PROJECT JOURNAL Rumyana Toncheva 5381347

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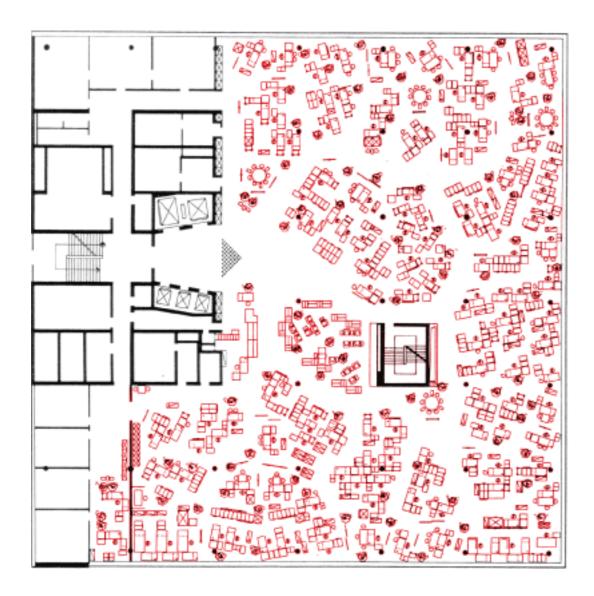
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Office Precedents Study In class Discussions. Reading.

Analysis and Study

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Francis Duffy_ Office Buildings and organisational change In class discussions and reflections



Bürolandschaft

- office landscape (the role of the landscape/plants in the office)

The open floor plan (or also known as office landscape) emerged with the pretext to remove office hierarchies between the workers and as a stimulator for knowledge exchange without boundaries limiting both visual and physical exchange. However, this typology was soon denied and started to be avoided because it seems like it was once again used as a managerial tool for even more control while on a first sight it gives an impression of freedom and flexible environment.

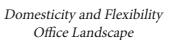
The invisible control?

Question of productivity?

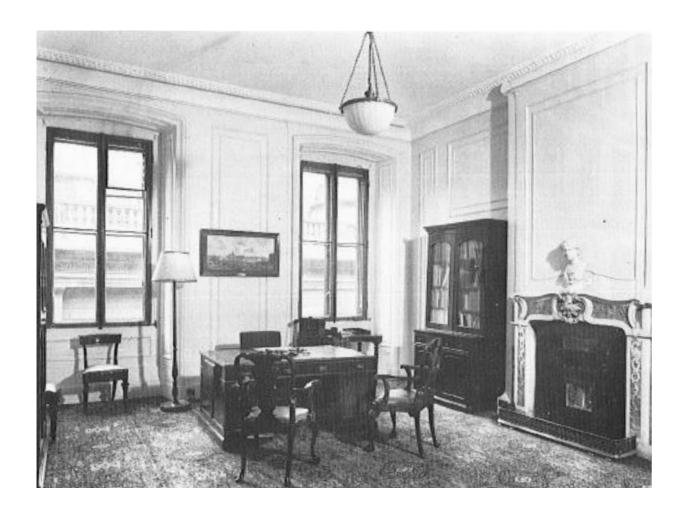
In some way the open floor plan also limits the hierarchy differences as well. Even though there is a great control once again, in this typology also executives were somehow under the spotlight and they were no longer hidden behind closed doors, thus their working process was also measured.







Role of plants and new landscape? While in the Sun Insurance Office the plants were used in the domestic environment for creating a warm and home like atmosphere, in the bürolandschaft it was like a landscape of plants which were used to create borders between the different desks and establish the avoided hierarchies in the office.



Domesticity

Among the first presented offices - Sun Insurance Office in London is a **direct transition from domestic architecture.** Initially, the office takes inspiration from the home since it is a new and yet unknown typology. Only the furniture layout differentiates the house from the office typology. However, how did this domestic environment influenced the working mode. Interestingly, decades later **our homes turned out to be the new office interiors.** Due to the pandemic people shared their **intimacy** with the public world outside of our homes.



Power and Solidity Trust

Buildings are never a neutral medium, they always carry a value or imposed impression by their architects as well as the users. Buildings express something in particular which is conveyed through the design. Often, it was a strategy to convey power and ensure trust of the authenticity and reliability of the company. This was often achieved through the facade design of the company - if they managed to build such a solid and imposing structure - they could be trusted. It was a form of power expression.

Dynamism in an office space. Dynamic corporate situation

Buildings in the text by Francis Duffy are juxtaposed to outline and bring out the differences between them but also to outline the evolution and the prominent features for each period in the corporate world. From domestic to modular planning to ecosystem to controlled working environment?

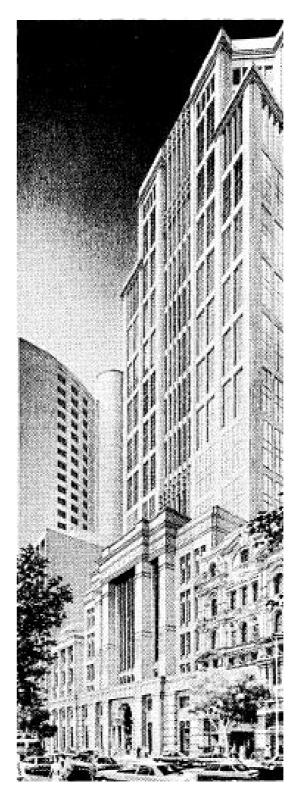
Questions to be considered in future research

- \sim How is this element of domesticity expressed in these emerging office typologies?
 - ~ What are the elements and how do they differ from each other?
- ~ How this could be applied in the future office with the current pandemic situation and the home office?
 - ~ But is it possible to design a neutral building?



Power & Solidity

As in Duffy's text, power and solidity could be expressed through the facade, through its material. For instance, even though the stone could be really manufactured, it still brings power. In the corporate this is expressed through the high rise - "the leisure layer" in the air. The higher the tower, the better view - the better company? There is always the need to get bigger, better, higher and there is no limit because aesthetics takes over usage and performance and influences the eternal image and fashion.



"In harmony with the past and the streetscape."

THIS WEEK WAS ALL ABOUT IMAGERY, REPRESENTATION, THE WORD SYMBOLIC.

Symbolic Capital Aura

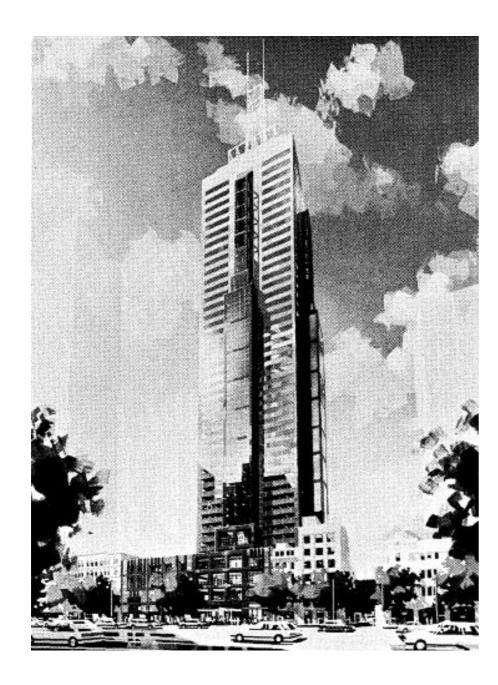
"The various forms of distinction and prestige acquired through cultural recognition..."; It is a quality that is converted often into a economic gain. How? Through the image and the distinction which the company has acquired.

What role does the architect have in designing these office towers and how much freedom does he have?

Seems like the architect has somehow limited power in terms of the final image that has to be portrayed through the building. His role is somehow sidelined by the image that has to be sold. However, he is still in charge of what the final image would look like to impose the meaning which the client wants. Are the architects complicit and part of this somehow distorted advertising?

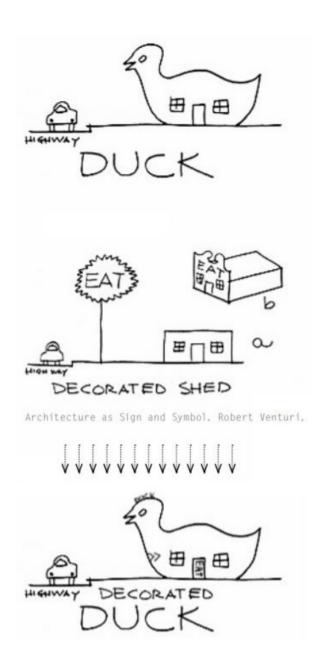
What is the connection between Architectural aesthetics and meaning?

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Cass Gilbert famously defined a skyscraper as "a machine that makes the land pay,"

"It is only shallow people who do not judge by appearances." ~Oscar Wilde



The Image. Building As Image

Design project turns into an actual built image, rather than a built form? One philosophy of classifying buildings states that there exists a dichotomy between a duck and a decorated shed. Meaning there is a distinction between an idea that showcases buildings as a symbol, while the other represents a structure to which symbols are applied. The image of the building in the corporate world is a symbol, it is an image which makes the business visible, associate your business with that building, taste and distinction. As in the text was mentioned, quite often in the renders the corporate values through distorted images, isolating the background, making it shine over the competition. Buildings can never be a neutral medium. They always carry a meaning, an emphasis, they carry an image that has to convince people of the ideals and values of the company, thus clients could trust them.

Interiors Buildings Cities

Precedents Study_ Workspace Discussion



User appropriated space. Space designed for social interaction and modular flexibility.

Centraal Beheer Herman Hertzberger Apeldoorn, Netherlands: 1972

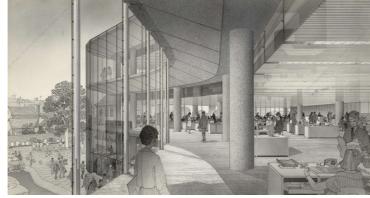


The garden as living room. How do the plants contribute to the notion of domesticity?

The Ford Foundation Kevin Roche & John Dinkeloo New York City: 1968



Artificial landscape and ecosystem which hosts everything one needs under one roof. Living your life in office facilities. "Transparent" control.



Willis Building Norman Foster & Wendy Cheesman Ipswich, England: 1963

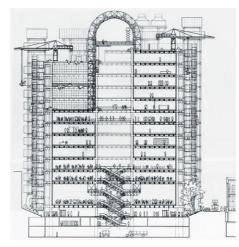


Illuminated machine for work efficiency. No connection to the outside world.

Union Carbide Building Gordon Bunshaft & Natalie de Blois Manhattan, New York: 1960



Larkin Building Frank Lloyd Wright Buffalo, New York: 1906



High-tech architectural aesthetic machine.

Lloyd's of London Building Richard Rogers London, UK: 1986

Participation of the user in the formation of the interior space. How does the domestic environment influence the employee productivity?

Especially now, with the pandemic situation and the home office, what is the future office like?

How do we define flexibility? Is it an open floor plan or is it possibility to change function? Is it another way of control imposed from the managers?

DOMESTIC/ USER ORIENTATED

bürolandschaft

FLEXIBILITY/

ECOSYSTEM/ SOCIAL COMFORT How do you bring the outside world and the street life to the office interior? I suppose if the outside world in is brought in there is no need for the employee to leave the premises of the office. This contributes to the idea of machine like office and constant control of the employees.

MACHINE/ MAXIMUM EFFICIEN-

The isolation of the employee to the outside world is a strategy which was used to create a machine like environment where users are exposed and limited only to work without distractions. The only possible surrounding environment is other people around you working.

CONTROL/ SURVEILLANCE

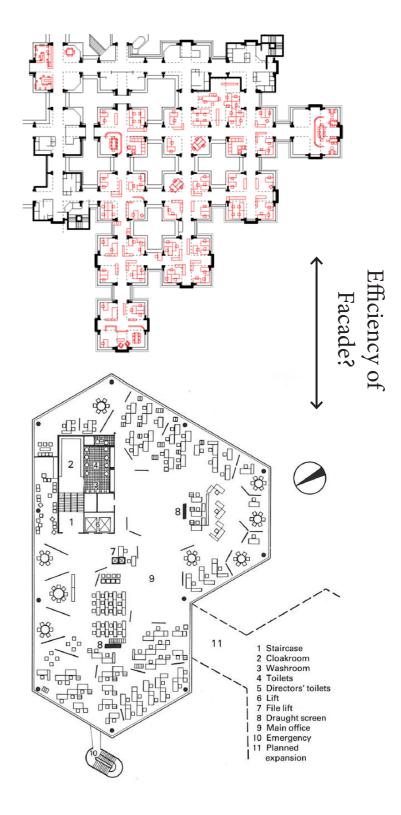
The reversed prison typology with the courtyard in the middle where people work under the surveillance of their executives. Is the ecosystem more controlled?



