

# 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	Pierre-Loup Benoit
Student number	5278333

Studio		
Name / Theme	Urban architecture studio	
Main mentor	Eireen Schreurs	Architecture/Urbanism
Second mentor	Jos Lafeber	Building Technology
Third mentor	Leeke Reinders	Research/Anthropology
Argumentation of choice of the studio	<p>Through both Public Building MSc1 and MSc2, I had the opportunity to work on two different positions transcending both studios: designing a building that shares an important interaction with the city in which it is anchored and focusing on existing structures (mainly vacant office buildings) to show the potential their reconversion can offer.</p> <p>Convinced of the role of mixity and reconversion in the future of urban renewal, the Public Building studio was a good opportunity to test the combination of both principles. However, the scale with which we engaged was mainly referring to the territory.</p> <p>Then, I chose the Urban Architecture studio to zoom in and try to apprehend the city more regarding its socio-economic realities but still anchored in a strategy of reconversion. In that respect, reconverting an industrial site was a good opportunity to question the limitations of the reuse of existing structures - industrial buildings being explicitly built for a purpose, not based on salubrity parameters. The choice of the studio clearly echoes the subject of the thesis I wanted to develop. It was even sharpened by the question of industrial production still in use and how both the city and the industry could cohabitate in a productive, yet socially sustainable environment.</p>	

<b>Graduation project</b>	
Title of the graduation project	The Manufacture of Space: a Strategy for a continuous transition towards a more inclusive production area.
<b>Goal</b>	
Location:	Maastricht, The Netherlands
The posed problem,	The unity of the industrial site that is part of our perimeter of research is meant to disappear considering the sale announcement of the Maastricht site by the multinational paper company SAPPI. Usually, the common strategy of industrial sites reconversion implies a long research process leading to the elaboration of a Master Plan which could take years before re-engaging the site with the city. Considering the urban location of the site, the latent <i>statu quo</i> during the reconversion procedure shows the necessity to look for a strategy for more direct action based on anticipation and intrinsic potential exploitation in the transition towards a more inclusive urban production area.
research questions and	<ul style="list-style-type: none"> <li>• How the valorization of intrinsic qualities of the factory site can lead to a continuous transition towards a more inclusive production area.</li> <li>• To what extent a strategy based on the cohabitation of production areas and residential facilities can participate to build a socially/ecologically/financially sustainable urban neighborhood.</li> </ul>
design assignment in which these result.	Initially formulated through the urban proposal, the design assignment aims to propose a strategy based on exploiting potential of existing buildings to organize the transition of the site towards the urban "industry 4.0" (H. Hosoya & M. Schaefer, 2021). In that respect, the personal design assignment will assess the notion of cohabitation in the incremental process of reconnecting the factory with the city by exploring the evolution of a selected area of the site, part of the urban

strategy, through three different temporalities.

## **Process**

### **Method description**

After a brief introduction retracing the issues that Sappi Maastricht site is facing, the research will be divided in two parts.

The first part will be dedicated to framing the theoretical framework regarding existing urban renewal strategies applied to industrial sites. Supported by readings of critical architects regarding the approach of Master Planning, a first case study will be illustrated: Kanaal neighborhood in Wijnegem. Then, the theoretical framework will focus on the latent period between design and completion of such strategy, looking at (un)voluntary meanwhile uses supported by academic and critical architecture readings. A second case study, the redevelopment of the Circularium, Brussels, will be illustrated.

Following the delimitation of the theoretical framework, the site in Maastricht will be introduced based on the urban analysis made during the first semester (interviews of actors, archives analysis, morphological study, mapping). This chapter has the ambition to retrace the current situation on site with a specific interest on the urban planning speculations regarding its future.

This first part of the research leads to a conclusion: there is a necessity to prone a more direct action for urban renewal not as a temporary occupation of existing buildings but as a valorization of intrinsic values of the site to promote a more sustainable solution.

The second part is founded on the hypothesis that, considering intrinsic qualities of the factory (connectivity, tools, and resources available), the productive aspect of the site should be maintained to promote a continuous activation.

