

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	Jingsi Li
Student number	4584325
Telephone number	0649520914
Private e-mail address	jingsili@tudelft.nl

Studio	
Name / Theme	History and Heritage
Teachers / tutors	Gerdy Verschuure-Stuip, First mentor Maurice Harteveld, Second mentor Paul Stouten, Third mentor
Argumentation of choice of the studio	My project will do a sustainable Hutong rehabilitation and renewal, and it will discuss Hutong preservation and development in a critical way. History and Heritage group plays with the heritage and historic area, and it is about physical, social and cultural value of heritage in a changing context, so it closely link to my project.

Graduation project	
Title of the graduation project	The New life of Hutong Sustainable Hutong rehabilitation and renewal in The North of Dongsì Historic Reserve in Beijing
Goal	
Location:	The North of Dongsì Historic Reserve, Beijing, China
The posed problem,	As the representative identity of Beijing, Hutong contains huge tangible and intangible value. The word of "Hutong" comes from Mongolian in Yuan Dynasty (1271-1368), means the "narrow alley" in width of 3-8 meters in Old City of Beijing. It profoundly reflects the concept of traditional Chinese rituality and religiosity, also inspires today's urban planning in wider context in China (Liang, 1986; Sit, 1995). A series of public and semi-public space in the ordered arrangement of courtyards provides much space for direct interaction between neighborhoods, brings special socio-characteristics for Hutong community. Accordingly, Hutong is not only a gift of theory of urban planning from previous generations, but also a treasure of traditional civic culture. Urban renewal in the Old City of Beijing, especially in historic Hutong area, was dominated by large-scale "old and dilapidated housing redevelopment

	<p>(ODHR)" from 1980s to 2000. Hutong has experienced rude demolition and replaced by high-rise buildings during the redevelopment.</p> <p><i>The Conservation planning of 25 historic areas in Beijing Old City (Commission, 2002)</i> marks the shifting of urban renewal in Old City to small-scale and conservation-focused rehabilitation and regeneration strictly controlled by government. Wu first proposed the concept of "organic renewal" is the core idea of this planning, which is emphasizing "metabolic change rather than clearance and rebuilding" in early 1990s (Wu, 2011).</p> <p>The main problem of this thesis project is to deal with the issue of environmental deterioration and Hutong conservation in the North of Dongsì historic area in Beijing.</p> <p>The North of Dongsì, with well-preserved urban fabric of "Hutong-courtyard" structure and the large amount of original residents, contains huge historic value in physical and social aspects.</p> <p>Like all other Hutong areas, incidents of population explosion, illegal constructions, courtyards crumbling and public space reducing are ubiquitous in the North of Dongsì. The conflicts between the demands of redevelopment and preservation reach a stalemate and fail to solve problems of bad living condition in this high living density area.</p> <p>Moreover, uncontrolled environmental deterioration may result in original residents moving out, it will damage the social structure and cause intangible value losing in the North of Dongsì.</p> <p>According to the <i>Urban Master Plan of Beijing (2016-2035)</i>, any demolition of courtyard is banned, and Hutong as the main public space should be improved toward traditional, green, comfortable and quiet space.</p> <p>Therefore, the North of Dongsì needs sustainable strategies and spatial interventions to help the practice of Hutong rehabilitation, and rehabilitation also need to continue the historic value as well as consider the demands of different generations of users. Recover the traditional Hutong space service for traditional and existing urban life as well as for future generations.</p>
research questions and	<p>The Main research question:</p> <p>Which strategies and spatial interventions could provide the North of Dongsì Historic Reserve for a sustainable rehabilitation and regeneration?</p>

	<p>To answer the main research question, several sub research questions need to deal with:</p> <ol style="list-style-type: none"> 1. What experiences can be learned from previous Hutong rehabilitation projects and conservation policies carried on by municipal government? 2. What spatial, cultural and social qualities does Hutong bring to the North of Dongsì? 3. What are the potentials for future development in the North of Dongsì? 4. What interventions could promote in the North of Dongsì?
design assignment in which these result.	<p>The main aim of my project is providing strategies and spatial interventions for conservation-oriented sustainability of Hutong renewal and rehabilitation. It includes redefining the heritage in context of Hutong, assessment of the critical site for future development, spatial interventions base on the strategies of future social structure trend in different scale. Organic renewal provides the idea of assessment, but it will be renewed in area-based context. In order to achieve sustainability, research should work with changing context, and also consider future generation. Social conservation and development need to rely on physical continuity, since the research of the relationship between people and physical environment in different generations is essential. Public space plays the key role in social interaction and public life, since it will be the main research object in street scale. Economy and amenities as well as new housing typology will influence the social structure, so it could work with people decentralization.</p> <p>The output of the project will consist of strategies and spatial interventions. Strategies will include future trend of population structure and strategies relate to people decentralization. Spatial intervention will be made in different scales, meet the demands of both existing and future demands, meanwhile, it will work on critical site, which find by assessments of courtyards.</p> <p>In community scale, there will be a spatial structure as the master plan, which will guide other planning. Land use, amenities distribution and transportation plan will support master plan. Those plans are relate to public life, so it contribute to social development and meet demands of users.</p> <p>In street and courtyard scale, urban design on</p>