Economic Openness. Temporarily. Flexibility

The new tendency and advancement of the technology where the use of thin facade to maximize floor plan because of the essence of maximum obtained rent. The thinner the facade - the more flexibility and remodeling of the space. Embedding flexibility in every aspect of the building due to the temporal aspect of the interior and the open floor plan. This new typology offered a fixed units such as the thin shell and the fixed core, this provided the necessity of adaptation. How is this an economic gain? - More square meters to rent out which positively contributes the investors but also more economic gain for the architect due to the fact that he designed building which needs control beyond the completion stage. The possibility of flexibility and alternations in the interior design provides more future work.

How did Herzberger allowed flexibility and change of future use in this building Centraal Beheer even though the facade was far from thin and the interior space was not maximised as in the tower typology for instance? The fact that Herzberger designed a limitless building allowed him future control and flexibility as well even though the facade was more than inefficient with all the designed corners. Moreover, since the building could expand because of the used repetitive module allowed future change of use even. The need to expand - each generation has to take more profit from the land - this is why they join bigger buildings and plots, leaving less space for public spaces.





Sick Building Syndrome Motion Studies & Measure of Productivity

The clerk became a process worker and therefore the office turned into a factory with process workers. The gender role also seen in the text by Daphne Spain became even more discriminated in the office. There was a feminization of the clerical work. Is it a gender issue or is it a social class issue? These hierarchies and gender divisions had influence also on the office typology in terms of internal distribution and design. The gender in this case operated the space. There was a distinction of the office - open floor plan (open door plans) and closed door space. Typists, secretaries, all women's jobs were taking place in open rooms, quite often without any connection to the outside world. A lot of desks next to each other because when working together they were more productive. There was nothing else to do but work, quite often there movement was even limited through the furniture used inside. Closed door rooms with visual connection both to the outside world but also the clerical work were always the managerial offices.





Future Workspace

In conclusion, Amy touched upon the topic of the future workspace and the current situation of the office during the pandemic. Even though this mode of home office works even better for some companies than other, this cannot be the general scenario for all the offices. Thus, the questions remains, how can we boost the workspace wellbeing and comfort after the heavy impact which the pandemic situation had on people and their mode of work?



SOL headquarters, Finland Architects: Jari Inkinen and Hanna Gullstén

Domesticity as Street

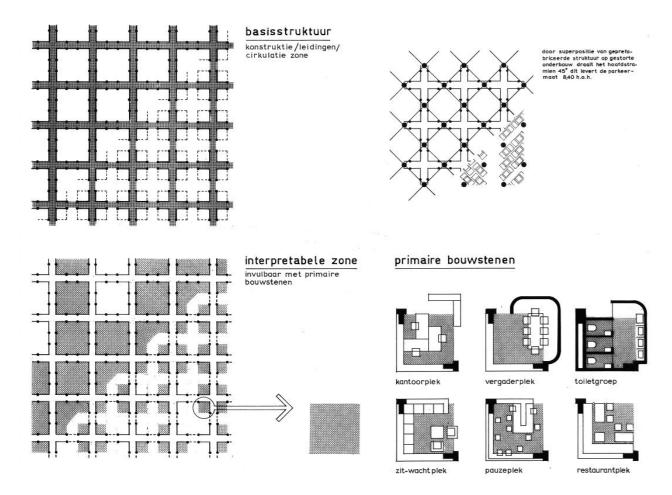
- Everything that you need under one roof
- Bring street inside the building, thus you can impose even more control over the employees
- They do not have to leave the building because the functions of the city are brought in

In this conclusion week of the office discussion and reading reflections, our group shared interesting personal observations and interests which could be carried on and further analysed. There were intriguing topics which overlapped with some of my points of interest which were already laid out in the project journal in the previous pages. This allowed me to expand my knowledge and look at some of the themes studied from a different point of view. However, all of the topics discussed and presented here are still thoughts in process.



Human Technology Vs. Nature

- With the digitalization of everything around us, what part of the bank's responsibilities would still need an architectural space where they could be happening
- Home office replaces the actual office how do we attract employees back to the public office?
- How does the bank affect the climate problem?



Unit Layout and program Centraal Beheer, Apeldoorn Architects: Herman Hertzberger

Performance & Efficiency

- motion studies

The more efficient - less flexible!

The fixed furniture showed greater productivity since it was limiting the movement and therefore the focus was solely on work.



Governer's Palace National Bank of Belgium Photo: Bas Leemans

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Past Vs. Future

- WHAT IS FLEXIBILITY?
- WHAT IS CIRCULAR MODEL OF A BUILDING, APART FROM REUSE?

Flexibility as menigarial tool?

Does flexibility boost productivity?

Flexibility as adoptable to the future changes and the digital age?

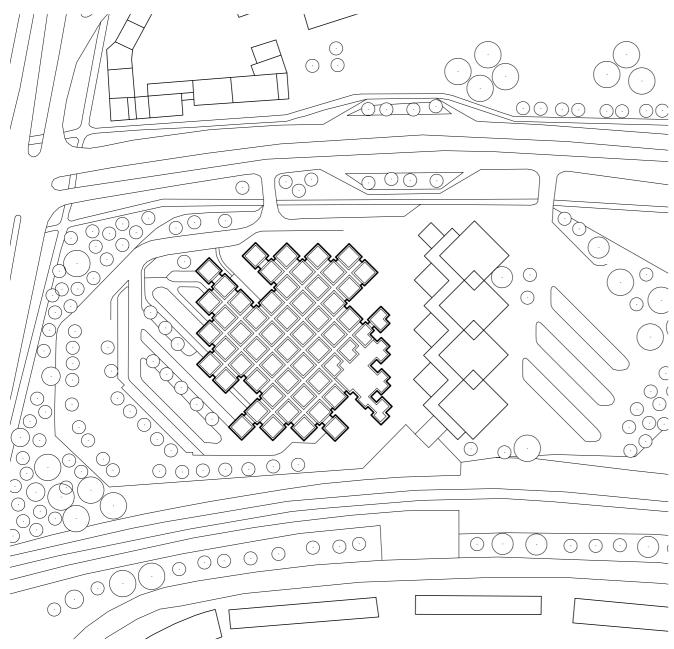
Changes in floorplan, changes in society, changes in policy.

Flexible as on every day bases? However, raises complaints by the managerial sector.

Can we design an office which is flexible in plan, and in the future if there is a need, the space could accommodate another function?

Centraal Beheer Herman Herzberger

Analysis and Study



Site Plan Centraal Beheer

Centraal Beheer is an office building designed to accommodate 1000 people. It is a single articulated unit, consisting of sixty tower- like cubes connected on each floor by over-passes. The extensive central street area, in which the space is equally developed in vertical and horizontal direction, calls to mind the street pattern of medieval town. Additionally, the materials of the glass-roofed inner space evoke an outdoor atmosphere.

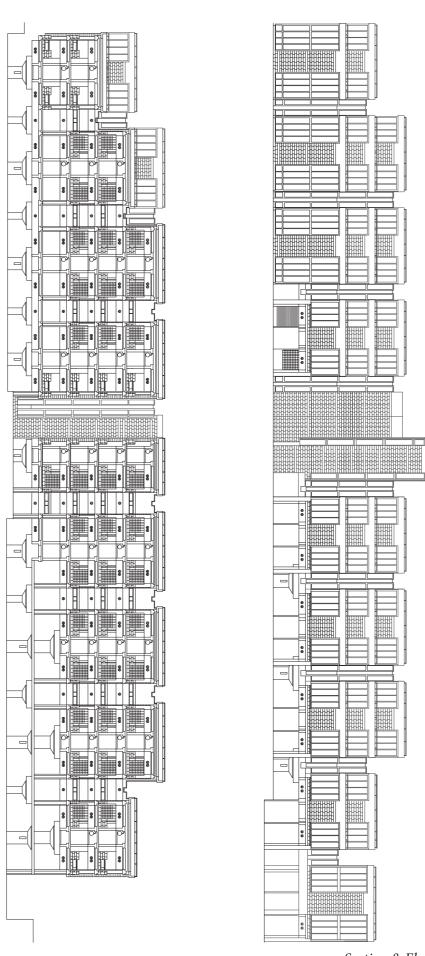


In each corner there is a place to have coffee, to relax or to hold meetings. The illumination throughout is an integral part of the architecture, in this case conceived in terms of street lighting. The transparency and lightness of the metal stairs together with the glass-brick fillings create a harmonious contrast with the heavily dimensioned main structure of the building. It has formal expression by using simple, sober means, to create a feeling of spaciousness even when working on a small scale. Centraal Beheer offered an innovative open office concept with a wealth of informal meeting places in the building, and on the rooftop terraces. Employees were free to decorate their work place as they wished, to grow their own plants and even to keep pets, including chickens. According to the long-time manager of the building this worked pretty well until someone took a rooster to work, upsetting the hens.

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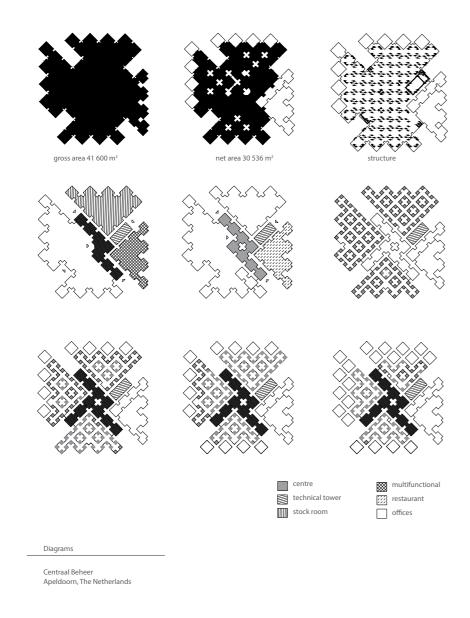
As our group worked on modelling a picture from the interior space of the Central Beheer by Herzberger I was able to understand a lot about the workspace itself and the life within that "sculpture". The building itself is a designed as a limitless building based on the module 9x9m. It seems to be an endless expanding system which just like honeycomb could expand as new modules are added to it. However, observing the plans there are still some limitations, and these seemingly randomly allocated cubes are actually positioned based on two symmetry axis around which all the services are positioned. In the case of expansion, new services would have to be provided in order to have sufficient environment.



Section & Elevation Centraal Beheer

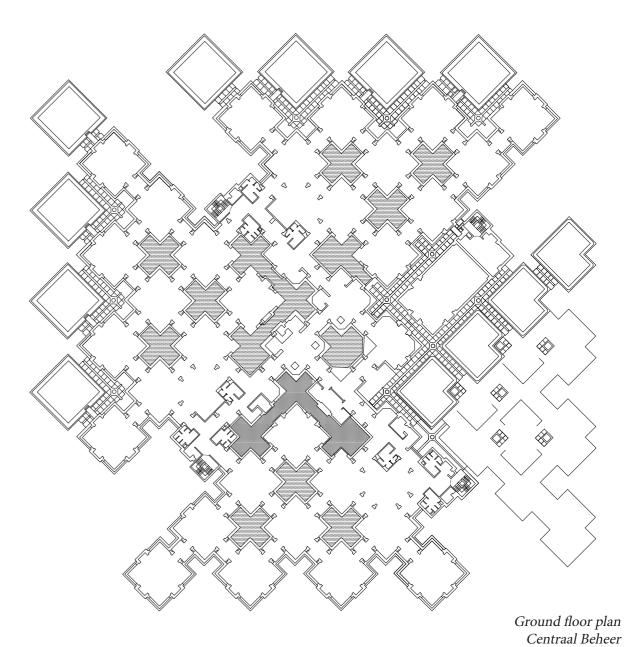
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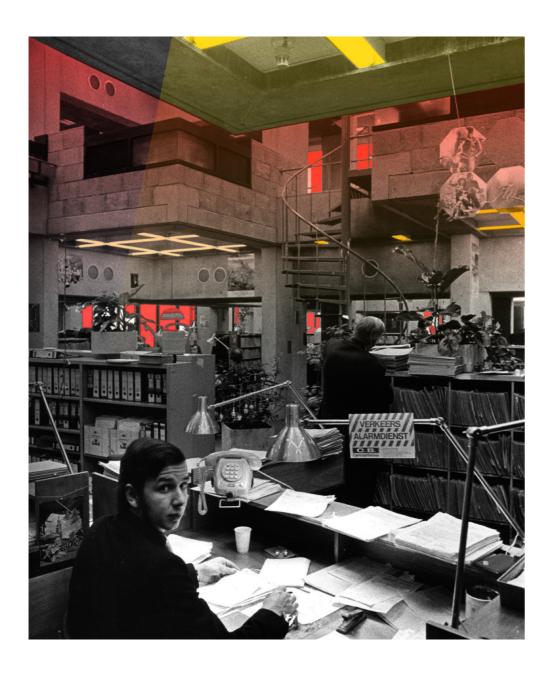
The use of single fixed module allows the structure to stay permanent, but the programs inside could alternate. This is the case with the dining space for the employees which occupies the same module as the office space. The plan of the building is like a Roman plan, the Roman city with the streets brought within the building.

