

# 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	Shi Haoyu
Student number	5050421

Studio		
Name / Theme	Heritage & Architecture – Studio: Vacant Heritage	
Main mentor	Lidy Meijers	Heritage & Design Mentor
Second mentor	Frank Koopman	Heritage & Technology Mentor
Third mentor	Hielkje Zijlstra	Research Mentor
Argumentation of choice of the studio	<p>Studio topic matches my fascination and interest. I believe that architects' responsibility is to resolve the social conflict with the playing of space within the urban fabric, reveal the beauty behind desolation, and build a durable community. Joining Vacant Heritage studio will provide a good opportunity for myself to engage in exploring viable solutions to the ever shifting urban issues. At the same time, I'd love to talk about social issues since architects are always designing for people. Besides, the studio will benefit my later career. The rise in numbers of vacant building is a global issue and not only afflicts department stores. Studying in this studio will gained me treasure experience and prepared myself for the coming challenges after I go back to China.</p>	

Graduation project	
Title of the graduation project	An In-between Stage – Architecture as a bridge
Goal	
Location:	The former V&D building in Dordrecht Voorstraat 258, 3311 ET Dordrecht
The posed problem,	<p><i>Vacant Heritage Building in Dutch city centres</i></p> <p>The increase in numbers of abandoned building is a global issue plaguing our cities. Sustainable heritage development is the future task for Heritage &amp; Architecture. The importance of adaptive re-use project is growing in an upward trend in the coming years. Due to various crises in the world,</p>

	<p>there is a high vacancy rate of buildings. Those buildings are urgently in need of adaptive re-use to find other new functional uses.</p> <p>Among of which, due to the rapid growth of online shopping, visiting traditional physical stores seems no longer necessary and have become less relevant to people's lives. As a result, department stores, have gradually detached themselves from public lives because of the loss of functions, and finally became vacant, which are in urgent need of transformation in a bid to regain and maintain their flourishing.</p> <p><i>Lacking of transitional space between the building surface and the street</i></p> <p>There is an intangible obstruction between pedestrian and the building. The building, or to be exact, the wall, indicated a clear and closed boundary between the vacant department store and the urban context. Although the showcases are designed with large windows facing the streets, walls or curtain were placed behind the window which eventually obstructed the interaction between indoor and outdoor.</p> <p><i>Lacking of In-between Space inside the building</i></p> <p>The building had a homogenized structure, which made each floor looks similar to each other, and lacking vertical connections. Every square meters inside the former department store was defined by commercial activities. Thus, inside the building, there are insufficient transitional space between different public and private zones.</p>
research questions and	<p>How can involving 'In-between Space' in the design process contribute to the final result of the adaptive reuse design of a department store, with regard to creating spatial transitions between the building and context as well as between different sections inside the building?</p>
design assignment in which these result.	<p>Transform one former V&amp;D department store into an architecture with soft connection with the street and with</p>

	good interior transition (both spatial, programmatic)
<p>The concept of “in-between realm”, proposed by Dutch architect Aldo Van Eyck(1956), arose under the contradiction between architecture and the city. The term refers to the sequence of space between outdoor and indoor. Van Eyck also proposed in 1962 that <i>City is a House and House is a City: a house must be like a small city if it's to be a real house</i>. He also described the in- between space as a meaningful, psychologically effective transitions. In an urban perspective, this kind of intermediary space can also establish a transitional level from private space to public space and form a continual sense of territory, security, and subordination (Strauven, 2007). Besides, “In-between realm” has a good-quality outdoor space suitable for spontaneous activities such as walking, staying, talking, and other social activities (Jan Gehl, 2011).</p> <p>Transform one former V&amp;D department store to a mix-used building with close interactions with the urban life. The building should not be limited by the function, but become an ever-lasting social infrastructure. The concept of In-between space would be used to create a durable connection between vacant department stores and urban space during the adaptive reuse process.</p>	
<b>Process</b>	
<b>Method description</b>	
<p><i>Research Phase</i></p> <ol style="list-style-type: none"> <li>1. Collective research: Spatial Building Typology research <p>Methods: Using Haussmann Method (Jallon&amp; Napolitano, 2017) as the primary reference, analytical drawings would be made to examine buildings from four different scale levels to better understand the common spatial feature of those former V&amp;D buildings.</p> </li> <li>2. Individual research: Involving in-between space during the adaptive reuse of heritage buildings <p>Methods: Literature research, looking into the following architects’ literature about in-between space, including Yoshinobu Ashihara, Kisho Kurokawa, Aldo Van Eyck, a basic theoretical framework on In-between Space would be generated. Furthermore, I will cover the literature about In-between Space’s influence on people’s social behaviour and the contribution to urban space, like Jan Gehl and Richard Sennett.</p> <p>Methods: Case Study Research, the criteria for choosing the case studies are: (1). Redesign of the heritage building which uses In- between Space as the concept, (2).Refurbishment of the heritage building that has close connections with the urban context</p> <p>Methods: Comparative Analysis, After the study on various reference projects, conclusions will be drawn to input the redesign process. These conclusions would be used for the comparative study with the former department stores of V&amp;D to investigate the possibility of applying and redesigning.</p> </li> </ol>	

