comparative case study is to compare the pros and cons of different cases, as well as the similarities and differences between the cases and the precondition of the project, so that to understand which parts of the different cases are worth referring to for the project.

### **(Multi-scale) Mapping**

Mapping is to highlight the spatial distribution of the relative elements. By synthesizing different layers of elements, the critical area can be shown on the mapping. Multi-scale mapping is to zoom in to a smaller scale after mapping the critical area on the bigger scale, which can ensure that on every scale the site(s) is strategically chosen and can be related to the other scales, so that the intervention on the smaller scale can reflect and be applied to the bigger scale.

### **Historical Review**

A historical review is to understand the historical development of the site(s). First of all, the key points of the development timeline need to be identified. Then, by mapping the same elements in different time periods, we can understand what has been changed and what remains all the time. Using this method, we can identify what should be kept, what can be adaptable to new demands, and what should be transformed into a new form or function.

### **Scenario Building**

Scenario building is a method to explore the different future possibilities. The method will be used to show different ideas and to explore suitable interventions.

### **Design**

Design is a tool to test the performance of the scenarios. Using different spatial interventions, it is possible to test whether the preferable future can be achieved.

### **Stakeholder Analysis**

Stakeholder analysis is to understand the existing governance model by analyzing the relationship between different stakeholders and their power-interest-attitude. Based on the analysis, it is possible to see how the governance model can be optimized and which stakeholders need to be engaged.

## **Literature and general practical preference**

The relevant literature addresses the following theoretical perspectives:

1. livability: to understand what livability means for young graduates and the relevant indicators;
2. inclusive cities: to gain the knowledge about how to promote inclusiveness for other vulnerable groups;
3. affordable housing: to understand the definition and assessment of housing affordability in the context of intensive urbanization.

The general practical experience that I intend to consult are the cases about urban regeneration and affordable housing. The governance model and spatial intervention in these cases will be used as references.

## **Reflection**

### **RELATIONSHIP WITH STUDIO**

The project is highly related to urbanization and urban planning. Young people are facing housing difficulties in the metropolitan area, not only in China but all over the world, which is the negative impact brought by massive urbanization. Adding the quantity of affordable housing is far from enough. What's more, we need policy and governance to control the property price and balance the spatial inequalities brought by urbanization, which is the reason why I chose the studio Planning Complex Cities. The studio guides me to get knowledge about planning tools, both spatial and non-spatial, which will support my research on the governance model. Meanwhile, urban village, one of the main subjects of my research, is the product of rapid urbanization, reflecting the history of urban planning in China, and I am going to explore how this kind of decaying urban area can be transformed and adapted to the future development of the city. As the target group is the young graduate, these regenerated areas may power up the transformation and upgrading of the industry, which will be highly related to the planning of the city in the future.

### **SCIENTIFIC RELEVANCE**

Related to the academic field of urban regeneration in the Chinese context and housing affordability in the metropolitan context, the project explores the opportunities brought by the new trend of urban regeneration for enhancing livability for young graduates, as well as the ideal performance of affordable housing in the context of intensive urbanization.

The gap of knowledge can be stated in two points. Firstly, urban regeneration is facing many constraints with the complex property rights, and will probably bring some negative social problems. Secondly, the definition and performance of affordable housing in the metropolitan context are not yet clear. As most of the research and discussion focus on traditional affordable housing, which is often related to poverty and newly-built housing, the existing construction regulation may not be applicable in urban regeneration projects.

The intended outcome of the project is an engagement strategy that can improve the existing governance model, as well as a spatial adaptation strategy, which may

provide guidance on the construction of affordable housing in urban regeneration projects and the transformation of the existing built environment to adapt to the demands in a flexible way.

Moreover, the analysis process of the project shows the methods to select the relevant factors and explore the potential areas for regeneration, which can be applied to explore the potential areas in other districts or cities.

### **SOCIETAL RELEVANCE**

The project is relevant to the housing difficulties that young graduates are facing, which is not only a phenomenon in China, but also a worldwide problem. The policy trend in the Chinese context is using urban regeneration as a tool to ease the pressure, but this may also cause rising in rent and displacement of existing residents.

The contribution of the project is to come up with a new governance model, which can not only bring a win-win situation to the youth and the decaying urban areas, but also take the vulnerable group into account, retaining the function of these urban areas as 'arrival cities' for immigrants.

Moreover, the project could also be an inspiration for the transformation of the real-estate industry and the village joint-stock company. As the "mass demolition" model of urban regeneration is no longer possible in the future, the focus of urban regeneration projects should not only be the process of development, but also the follow-up management and operation.