The interior of the Central Beheer is quite particular. Since the structure of the building is very defined it actually makes up the working space. Moreover, even though this building is enormous when put in the site the interior gives the feeling of a little space, almost domestic scale because of the structural divisions. The interior is like stepped atrium; because of the cross shaped interior spaces with voids above, the space allows you to see across wherever you are in the building and it does not feel like surveillance as is the case with the Larkin building. What it feels like is that Herzberger designed a social space. Through this architectural composition he allowed people to communicate and feel part of an inclusive environment, he designed potential and interaction into the space.

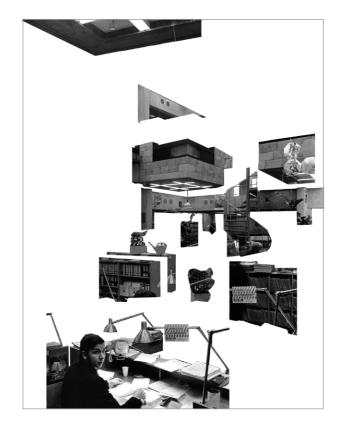


There is an enormous square meters of walls in this building because of the shapes of the modules and therefore enormous amounts of materials used within.

The interior space apart from the furniture is left to the employees to decorate for themselves and adopt it to their taste, thus it feels comfortable to work within this environment. It allows personalisation of the space and establishing a felling of a home?



Our study of the picture essentially led to study of details of the workspace itself and the atmosphere that was present in the office by Herzberger. After identifying the main elements and structure of the photo which somehow makes up the whole office interior, we studied the artificial and natural light which was present in the picture. The artificial lamps which are present in this office are very particular in shape and lightning and become the main source of light for the smaller desk units within the 9x9m modules. There are also skylights which allow for light to enter within the building due to the fact that the building is quite deep in plan and a huge surface of the office does not have a close view towards the outside.





Our recreation of the office interior by Herzberger, started with analysis of the picture, identifying the elements in the foreground and in the background. At the same time we collected drawings which allowed us to understand the structure of the building which would become our base for the model. After identifying the main elements which are in the picture we looked at various references to understand the real materials and colors which are in the black and white office interior photo.

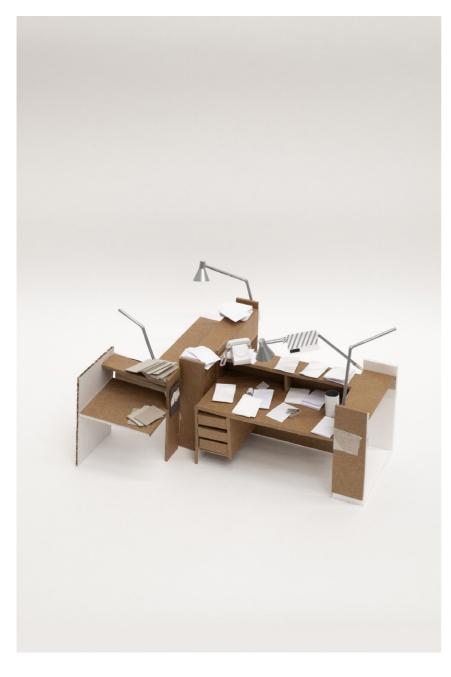




In the first week, when I saw this photo on the screen I could not honestly realise what exactly was happening in this office interior. There were so many things going on, so where should we start from. On a first glance I thought "What a mess!". However, with the weeks passing by and us studying the building, drawing it, modeling it everything on the photo seemed more and more clear and actually quite amazing. One cannot look at this photo and not see the structure which makes up the whole working environment. In comparison with the office interiors which some of the other groups had to model, in this picture there is a bit of chaos and appropriation by the employees. There are files and documents spread everywhere on the desks. A lot of plants which bring once again the topic of domesticity.



Overview of whole model as an object



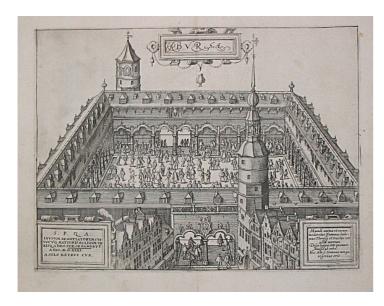
Fragment furniture taken from model



It feels quite amazing to see how the model would frame an image just from one point of view, any other angle and viewpoint does not make any sense. This stepped atrium structure allows great visibility throughout this deep building structure and is great strategy for designing a social space where people could interact and exchange knowledge. Even though there is great visibility of the working process from every angle of the building, it does not feel like surveillance and imposed control as in the other office interiors which we saw during the presentations in class.

Bank Precedents Study In class Discussions. Readings

Analysis and Study





The Courtyard

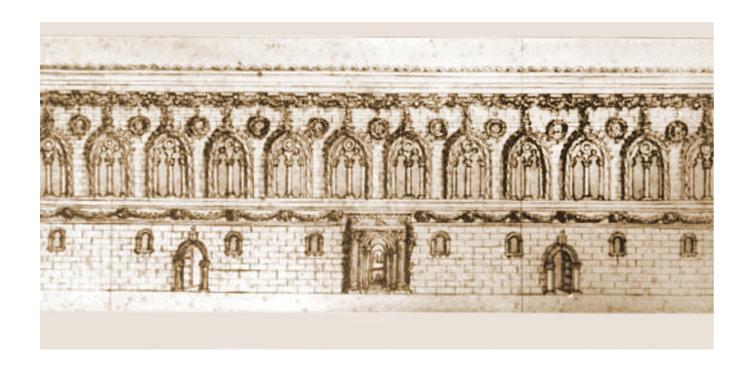
- place of exchange (exchange of ideas, communicator between bank and the public, exchange of goods, mediator)





The Courtyard

While reading the text and then analysing the precedent banks in class, there was an interesting observation that came upon which was visible in all bank typologies in some way - the courtyard was always appearing as a sort of mediator between the bank and the public. It was mainly use for exchange when this typology evolved. However, I believe the courtyard slowly started to lose its function as a place for exchange and therefore became obsolete at one point with the bank slowly changing its role and function (becoming less tangible and physical exchange). With the change in role - the national banks became more closed and private institution which leads to the courtyard being no longer part of the public urban layout. It is no longer a safe enclosed space for the public to gather and exchange ideas or goods.





TYPOLOGY

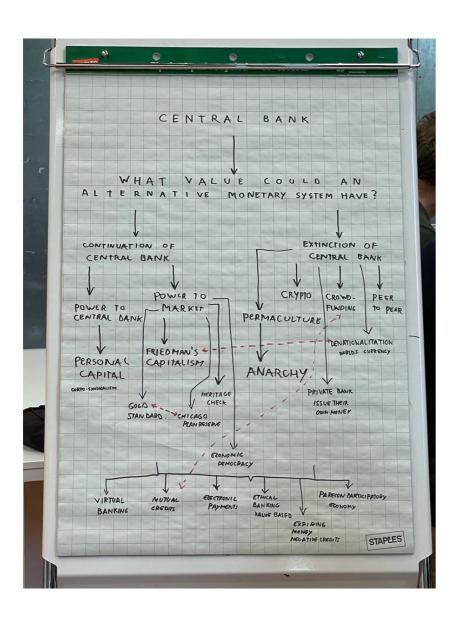
I found it quite interesting how the bank typology evolved from a domestic scale - private house of the merchant to the enormous in scale fortress. What I found particular about the bank typology is that it did not preserve a certain type - it could take place in a square and constitute an urban type, but at the same time it could remain a domestic architectural type or occupy a palazzo. Similarly, the office originated from the house and the domestic typology and quite often you could barely outline the difference between a room of a house and the managerial office.



Bank Vs. Office

HIERARCHY

Based on the image in the text which illustrates a "woodcut of merchants and their activities" by Jost Amman there are some essential similarities that could be found between the office typology and the bank. The image describes the societal structure in the bank and how it operated at that time. One of the main similarities with the office and the organisational description presented by Francis Duffy in the text "Office Buildings and Organisational Change" is the hierarchical model which exists in these architectural types. Some people are shown working on the ground level in an open environment while being observed and regularly checked from above. This is very similar to the way offices operated and the division which existed between the clerical workers and the managers. However, whether this image illustrates what was the real organisation in the banks back then or it is an imaginative scenario we only can guess.



WHAT ARE THE ALTERNATIVE MONETARY SYSTEMS AND WHAT ROLE WILL THE CENTRAL BANK PLAY IN THEM?

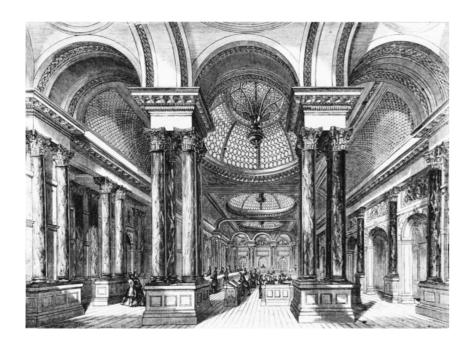
When we started outlining the options which we think might be alternatives in the future they fell into two categories:

Continuation of the Central Bank

It is essential for me that the central bank and the individual have a stronger connection and the corporate bank does not stand in the middle always. It is important that the individual is part of the decision making or at least is heard. The alternative systems which we outlines and seemed intriguing to me were the personal capital for which the greek former finance minister also talked about. There is definitely the need of more deeper research in the topic since the terminology still is quite challenging for me.

Extinction of the Central Bank

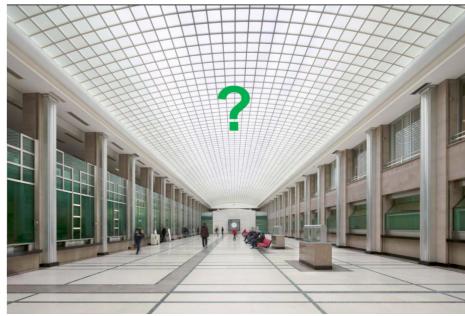
Most of the examples which excluded the role of the central bank in the alternative and imaginary future are affected somehow by the digital age and the virtual money which more and more take place nowadays. Whether it is the crypto currecny, virtual banking other methods which work without the central bank but through more private channels like private banks issuing their own currency or peer to peer exchange.



Faced vs. Faceless Building Character and Individuality of the Bank

'The structure looks solid enough but the foundations are mysterious... You can't see it, but they've got it. You don't know them, but you trust them.'





Faced vs. Faceless Building Character and Individuality of the Bank

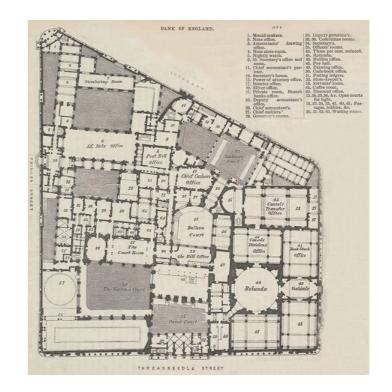
The bank typology did not evolve from a bank type, but maybe from a merchant house? The first banks were not designed to be banks and later they acquired this function. Later on, there were new structures meant to regulate the trade. This allowed to have close relationships between the people of exchange but also between the institution and the client. However, when the grandeur, trust and massiveness became relevant this close relationship between the society and the institution was broken. From the 18th century when the bank became their own building, the scale, the material, the space lost its connection with the human. The Banking Hall and its shininess took over the courtyard which was a place for the society and for the peer to peer connection.

