

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	Yichen Lai
Student number	5285755

Studio		
Name / Theme	Interiors, buildings and cities: Future Bank	
Main mentor	Sam De Vocht	Architecture
Second mentor	Matthijs Klooster	Architectural engineering and Technology
Third mentor	Sereh Mandias	Architecture
Argumentation of choice of the studio	With Brussels declaring to be implementing a donut economy, I am curious about the social, economic, political and cultural transformation of the city. I am also interested in the graduation studio's "Future Bank" as an entry point for this general direction to explore public and private issues of public buildings and workplaces. I would also like to learn about the studio's pedagogies and methodologies.	

Graduation project	
Title of the graduation project	Future Bank
Goal	
Location:	Brussels, Belgium
The posed problem,	The National Bank of Belgium is the central bank of Belgium, located in the capital Brussels. It is a financial institution responsible for monetary policy and the stability of the Belgian financial system. However, after the financial crisis in 2008, the public lost trust in banks, defining them as a complex, incomprehensible image that controls their lives. The bank also contains a workplace. The studio studied the characteristics of office space in different periods of history and asked questions about what contemporary workspace would look like and how to accommodate 1,500 employees in the bank. In addition, the bank takes on the responsibility of contributing to a new society under the claim of the donut economy. As such, it is also a public building that needs to accommodate other uses and organizations.

<p>research questions and</p>	<p>How should the future National Bank of Belgium adapt or transform to integrate financial institutions, office space and public buildings while responding to the ambitions of new realities and future at the center of economic transformation?</p> <p>More specifically, are there new possibilities for the bank to open up some of its private public outdoor and indoor spaces as places for public participation and input from all sectors of society? And how can these open spaces be welcoming so that people want to gather and stay? How can the bank's workspace be transformed from a closed fortress to a knowledge center where people can type, talk, and think together? There are many private, security-related functions in the bank, how to balance the public and private boundaries while opening some spaces to the public?</p>
<p>design assignment in which these result.</p>	<p>The National Bank of Belgium is located in a triangular block, at the junction of the upper and lower city of Brussels. The facade of the National Bank on the Boulevard de Berlaimont is a continuous colonnade, nearly 200 meters long. It represents the building's current status as an institution, an entity that cannot be denied or penetrated. The more anonymous façade of Rue de la Banque suggests some kind of bureaucratic or administrative labor within. Rue du Bois Sauvage façade covers the old bank as an opulent palace. This three-sided fortress-like exterior suggests a serious institution that operates opaquely, is associated with elites and traditions, and is working anonymously for the state and its citizens.</p> <p>Within the interior of this building complex is an inner courtyard, which is now used for service functions. It is surrounded by the back of the surrounding buildings and contains high solid walls and concealed passageways left in various stages. Its elevation is at the negative level of the surrounding buildings and there is no landscaping. These factors contribute to the low quality of the courtyard and its inability to accommodate public interaction.</p> <p>In the center of the 200-meter building's ground floor is a large hall of nearly equal length. It now contains only a few seats and writing desks, and the space on either side is enclosed by walls. As a result, the hall is underutilized and closed off from the street and courtyard on both sides.</p> <p>The existing office spaces are long and narrow, consisting of a single corridor linking many rooms on different floors. This monotonous space prevents communication between employees.</p> <p>These failing conditions provide an opportunity for change, redefining the social, urban, architectural and interior scales of the national bank as a financial institution, office space and public building.</p>

Process

Method description

The research themes and methods are examined from several perspectives, focusing on future Belgium National Bank's social responsibility, the role of financial institution, work spaces and public spaces.

Precedent studies:

The studio's study of the historical evolution of office space leads us to consider the contemporary needs of office space. From the precedent of model making and the reading of articles it can be broadly divided into home office, Taylorism, office landscaping and modular business furniture system. This study of office space typologies helps to define the current types and problems of the bank's office space and provides guidance on future choices and directions. The studio has also conducted drawings of bank precedents to help us understand the spatial form of specific functions such as the bank hall, counters, and vaults.

Literature research:

The purpose of the literature research method is to study the economic and governance system of Belgium National Bank and its social responsibility. By searching the official website of Belgium National Bank, an analytical map of the hierarchy and organs of Belgium National Bank and its social responsibility list in culture, art and education was drawn.

Site research:

The site study was conducted through visits to important buildings in the Brussels city and the surrounding area of Belgium National Bank. The study analyzes the city by different themes such as urban development, culture, politics, economy, infrastructure, history, and public space. Detailed photography of the bank's exterior and interior and drawings are also important research methods. In addition, 1:500 and 1:200 site models are produced to study the environment at different scales.

Making: A model of Social Plinth

The studio members modeled their own understanding of social plinth. My research was to transform a street and its pedestrian arcades and interiors to gather public activities through small and modest means (carpet and planted ceiling).

Literature and general practical preference

Literature:

Duffy F. Office Buildings and Organisational Change, in Buildings and Society, ed. Anthony D. King. London: Routledge & Kegan Paul, 1980.

National Bank of Belgium. NBB Report 2020, The National Bank, central banking in the time of COVID-19, 2020.

National Bank of Belgium. NBB Report 2020, The Bank and its social responsibility, 2020.

National Bank of Belgium. NBB Report 2020, Global economy and euro area , 2020.

Pimlott M. The public interior as idea and project. Heijningen: Jap Sam Books, 2016.

Condello A, Lehmann S. Sustainable Lina : Lina Bo Bardi's adaptive reuse projects. Switzerland : Springer, 2016.

Interiors Buildings Cities Graduation studio 2021|2022. Research booklet, 2021.

Precedent:

Centraal Beheer, Apeldoorn, 1972, Hertzberger.

Holland House, London, 1916, Berlage.

Hongkong and Shanghai Bank Headquarters, Hongkong, 1986, Foster + Partners.

Nederlandse Handel-Maatschappij, Amsterdam, 1926, De Bazel.

SESC-Fabrica Pompeia, Sao Paulo, 1986, Linda Bo Bardi.

Teatro Oficina, São Paulo, 1984, Linda Bo Bardi.

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 project is to transform Belgium National Bank into a working environment capable of accommodating diverse activities. Given its economic capacity and social responsibility, the bank also has a public attribute that allows it to accommodate specific public events. The project will demonstrate how to design a workplace with economic, governance and political attributes for the bank building and how to design its public spaces from social, urban, architectural, interior and technical perspectives.

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

The 2008 financial crisis, with its disastrous impact on the lives of ordinary people, coupled with the rise in cryptocurrencies, inflation, and the inability of governments to adequately control taxes or address global climate emergencies, all threatened the bank. This is an opportunity for the bank to clarify the issues and transform it into an open and transparent image. Through the physical, material and architectural re-integration of the building, it will help create a better working environment and public space to promote a renewed understanding of the bank.