	new typology of public space and courtyard will accord to typology of social group.
<p>[This should be formulated in such a way that the graduation project can answer these questions. The definition of the problem has to be significant to a clearly defined area of research and design.]</p>	
Process	
Method description	
<p>Methodology of the research will be integrated by the literature review, historic analysis, the case study, the mapping and GIS analysis, site observation and interview. In addition, according the conservation planning made by municipal government, the basic unit of this research is courtyard.</p>	
Literature review	
<p>The literature review will related to all questions. Firstly, books, academic thesis, governmental documents regarding the urban renewal progress of Old City in Beijing and existing policies “Conservation planning of 25 historic areas in Beijing Old City” as well as general theories of heritage and sustainable development will be reviewed, together with the findings of my theory paper, these conclusions will help me to inform my research framework and the approaches for further study and design (sub question 1). Secondly, books, historical maps, governmental documents, websites even video records regarding the design, history and stories of Hutong and courtyard will provide information from physical, social and cultural aspects, they can be visualized to support the quality analysis of my site (sub question 2). After that, governmental documents, statistical websites and city map can provide data for mapping and visualizing site analysis in spatial, social, and economic aspects in order to find the existing problems (sub question 3). To solve the problems and preserve the quality of my site, strategies and spatial intervention will be proposed, and they should working under the existing urban renewal policies (sub questions 4).</p>	
Historic analysis	
<p>Historic analysis is also related to all questions. On the one hand, historic overview of the development of urban renewal in Beijing and western cities which influences today’s urban renewal policies in Old City of Beijing can help me to understand the existing “Conservation planning of 25 historic areas in Beijing Old City” and its core idea of “organic renewal” which will guide my design process (sub question 1). On the other hand, historic analysis is an essential method to understand the changes of Hutong and courtyard in physical, social and cultural aspects, which help me to study if and how Hutong and courtyard can suit for modern life less or more (sub question 2,3 and 4).</p>	
Case study	
<p>The case study of previous “Juer Hutong rehabilitation project” will provides me an example of the practice of Hutong rehabilitation base on the concept of “organic renewal”, it will help me to understand the current policy and contribute to my site interventions both in physical, cultural and social development (sub question 1 and 4). In addition, the case studies of Hutong regeneration projects focus on cultural-resource exploration, named Nanluogu Xiang and Guozijian will warn me the problems of creative economy and tourism development (sub question 1), but they still could inspire the spatial planning and what programme could be introduced in the North of Dongsì (sub question 4).</p>	

Mapping and GIS

Mapping provides **visualized method that needs to cooperate with the data and information collecting from other methods (like literature review, interviews and etc.)**. On the one hand, maps can be overlapped with variety elements, which will help me to find the existing qualities and problems need to be solved. According to those findings, potential points in spatial, economic, social and mental aspects where the intervention and strategies could be worked on will be informed (sub question 2 and 3). For qualities study, maps are: the distribution of heritage objects and valuable courtyards, location of people activities and different types of public space, Hutong pattern and etc. In order to find potential space in Dongsì, maps are concentrate on: land-use, distribution of public service facilities, owner property, business types and location and etc. On the other hand, mapping is also a tool for expressing my conclusion of site analysis and ideas of further design (sub question 3 and 4). The conclusions of site analysis are several assessments of interventions typology maps involving living and business courtyards. Further spatial intervention and strategies will be matching with it.

GIS is a sub method of mapping, it will help to **visualize the large amount of data in a time-saving way**, like the population density and building height as well as building quality.

Observation and interviews

The observation and interviews are essential to find the qualities and problems in physical, economic and mental aspects, and to do assessment for courtyards (sub question 2 and 3). The method will be divided into physical and mental aspects.

For physical aspect, observing **the situation of different courtyards, public space and businesses** is a direct way to collection information for quality finding and typology assessment (sub question 2 and 3).