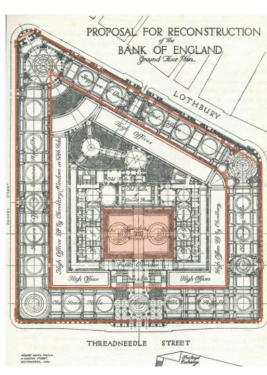




Bank Courtyard - Extension to the street & way of silent control

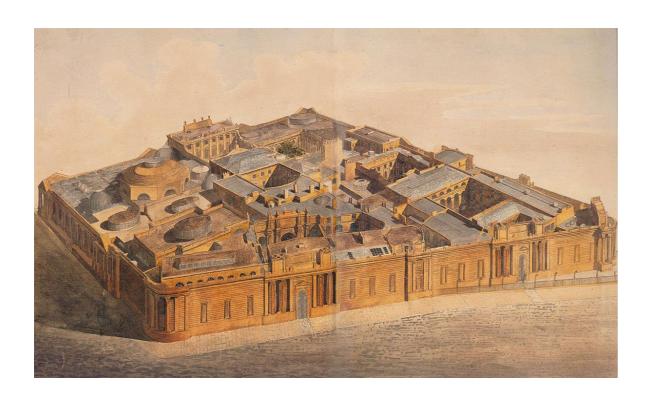
The courtyard remained as an essential part of the bank typology even though it partly changed its function and openness to the public. From completely public place of exchange which acted as an extension of the street, it turned in a very closed, private space for the bank only. I found this privateness of the courtyard as well as the visual control that the courtyard typology offers similar in the Larking Building and in the Bank of England courtyard. The courtyard in both cases was a controlled spot in way to increase the productivity of the employees.





Bank Courtyard - Extension to the street & way of silent control

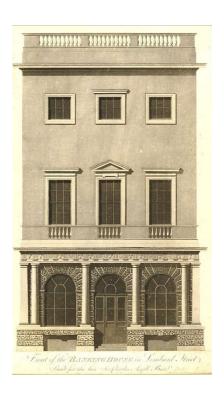
The transition from the plan of Bank of England by Soane with the labyrinth of spaces, transitional space and more private rooms to the proposal by Herbert Baker's reconstruction of the bank suggested a central courtyard which does not have any connection to the outside street, above which all the head offices are positioned.



Questions to be considered in Future Research

How can a bank of such scale still have the domestic features and feeling but at the same time respect the institution's privacy?

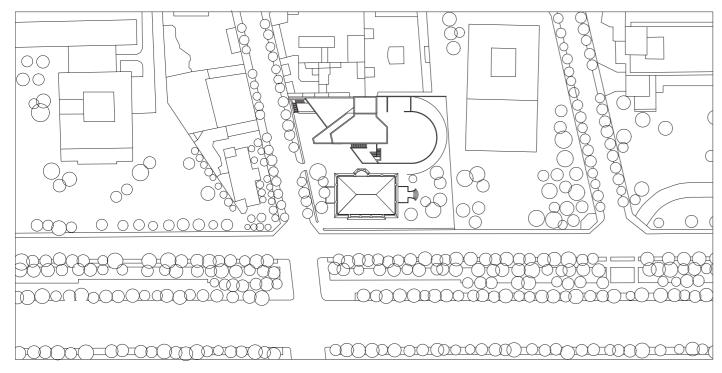
How can the public become part of the bank and therefore improve the communication and bond between the institution and the society?



Bank Scale & Representation From the furniture & House to the fortress and city

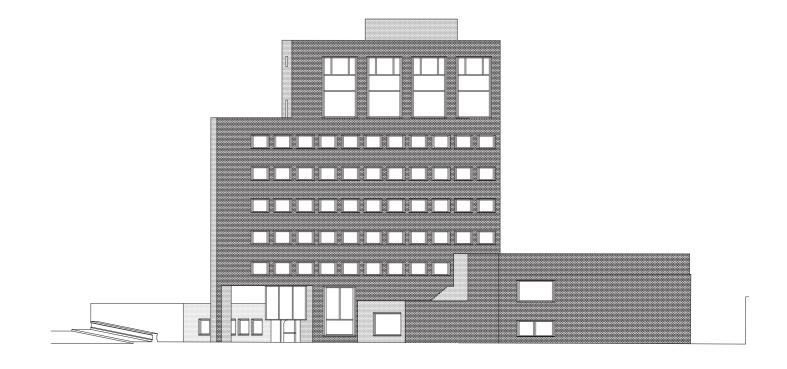
I found it quite interesting how the bank typology evolved from a domestic scale - private house of the merchant to the fortress scale. As in the text by Pevsner, the bank typology evolved from a small house where private matters were taking place to the fortress and the Roman City pattern withing the closed boundaries of the Bank of England. Bank of England by Soane is a whole city network within a building. While on the outside it may seem very closed off like a fortress, the interior is like a labyrinth where one can enter from one room to the other. The whole building is lighted only from the top though skylights. It reminds of the honeycomb office systems, or the limitless buildings which expanded over time depending on the needs of the institution. The bank typology was becoming bigger in scale but at the same time more and more closed, flanking the whole space as private. The society was no longer part of the process as it was before with the courtyard typology where people could meet and exchange both goods and ideas. Moreover, similarly to the office the need to become bigger and more massive in order to convey solidity, trust and power was also equivalent to the bank typologies.

Bank Precedent Drawings



Site Plan

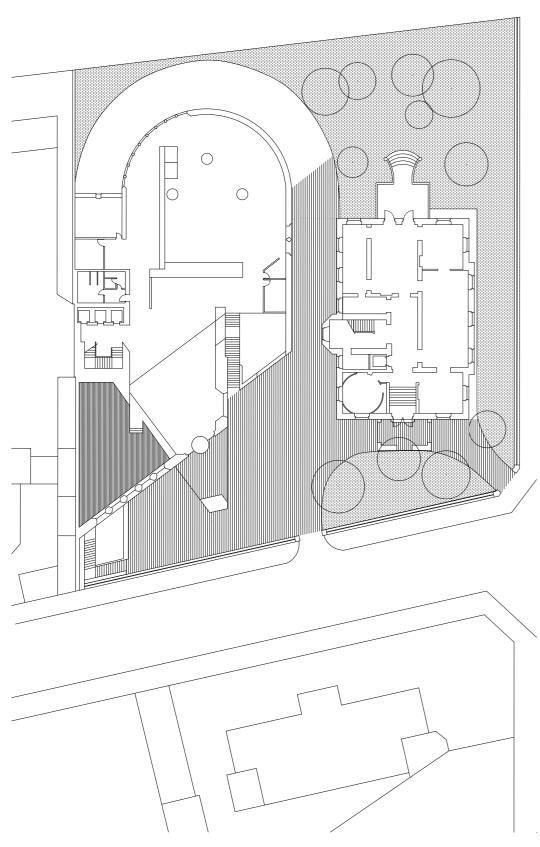
Bankinter by Rafael Moneo



Elevation towards P.º de la Castellana

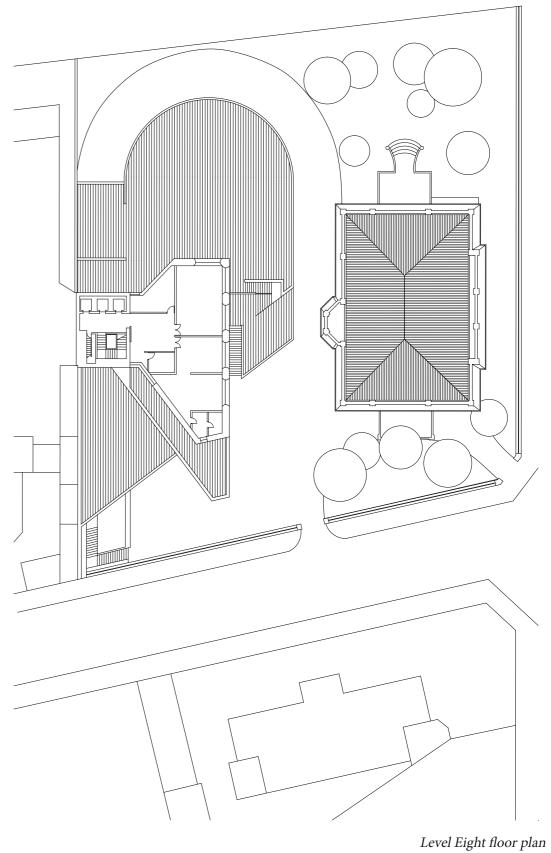
Bankinter by Rafael Moneo

50



Ground Floor Plan

Bankinter by Rafael Moneo



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Bankinter by Rafael Moneo

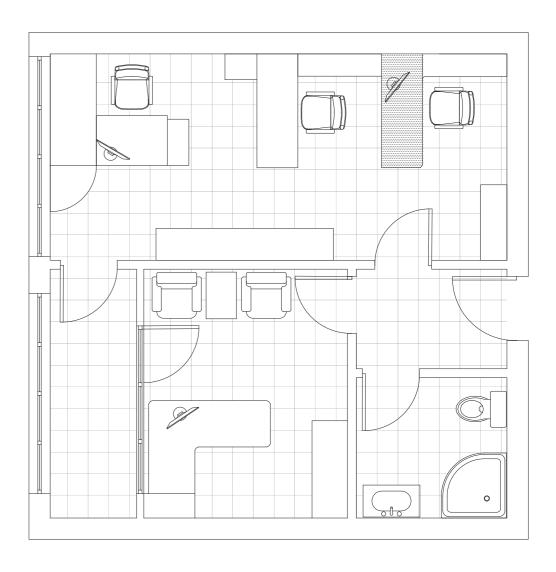
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Desk Drawings

Analysis and Study



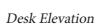
This is the accounting office of my parent's firm in my hometown in Bulgaria. This office was once an apartment when my parents bought it and then transformed it into an office. Since this office was transformed from an apartment it has very domestic features and employees are allowed to bring whatever makes them feel comfortable. When I first entered in the space I was amazed by the quantity of paper there is even though my parents offer the employees all the digitalization they need, it seems like they are used to have everything in physical copy. According to them there is an organisation by folders and files but to me honestly it seems like a real mess and a storage place. There are three desks in the main room and one more desk in a separate room (for the Chief Accountant) which was once a living room but only the kitchen was left. It was interesting to see that in this office the computer was not the main object occupying the desk but it was the stacks of papers and small personal props.



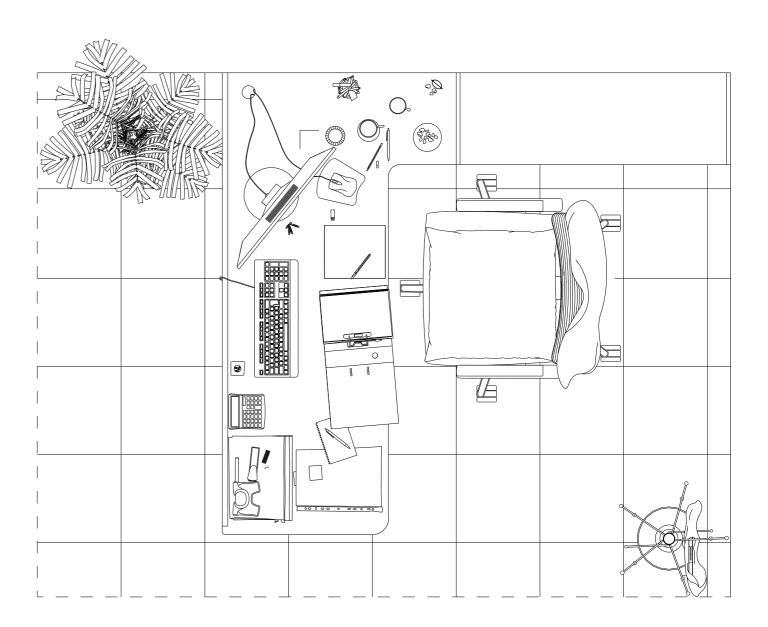
Site plan

Scale 1:50 Accounting Office Stara Zagora, Bulgaria





Scale 1:20 Accounting Office Stara Zagora, Bulgaria

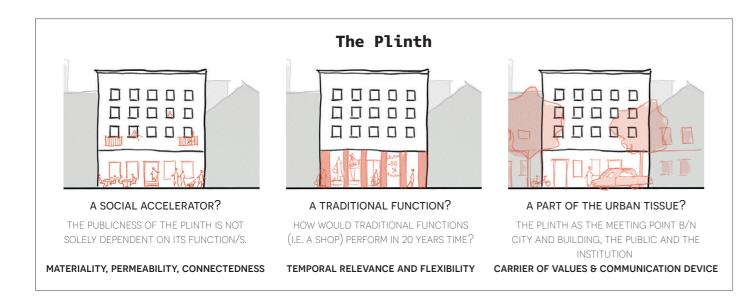


Desk plan

Scale 1:20 Accounting Office Stara Zagora, Bulgaria

Social Plinth

Analysis and Study



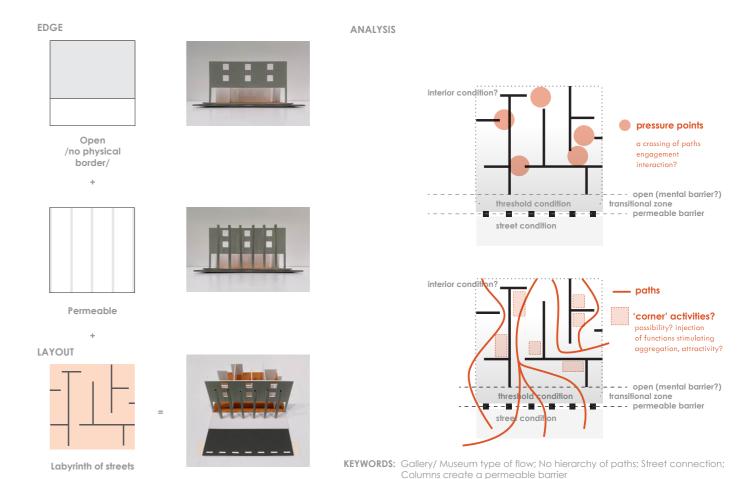
How can we foster social interaction and engagement in the social plinth?