Based on this hypothesis, the notion of the contemporary urban industry will be explored through readings of critical architects and academic researchers. A case study, the former Saint-Gobain industry, Sambreville, will explore that aspect meanwhile showing a lack of collective facilities integrated in the strategy. Then, a particular focus will be done on the notion of cohabitation between productive and residential functions in the design of a sustainable neighborhood.

This second part will end with the elaboration of a dynamic strategy of incremental transition towards the new urban industry based on results elaborated in the collective assignment of the urban proposal.

Considering results obtained through this research, recommendations regarding a more progressive urban reappropriation of industrial facilities will be detailed as part of the conclusion.

The personal design assignment is meant to be the concretization of the notion of cohabitation in a dynamic transformation of the Sappi site. Through the design of a selected area of the factory at three different temporalities, the project has the ambition to assess to what extent a site can handle incremental changes meanwhile staying activated. The building technology aspect will explore constructive realities surrounding this transformative dynamic with the accent made on acoustic, energy efficiency supported by the analysis of similar built examples.

## Literature and general practical preference

- Brand, Stewart. *How buildings learn: What happens after they're built*. Penguin, 1995.
- Hillier, Bill, and Julienne Hanson. *The social logic of space*. Cambridge university press, 1989.
- Sennett, Richard. *Building and dwelling: ethics for the city*. Farrar, Straus and Giroux, 2018.
- Schwab, Klaus. *The fourth industrial revolution*. Currency, 2017.
- Boxel, Van Elma, and Kristian Koreman. *City of Permanent Temporality: The Making of Luchtsingel, Schieblock, Test Site Rotterdam*. nai010 publishers, 2019.
- Leysen, Dieter. «Meanwhile Use as an Act of Resistance.» *Joelho Revista de Cultura Architectonica* 9 (2018): 118-130.
- Ball, Sue, and Ruth Essex. "A hidden economy: a critical review of Meanwhile Use." (2013).
- Hosoya, Hiromi, Markus Schaefer, and Philipp Aerni. "The Industrious City Urban Industry in the Digital Age." (2021).
- Verbakel, Ward. "Hybrid Factory/Hybrid City symposium: Dwelling on the productive city; productive models for inhabiting a productive city." *Hybrid Factory/Hybrid City Symposium. Politecnico di Torino Future Urban Legacy Lab, daSP PhD program with Nina Rappaport of Vertical Urban Factory, Date: 2020/02/14-2020/02/14, Location: Turin, Italy*. 2020.
- Rappaport, Nina. "Hybrid Factory| Hybrid City." *Built Environment* 43.1 (2017).
- Lane, Robert N., and Nina Rappaport, eds. *The design of urban manufacturing*. Routledge, 2020.
- *Circularium*. [www.circularium.be/fr](http://www.circularium.be/fr). Accessed 12 Nov. 2021.
- 51N4E. "51N4E - D'Ieteren Project." 51N4E, 14 Dec. 2021, [www.51n4e.com/projects/dieteren](http://www.51n4e.com/projects/dieteren).

## 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)?

My graduation topic is deeply anchored in the studio theme "Glaneurs, Glaneuses". It has the ambition to maximise the consideration of existing elements in a wider perspective of urban sustainability both in terms of resource economy, social and economical continuous activation. The objective of the project is to act as a case study for further research, questioning the appearance of a more sustainable strategy of urban renewal at all scales, from the site involved in a territorial network to the construction specificities implied in cohabitation of programs. In that respect, the project relies to all aspects of the built environment, a major principle of both master track (architecture) and master programme in general.

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

As mentioned above, the ambition of the work is to define a strategy of urban transition towards a more sustainable productive area. As the theoretical research and the graduation project are deeply bound to each other, my work is meant to be used as a case study for further exploration regarding direct reappropriation of former urban factory sites.

My graduation work is meant to show an alternative to both long lasting master planning strategies and temporary occupation and show that cohabitation in a site facing a change of paradigm is possible.