For mental aspect, interviewing on **the perspective of residents and other stakeholders and observing their behaviors in Hutong** will help to answer what kinds of intervention can promote the living environment (sub question 4). The target group will focus on residents who is living in the courtyards with bad living condition and shop holders whose shop need redevelopment, because they area closely relate to the main potential area for future renewal (sub question 2 and 3). In addition, visitors and new immigrants will be asked, because they represent the potential future generations and help to the lasting Hutong development (sub question 4). In order to increase the efficiency, interviews will combine questionnaire and single group interview as well as group interview. Questions for interviewee are about their initiative act for housing improvement, dissatisfaction on environments, mental map of daily activities and so on (sub question 2, 3 and 4).



Literature and general practical preference

Abramson, D. B. (2007). The aesthetics of city scale preservation policy in Beijing. *Planning perspectives*, 22(2), 129-166.

Ahmad, Y. (2006). The scope and definitions of heritage: from tangible to intangible. *International journal of heritage studies*, 12(3), 292-300.

Bacon, E. N., & Norwood, E. (1976). *Design of cities*: Penguin books New York.

Blake, J. (2000). On defining the cultural heritage. *International & Comparative Law Quarterly*, 49(1), 61-85.

Breines, S., & Dean, W. J. (1974). *The pedestrian revolution: streets without cars*. Vintage Books USA.

Conservation planning of 25 historic areas in Beijing Old City, (2002).

Earl, J., & Saint, A. (2015). *Building conservation philosophy*: Routledge.

Fang, K. (2000). *Contemporary redevelopment in the inner city of Beijing: Survey, analysis and investigation*. China Construction Industry Publishing House.

Fang, K., & Zhang, Y. (2003). Plan and market mismatch: Urban redevelopment in Beijing during a period of transition. *Asia Pacific Viewpoint*, 44(2), 149-162.

Gehl, J., Gemzøe, L., Kirknaes, S., & Søndergaard, B. S. (2006). *New city life*.

Habitat, U. (2006). *State of the World's Cities 2006/7*. New York: United Nations.

Hedman, R., & Jaszewski, A. (1984). Fundamentals of urban design

Harvey, D. C. (2001). Heritage pasts and heritage presents: temporality, meaning and the scope of heritage studies. *International Journal of Heritage Studies*, 7(4), 319-338.

Jacobs, J. (1961). *The death and life of great american cities*. Vintage, New York.

Janssen, J. (2014). Modernising Dutch Heritage Conservation: Current Progress and Ongoing Challenges for Heritage Based Planning and Management. *Tijdschrift voor economische en sociale geografie*, 105(5), 622-629.

Johnston, C. S. (2014). Towards a theory of sustainability, sustainable development and sustainable tourism: Beijing's hutong neighbourhoods and sustainable tourism. *Journal of Sustainable Tourism*, 22(2), 195-213.

Li, L., & Xu, X. (2008). Analysis on Theory and Practical Significance of Urban Organic Renewal. *Modern Landscape Architecture*(7), 25-27.

Liang, S. (1986). Beijing: an unparalleled masterpiece of urban planning. *The Collected Papers of Liang Sicheng*, 4.

Mao, Z. (2005). Talking about Hutong in Beijing. *At Home & Overseas*(11), 72-72.

Martínez, P. G. (2016). Authenticity as a challenge in the transformation of Beijing's urban heritage: The commercial gentrification of the Guozijian historic area. *Cities*, 59, 48-56.

Ni, Y. (2009). *Study on typology of Beijing hutong sihe yuan: China*
Architecture & Building Press.

Palumbo, G. (2002). Threats and Challenges to the Archaeological Heritage in the Mediterranean. In *Management planning for archaeological sites*. Proceedings (pp. p. 3-12): GCI.

Peter, B. (2008). *Urban Transformation: Understanding City Design and Form*.

REN, J., & LU, B. (2010). PRESERVATION AND REGENERATION OF BEIJING SIHEYUAN BASED ON TYPOLOGY METHOD [J]. *City Planning Review*, 10, 022.

Roberts, P. (2000). The evolution, definition and purpose of urban regeneration. *Urban regeneration*, 9-36.

Rowe, P. G. (2011). Rehabilitating the old city of Beijing: a project in the Ju'er Hutong neighbourhood. In (pp. 7-10): UBC press.

Sit, V. F. (1995). *Beijing: The nature and planning of a Chinese capital city* (Vol. 38): * Belhaven Press.

Smith, L., & Akagawa, N. (2008). *Intangible heritage*: Routledge.

Steinberg, F. (1996). Conservation and rehabilitation of urban heritage in developing countries. *Habitat International*, 20(3), 463-475.