In my opinion, there are two main factors which affect the social engagement in the plinth of a building and those are the layout of the ground floor as well as the threshold. Depending on the openness of the facade the transitional space between the interior and the exterior of the building varies.

Is radical openness needed in order to attract people to go inside and engage?

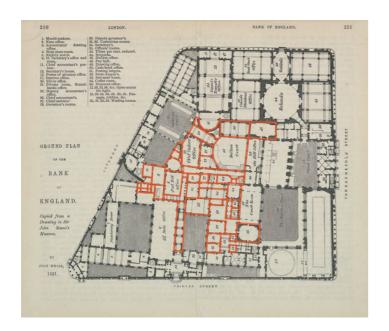
When there is a completely open ground floor, the street and the interior of the building become one unique space which invites people to go inside. However, this is not enough of an attractor to make them interact with the space and with the people.

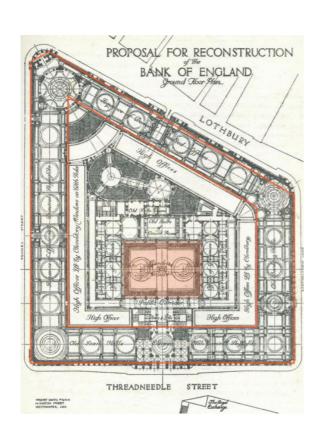
61

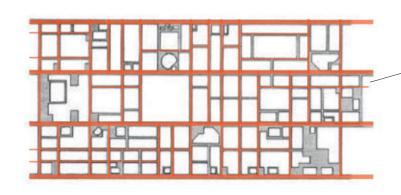


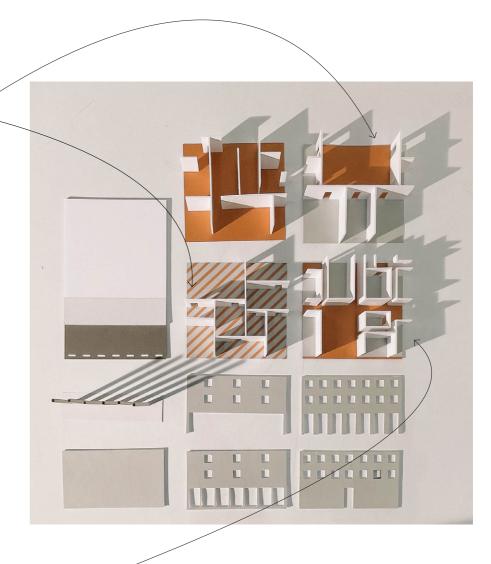
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Rumyana Toncheva Interiors Buildings Cities





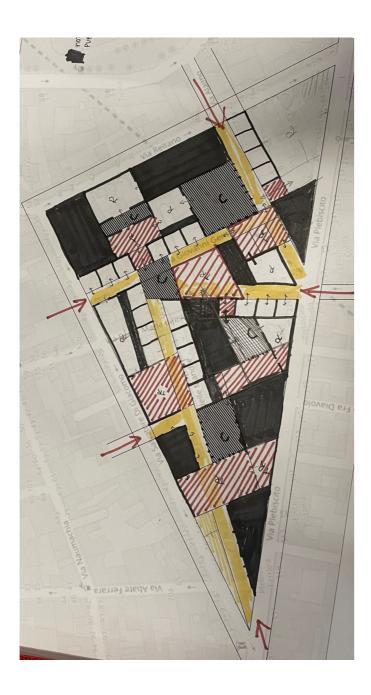




How do we attract people in the building?

How do we make the National bank of Belgium part of the public?

The goal of the project might be to open up the bank in order to establish a better link between the public and the private institution. The bank should act as a communicator of ideas, maybe a mediator but not as a private and enclose entity which does not have a link with the individuals. What kind of architectural space the social plinth might be in order to respect the privacy of such institution but at the same time to become an actual social platform?



The social plinth as an extension of the urban pattern and morphology

In my opinion, the social plinth and more precisely the ground floor of the building must become part of the urban morphology. If one enters the building it certainly must feel as if the city, its streets, squares, courtyards and typical patters continue within the ground floor of the urban form.

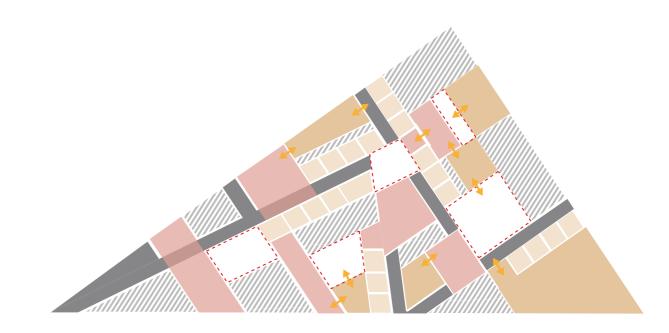


The social plinth as an experience and transition between spaces of various types

As one walks through the city, there are completely private urban units, streets which act only for circulation, there are transitional spaces, public courtyards and squares and there are also public interiors. For me, it is definitely an experience of spaces which one passes through while reaching the final destination. Throughout this experience, there is social attractors, fostering social engagement.

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ACCESS

COURTYARDS

CORRIDORS/ STREETS

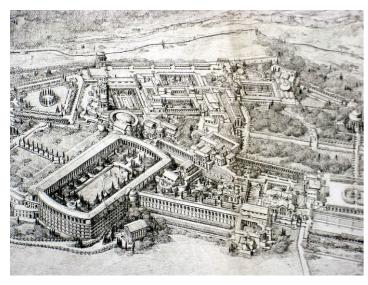
ROOMS

TRANSITIONAL ROOMS

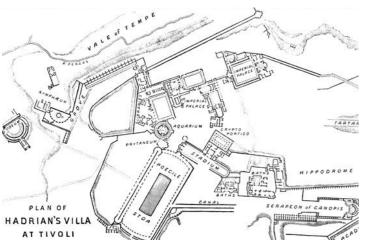
SERVICE/ PRIVATE

Bank Of England by Soane Analysis COURTYARDS
CORRIDORS/ STREETS
ROOMS
TRANSITIONAL ROOMS
SERVICE/ PRIVATE

Proposed Public Plinth Analysis









"The Scottish Castle. Thick, thick walls. Little openings to the enemy. Splayed inwardly to the occupant. A place to read, a place to sew [...]. Places for the bed, for the stair [...]. Sunlight. Fairy tale."

- Louis Kahn, 1973

Two ways to approach the social plinth:

- Have a public (solid) base from which we carve out the public functions. I imagine the bank plinth as being fully solid as it is completely private and restricted with boundaries from the street and therefore from the city. It is a piece of land which is cut out from the city fabric. If the base is solid and we carve out public functions in way they become part of the urban morphology, the social plinth becomes a network, a miniature city withing the megacity, extension of the urban plan.
- As excavation and as punctuation? Taking the Bank of England as an example from which we derive the ideal social plinth. The Bank of England works in a different way a solid border with city network within the fortress. There are transitional rooms, more semi-private rooms, courtyards, however, everything once again is private in terms of access. The border does not allow connection to the city. Spaces withing the Bank of England are all in a way permeable and never completely closed off.

The Plinth - social mediator and extension of the city

Rumyana Toncheva

dynamic corporate world establishes a disconnection between the social nature of the human, his work obligations and more importantly his well-being and comfort. There has been a tendency of invisible control, comfort according to a rank and slow transition of the human into a machine like experiment. In order to remove this huge gap between the institution, its workers and the public, my goal for the central bank is to establish a democratic base for communication, social exchange and connection between the individuals and the institution. While the courtyard of the bank in the past was a place of exchange and it was slowly replaced by the private banking hall, I believe the bank plinth should return back to its typology basis in order to once again create prerequisites social action, interaction and knowledge exchange.

The ground floor of the building or the plinth of one structure is often considered as a separate entity both from the city network and from the building block. Where in reality I think the social plinth must be part of the urban plan and an extension to the city morphology. After an analysis of the Bank of England by Soane, the souk typology and pieces of the urban tissue of Brussels, with my groupmate

we developed a social plinth as a miniature replication of the city. It is a network of spaces connected to each other, as well as to the street life and the building itself. It is an experience of perceiving different scales and materials as one walks through the city, passing though intimate corners, crowded transit streets, collective rooms where social interaction and public life are fostered.

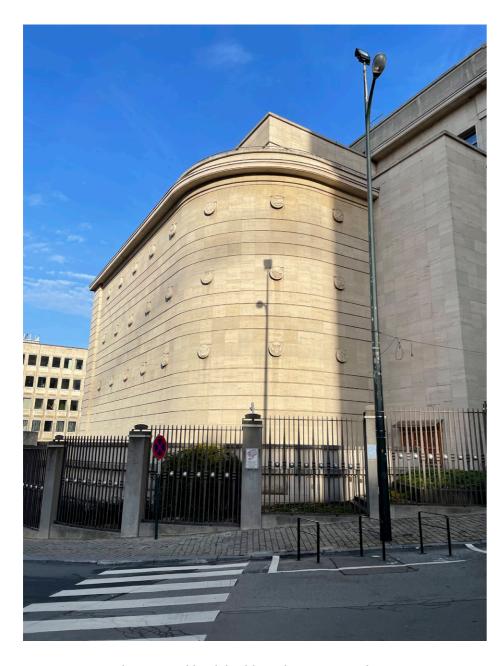
As the social plinth strengthens the role of the bank as a communicator and mediator, it is essential to think about how this could be translated within the workspace as well. The central bank has to be designed as a social platform both on street level and within.

P1 Statement

Interiors Buildings Cities - Msc 3/4

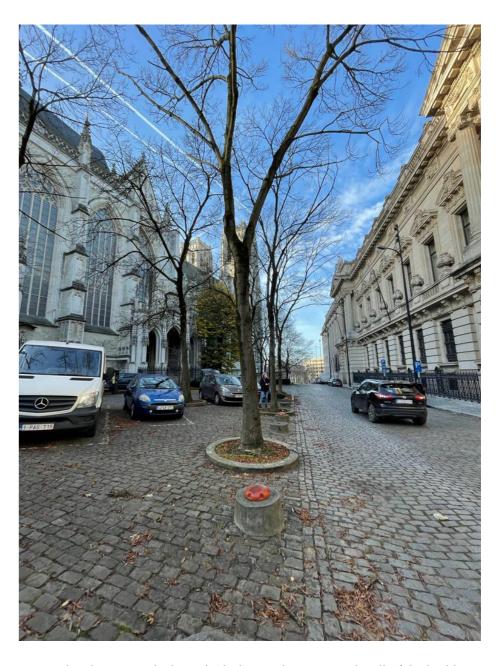
The City & Site Visit

Analysis and Study



The National bank building chooses to not have any connection to the surrounding site. It has blind facades towards the most public parts of the site - the park next to the cathedral as well as the Rene Pechère's gardens. The bank feels very introvert and fortress like.

What is the value of this blind facade? - to give a sense this is very secure building?



The place towards the cathedral is used as a car park. All of the buildings plinths around the building are private, thus there is no reason for the public to come to this part of the city. The space in between could be utilized.

The part towards the cathedral is the back part of the bank - even the governor took his desk to the front If this is the back, and even the bank does not know what to do, is it actually connected to the bank? Is it part of the bank?