### *Design Phase – research based design*

1. Essence model making, to help us capture the essence of these buildings
2. Location analysis, After choosing the site, more analysis would be conducted in different scale levels to understand the building in a deeper level. The analysis will be conducted in city, context, and building and detail levels.
3. Value assessment, assess the value of the building based on different aspects(7 S). It is a tool to help us form a guideline for the later redesign
4. Sketch as a starting point, it is related with personal preference. For me, sketch is a direct and efficient way to express the design ideas. My sketch based design will be the extension of Five-minutes sketch exercise.
5. Feedback loop, designing is not a one-shot issue and needs rounds of changing and improving. Also, as the designing goes deeper, building technology would be an important factors and modify the design.

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

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 Sennett, R., (2019). Building And Dwelling\_Ethics For The City. 1st ed. London: Penguin Books.  
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 Strauven, F., (2007). Aldo van Eyck – Shaping the New Reality From the In-between to the Aesthetics of Number. CCA Mellon Lectures, (12).  
 Zijlstra, H., (2020). Research Spatial Building Typology-WHY WHAT And HOW. [powerpoint]

## Reflection

The increase in numbers of abandoned building is a global issue plaguing our cities. Sustainable heritage development is the future task for Heritage & Architecture. Due to various crises in the world, there is a high vacancy rate of buildings. Those buildings are urgently in need of adaptive re-use to find other new functional uses. To respond to this situation, the studio of Vacant Heritage set the vacant department stores of V&D in the Netherlands as the research objects. Also, Heritage & Architecture would like to strengthen the relationship between real estate development and the field of re-use. The course will invite relevant practitioners to join the studio discussion as well. Within the studio of Vacant Heritage, our research contributes to the broader question of Vacant Heritage: Find indicators for building typologies that will become obsolete and are their general concepts for revitalization. (Meijers, 2020)

The collective research on the Spatial Building Typology of former department stores of V&D helps students better understand the common spatial feature of the originally designed buildings for one specific function. The research also provides the heritage world the knowledge of the spatial typology of former department store buildings in the Netherlands. Since function changes all the time in the building while space is timeless, this research is built on the HA's traditional research program on building analysis and adds a new chapter (Zijlstra, 2020).

The contribution of individual research on involving in-between space into the adaptive re-use of heritage buildings is two-sided. On one hand, the research examines the sustainability between the architecture and the urban context as well as respond to the Open City theory (architecture level responds to urban level). On the other hand, it attempts to find possible strategies for creating spatial transitions between the public and private space inside the heritage building. In general, under the guidance of the Spatial Building Typology research topic in HA Studio Vacant Heritage, students are encouraged to find sustainable ways to redesign these monumental vacant department stores. The 'In-between Space' concept had been proposed and shaped by many significant architects and scholars. Nevertheless, confronting with adaptive re-use of heritage buildings, this theory would be interrupted in a new way, which will become a new contribution to the field of re-use.