Stouten, P. L. (2010). *Changing Contexts in Urban Regeneration: 30 years of modernisation in Rotterdam*

(Vol. 8): Techne Press.

UNESCO. (2005). Operational guidelines for the implementation of the World Heritage Convention. Paris: Unesco World Heritage Centre.

Urban Master Plan of Beijing (1991-2010) (1993).

Urban Master Plan of Beijing (2016-2035) (2017).

Vecco, M. (2010). A definition of cultural heritage: From the tangible to the intangible. *Journal of Cultural Heritage*, 11(3), 321-324.

Venturi, R. and Brown, S. (2004). *Architecture as signs and systems : For a mannerist time*

Wang, J. (2011). *Beijing Record: a physical and political history of planning modern Beijing*: World Scientific.

Whyte, W. H. (1980). *The social life of small urban spaces*.

Wu, L. (1989). The rehabilitation of residential area in Old City of Beijing: Exploration of Organic renewal and "New Courtyard". *Architectural Journal*(7), 11-18.

Wu, L. (1991). From "Organic Renewal" to "Organic Order": The rehabilitation of residential area in Old City of Beijing (2). *Architectural Journal*(2), 7-13.

Wu, L. (2011). *Rehabilitating the old city of Beijing: a project in the Ju'er Hutong neighbourhood*: UBC press.

Xinkui, L. (2012). Urban Renewal: The Theory Evolvment and Practice Characteristics. *Urban Development Studies*, 10, 5-12.

Yi, D. (1996). Study on the Urbanization of Chinese City. *Modern Urban Research*(6), 15-20.

Zacharias, J., Sun, Z., Chuang, L., & Lee, F. (2015). The hutong urban development model compared with contemporary suburban development in Beijing. *Habitat International*, 49, 260-265.

Zhang, D. (2016). Ju'er Hutong new courtyard housing in Beijing: a review from the residents' perspective. *International Journal of Architectural Research*, 10(2).

Zhang, J. (2002). The historic preservation and refurbishment in Beijing. *City Planning Review*, 26(2), 73-75.

Zhao, X. (2011). Study on the allocation of high quality public resources and population dissolution in Beijing. *Population Research*, 35(4), 75-84.

Zhu, J. (2003). *New Ways of Old City Conservation and Renovation of Old and Dilapidated Houses*. BEIJING CITY PLANNING & CONSTRUCTION REVIEW(4), 52-53.

Zhao, S. (2016). The historic overview of Beijing. *National Geographic - Chinese Version*(5).

Reflection

Relevance

Social relevance

Hutong regeneration and preservation has always been an important issue in Beijing city development, not only because Hutong contains huge historic, social and cultural value, but also there are many complex problems related to historic, social and economic aspect in Hutong.

According to the result of previous Hutong renewal, some Hutongs were demolished and replaced by high-rise buildings, others were reconstructed but caused gentrification and over-commercialization because of its "real estate market-oriented" redevelopment, but the problems that how to keep both physical and social value in Hutong protection still remains unsolved.

Therefore, my project will not just focus on the physical preservation, but the social structure maintaining and Hutong economy development are also taken into consideration. The research will try to build the balance between conservation and development in order to provide some references for the regeneration of other Hutongs, even a wider social context in other old cities regeneration in China.

Moreover, Beijing has grown as the cultural and political center of China, it welcomes increasing migrants from other regions. As a very social space, Hutong provides much possibility in social-mix, and its cultural and social environment also will change with mix of locals and migrants.

As a result, such a research on the topic was considered necessary for exploring new sustainable possibilities for the Hutong regeneration and heritage protection.

Scientific relevance

The project will contribute to the methodology and integration of values assessment of heritage, and practice sustainable regeneration in context of Hutong, even for old city regeneration in general context in China.

The World Heritage Operational Guideline define the social aspect has becoming intangible values of heritage, it help to clear the targets of the heritage protection in Hutong is integration of physical, social and cultural aspects. Meanwhile, the policies and several researches on urban regeneration and heritage reuse help me to understand social values of heritage and sustainable regeneration in global context. Therefore, finding scientific assessments methodology, considering demands of different stakeholders and proposing sustainable solutions in Hutong regeneration in the context of Beijing is the main innovation of my project. It is also a experimental regeneration in such a complex context.

Time planning

[A scheme of the division of the workload of the graduation project in the 42-week timeframe. Compulsory in this scheme are the examinations at the middle and end of the semester, if required, the minors you intend taking and possible exams that have to be retaken. The submitted graduation contract might be rejected if the planning is unrealistic]