How to negotiate the relation of the bank with the car park and then the housing built now which is a really hostile place

Project: Making it a better neighbor to the things around, and also to profit from these things

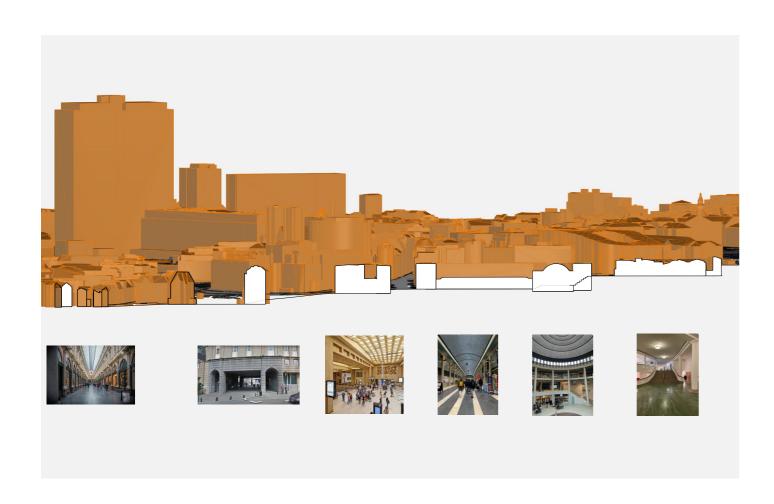


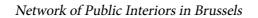


The avenue next to the bank is so huge. Compared to the pedestrian zone is not very welcoming to the public. Is the street part of the project? - is it necessary to be that dominated by the road?

Even the employees don't touch the street but go underground.

There is no reason to come to this peace of the city



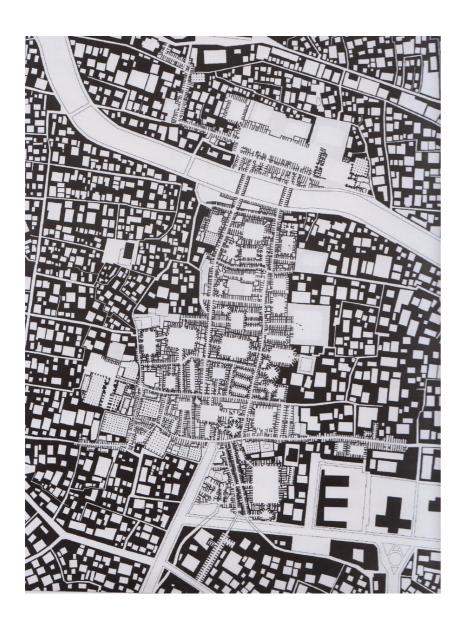


I zoomed in to the sequence between the Bozar and gxalleries Saint Hubert. Since our definition of social plinth was a network of spaces and a small miniature of the city all fitted in the plinth of the building.



Network of Public Interiors in Brussels

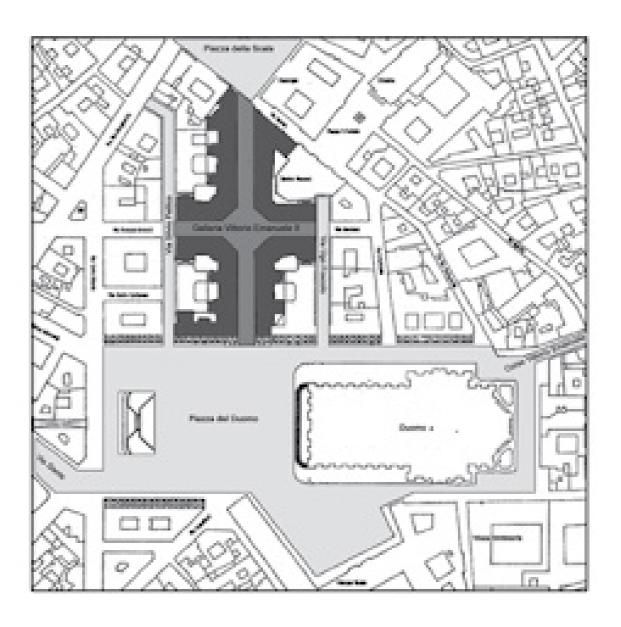
Rumyana Toncheva Interiors Buildings Cities 77 78



Plan of Bazaar van Tabriz

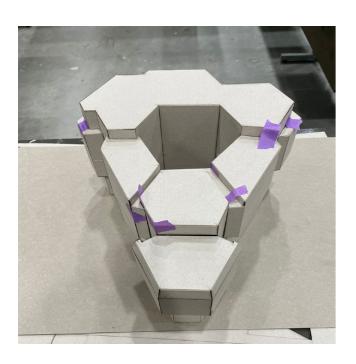
"a complex of interior streets interwoven in the fabric of the city"

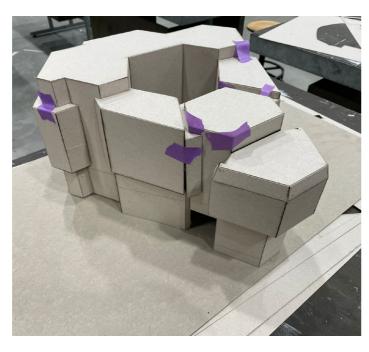
"A network suggest a connective realm that is commonly understood, yet is grasped primarily through one's movement through it" "tied many distant places and peoples together for the purpose of trade"



Urban plan - Galleria Vittorio Emanuele II

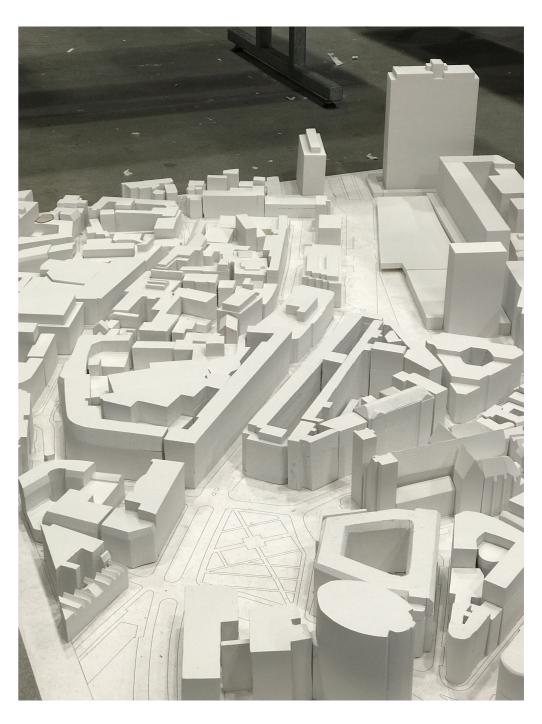
"It connected two particularly charged open public spaces in the city. [...] The city was networked by the Galleria's presence."



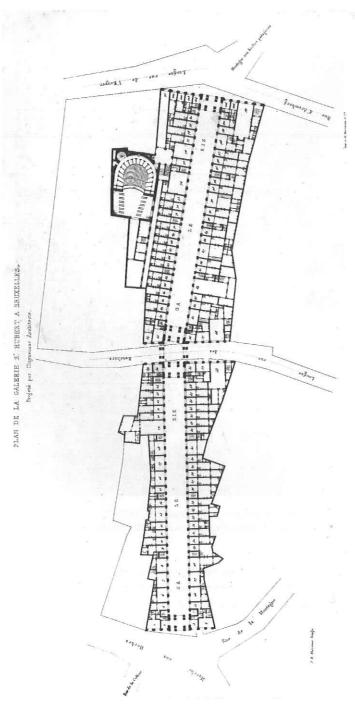


Site Model Making - 1:200

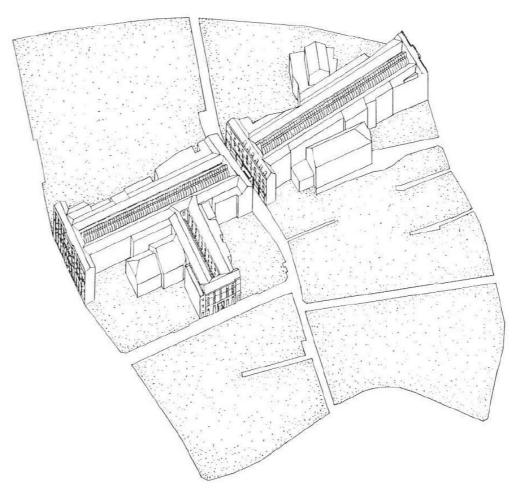
Police station progress, laser cutting



Site Model Making - 1:200

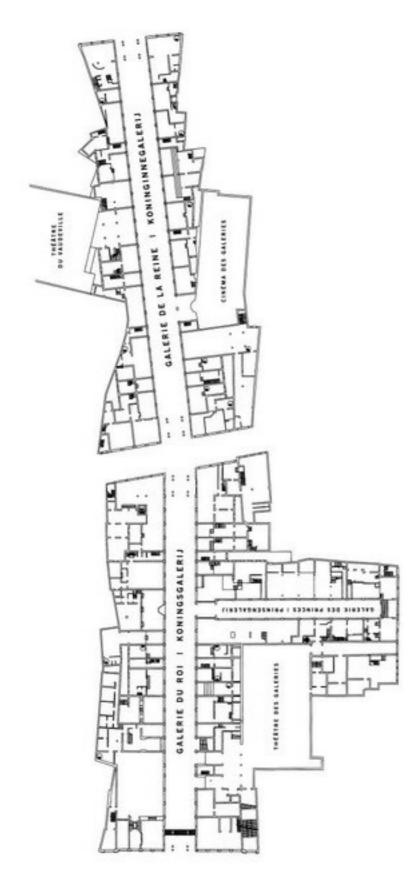


Ground plan of Saint-Hubertus Galleries (Reis et al. 1838)

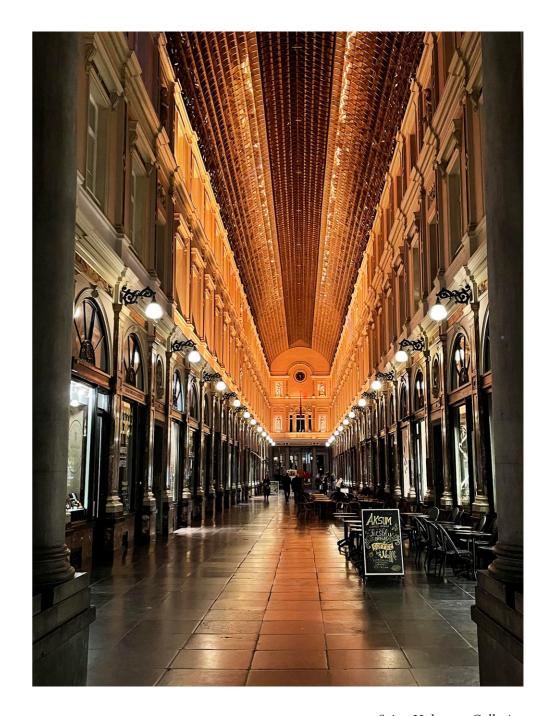


Saint-Hubertus Galleries.

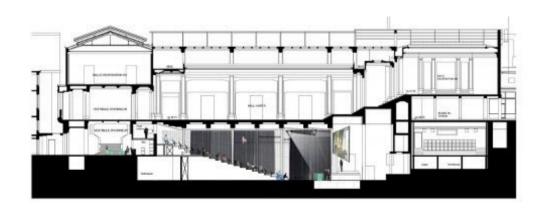
Axonometric drawing showing irregular volumetry and placement of Galeries in Brussels city fabric.

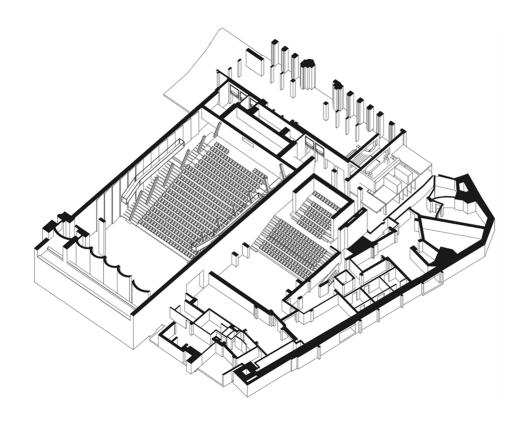


Ground plan of Saint-Hubertus Galleries (Reis et al. 1998)



Saint-Hubertus Galleries





Bozar, Brussels by Victor Horta

The building appears smaller from the street than it actually is, with many of the galleries and public spaces located below ground.

Bozar's mission is to connect people to the arts and to provide a total experience under one roof.



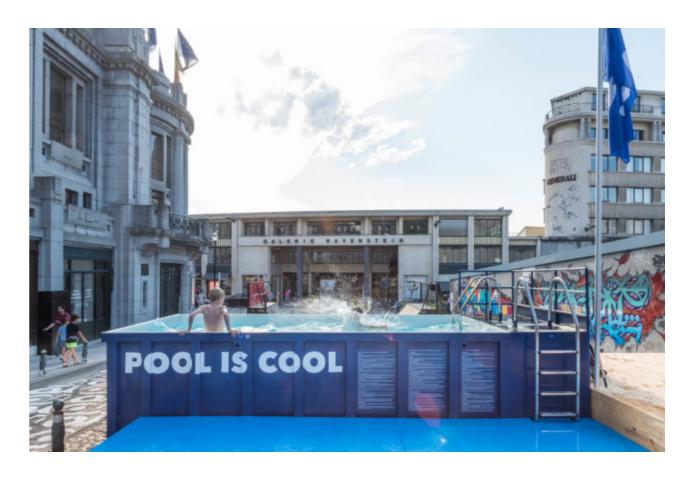
Public Buildings in Brussels

After visiting Brussels I realized what a permeable city it is and that actually the topic of my social plinth is really applicable in the case of this city. I started marking out on map all the public interiors and public squares that are present within.



Bozar, Brussels by Victor Horta

The building has its face towards the street and opens it public interior to the outside.

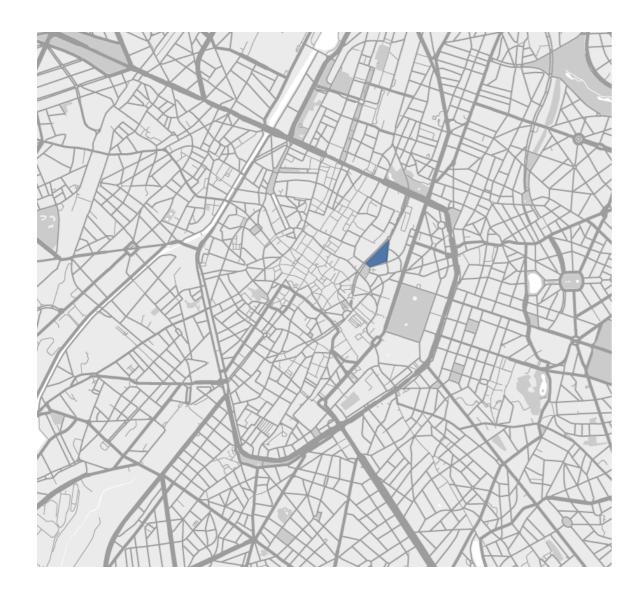


Bozar, Brussels by Victor Horta

The street adjacent to the Bozar becomes a place for the public to gather for various social activities.

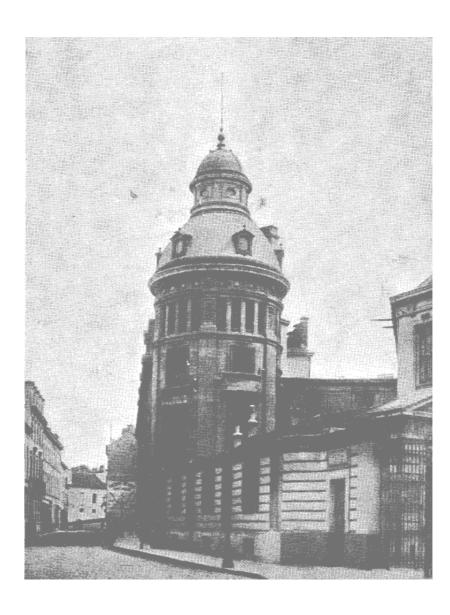
National Bank of Belgium

History and Building Analysis



Location of the National Bank

City Scale Brussels



2056

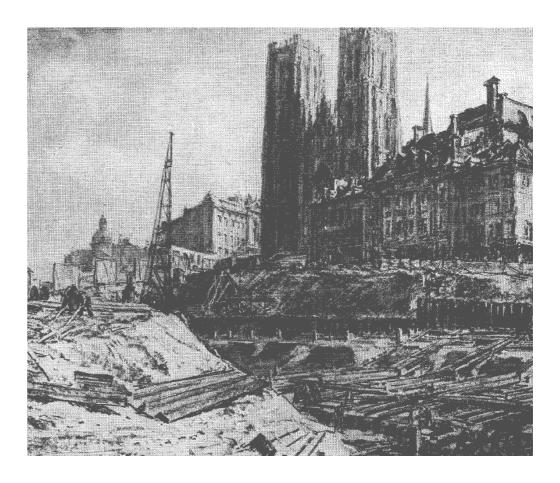
The National Bank in 1860 Beyaerts tower on Berlaimont street

Architect: Hendrik Beyaert



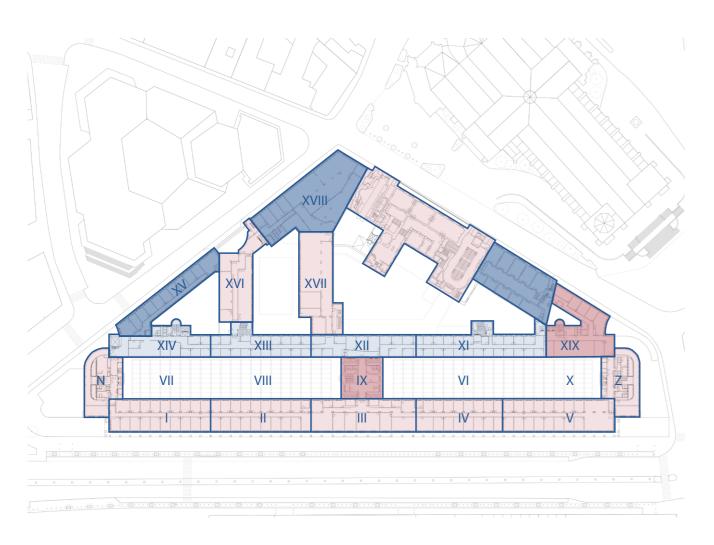
Location of the Bank - City Scale

North-south junction became the largest urban development project in the early 20th century which eased the traffic between the two parts of Belgium by connecting the north and south station.



Redevelopment of the Bank

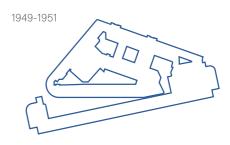
Construction work for the North-south junction required demolishing a series of districts in the heart of the city. At the same time the bank employees were increasing steadily, the demand for bank note's emission grew exponentially and the need for extension of the bank's building became urgent. The creating of the North-South Junction was the perfect opportunity to do this.

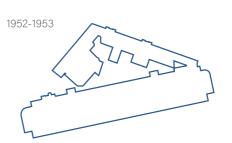


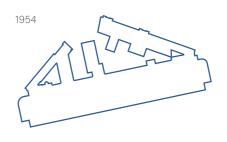
Construction Phases

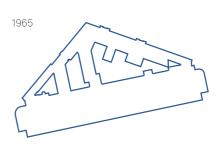
The new architect who started working for the Bank was Marcel Van Goethem, . From 1948, the building was constructed in phases, as the service of the Bank couldn't be interrupted. Both construction work and usual bank service had to be carried out simultaneously, so the project was carried out in phases, and the different services moved into the new buildings as they were finished.

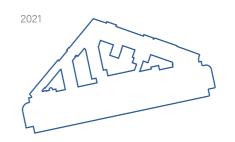


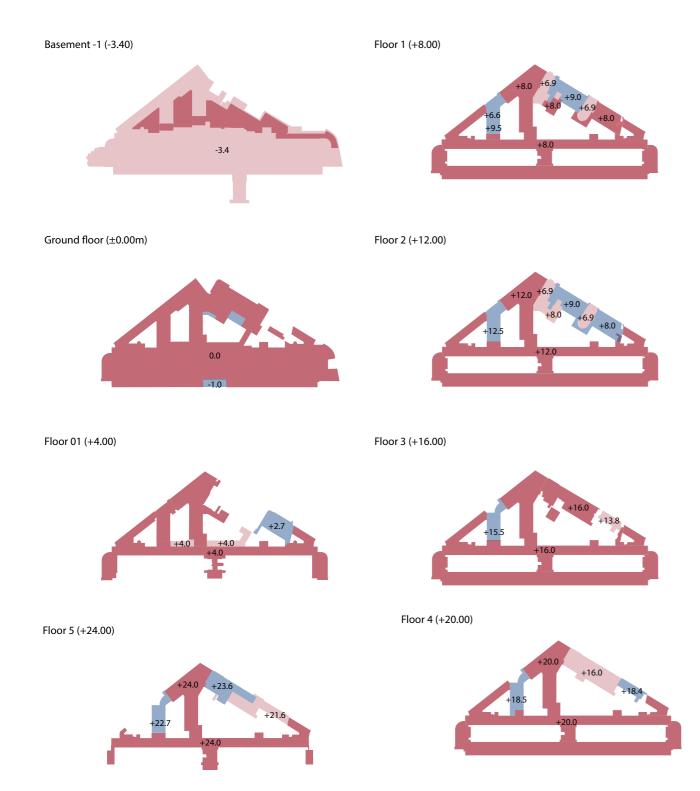












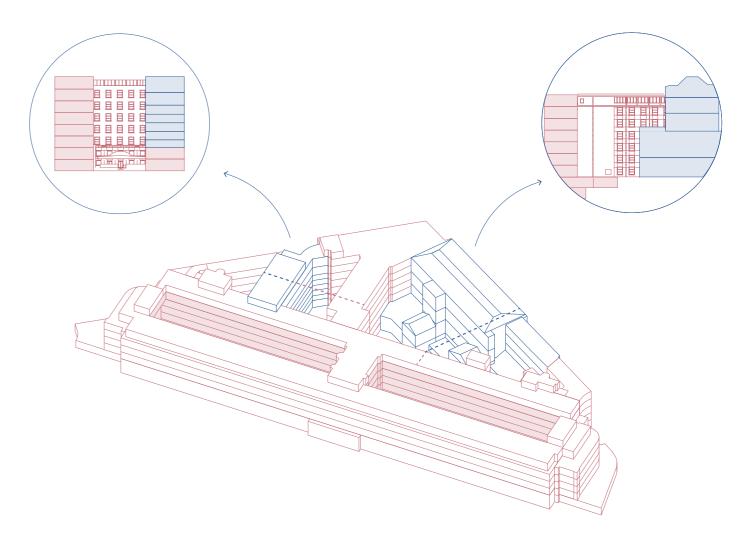
Total Area: 67 500 m²

Brief Area: 45 000 m² Left Area: 22 500 m²

Since the building was built in phases and the demands were therefore changing with time, more space was required for the national bank. Because of this some parts of the bank have additional floors to increase the floor area on the expense of height. In these diagrams we can see

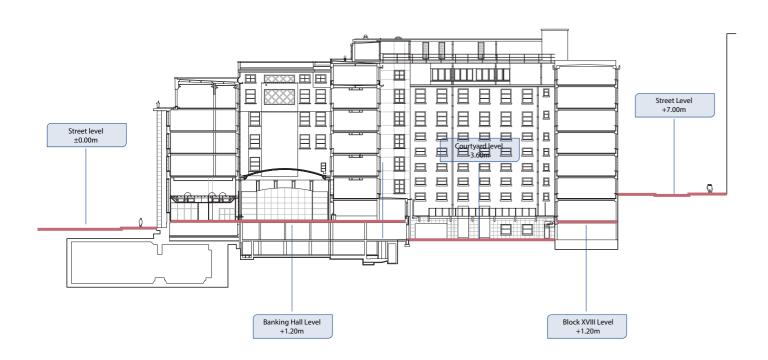
Floor Heights - Differences in Plan

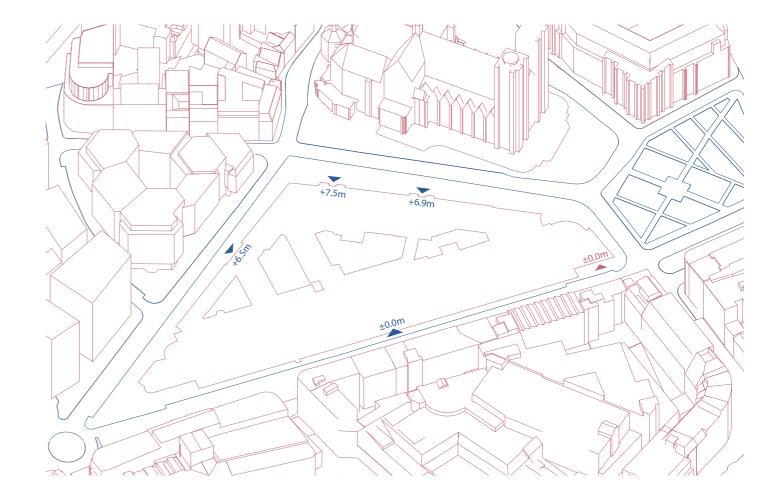
each floor and its differences in level.



Floor Heights - Differences in Section

There are two buildings which floors alter from the rest. This is the governor's palace and block 17. The palace has a different typology from the rest of the buildings and functions as a separate building because it was preserved from the previous architect. However, it is still connected from street level to the banking hall. Block 17 stands out with its 2.50m floor levels disconnecting it from all other blocks surrounding it.



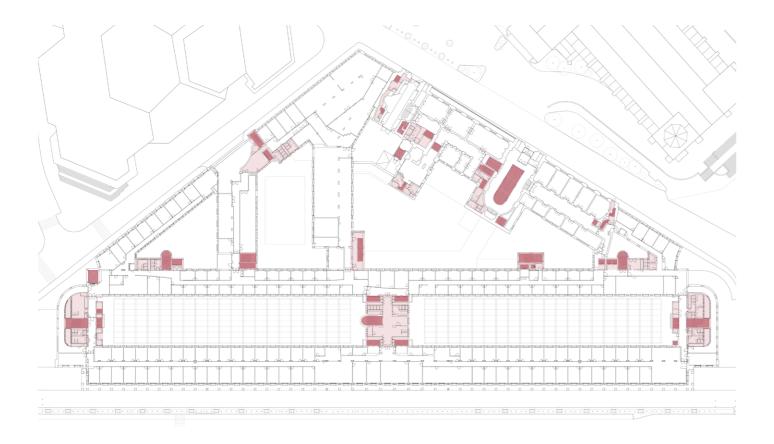


Courtyards & Building Levels

Disconnected Network

Entrances - Level Differences

10. The bank structure is located on a hill. There is a difference of around 8 meters from the main boulevard Berlaimont and the Rue du Sauvage. There are 4 pedestrian entrances marked in blue and one vehicle entrance for servicing the bank. However, only this entrance functions for the employees at the moment.

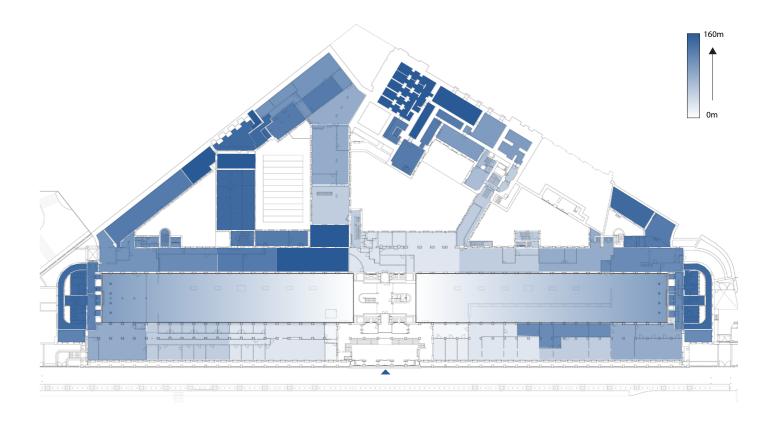


Circulation - Distance from Entrance

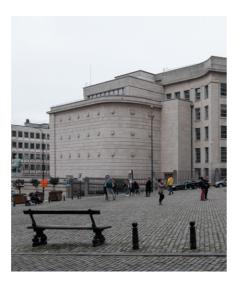
As a result of the only one functioning entrance, closed off interior and disconnection with some buildings, during our visit employees said that sometimes they need more than 20 min to reach their working space. This diagram show the areas in dark blue which are furthest to reach from the main entrance. Even though some of them seem very close to the entrance, because of the closed off interior they need to go around long corridors to reach their desk.

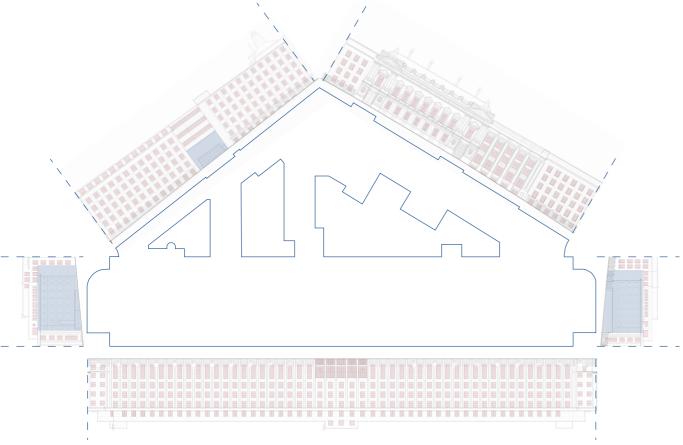
Circulation - Existing Vertical Connections

The vertical connections in the building are also result of the construction in phases and level difference both in typology and in floors. The main block has three main circulation cores and 4 attached. Block 17 is connected through this service core.







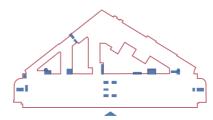


Facade Study - Blind Facades and Exceptions

The bank is a private institution and functions as a closed mega structure. It was built without taking into consideration public functions and spaces around and therefore at some moments the bank turns its back or its blind facades towards the most public areas surrounding it. Apart from the fence running all around the bank, the two ends marked in blue one facing the park in front of the cathedral the other one facing the new administrative centre that is being developed are closed off because they host the service cores within. The facade of block 17 is also closed off for security reasons.



The national bank is a fortress like building which impose power and solidity, make the citizents trust the institution without allowing them to enter within.



Because it was built in phases it was not treated as one uniform volume but separate buildings with separate connections.



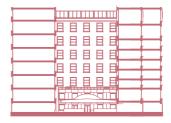
The courtyard which was historically a place of exchange for the bank is now used for servicing the building and for delivery making.



The bank turns its back towards the most public parts of the site. There are blind facades facing the squares next to the building.



The current buildings hosting the national bank are only used for offices. Most of the buildings are obsolate because the building is huge compared to the need.



There is a significant difference in the levels between the different buildings due to the fact that the building had to expand because of the increasing number of workers.

The Role of the National Bank of Belgium
Now vs. Future
Alternative Banking

Development

ISSUE MONEY

the printing of banknotes and the placing in circulation of coins and notes

MONETARY POLICY

Set Interest Rates



ENSURE STABILITY

the collection, circulation and analysis of economic and financial information

LENDER OF LAST RESORT

Lender to Commercial Banks

SERVICES FOR THE GENERAL PUBLIC

"as an institution promoting the public interest, the National Bank performs numerous services for individuals"

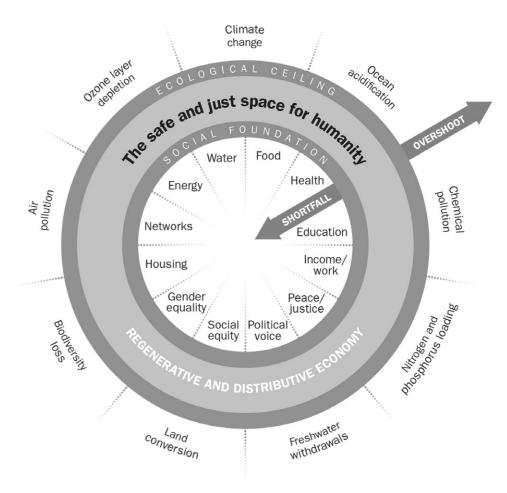
- Exchanging banknotes and coins
 Securities and coupons
- Central Individual Credit Register
 Central Balance Sheet Office
 - Documentation base - Museum

Source: https://www.nbb.be/en/faq/what-purpose-national-bank

Role of the National Bank of Belgium

The national bank is responsible for printing banknotes and placing in circulation coins and notes. However, with the new project for the bank this program is not going to take place in this building. The bank ensures economic stability, sets interest rates and lends money to the commercial banks which are then going to the public. The banks states it is "as an institution promoting the public interest, the National Bank performs numerous services for individuals", however, the new brief and when we visited the bank it was quite the opposite. The public was not welcomed, nor will be in the future according to their brief. There was one open counter for money exchange in the whole bank.

What is the service for the general public?



Kate Raworth, Doughnut Economics

Doughnut economic model | Kate Raworth

As the city of Brussels has declared itself a doughnut economy, the future national bank should be taking into consideration the environmental impact that this project will have but also its future consumption.

What can we do to positively influence this model and where is it lacking attention at the moment so the bank could respond to this?



THE BANK AS A CATALYST OF CHANGE

"Social responsibility is one of our key values"

Source: https://www.nbb.be/en/faq/what-purpose-national-bank

The Bank as a Catalyst of Change

The future bank is a catalyst of change which would affect the city in various scales - through the future economy, society's attitude and awareness and hopefully set an example to be followed by other institutions.



The money-based market system fails to reward many types of critical work—the work of building strong communities, revitalizing neighborhoods, preserving the environment, advancing social justice, and sustaining democracy.

Money-Based Market

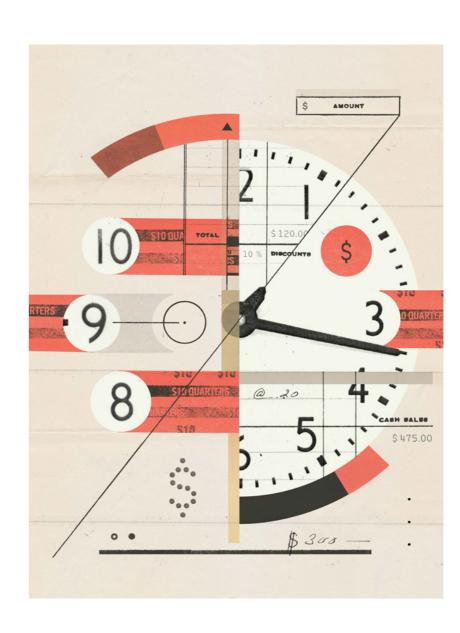
As a conclusion of my research and the contribution of the national bank to the core values, it fails to fulfill its mission as a socially responsible and inclusive institution. Moreover, money-based market system fails to reward many types of critical work—the work of building strong communities, revitalizing neighborhoods, preserving the environment, advancing social justice, and sustaining democracy.



Local Currency

In economics, a local currency is a currency that can be spent in a particular geographical locality at participating organisations. A local currency acts as a complementary currency to a national currency, rather than replacing it, and aims to encourage spending within a local community, especially with locally owned businesses. Local currencies tend to circulate much more rapidly than national currencies. Since local currencies are only accepted within the community, their usage encourages the purchase of locally produced and locally-available goods and services.

The Bristol Pound. A group of campaigners and financial activists set the Bristol Pound, currently changing to Bristol Pay up in 2012. It comprised a network of +2000 individuals and independent businesses who used digital and paper currency to trade in Bristol, localizing supply chains and keeping money circulating in our city.



Time banking

Time banking is a bartering system for services, where people exchange services for labor-time based credits, rather than money. In joining a time bank, people agree to take part in a system that involves earning and spending "time credits." When they spend an hour on an activity that helps others, they receive one time credit. When they need help from others, they can use the time credits that they have accumulated.

Until now it gains its popularity as an online platform more than physical means. Architecturally, its challenging to define solutions for knowledge skill service.

1 HOUR = 1 CREDIT

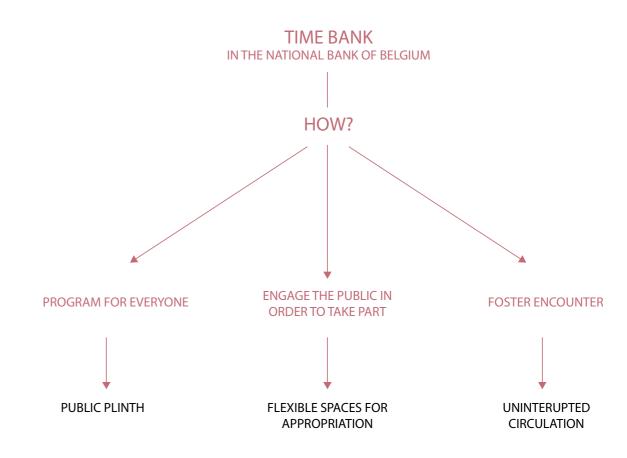
Time Banking provides a medium of exchange that advances goals that money does not.

Exchange of knowlegde and services, sharing expertise

Fosters Business and community development; Open up opportunities to weave social interaction

Time Banking Explained

This was a proposal for P2. However, much more alternatives could be implemented within the bank which could be supported by the National Bank of Belgium.



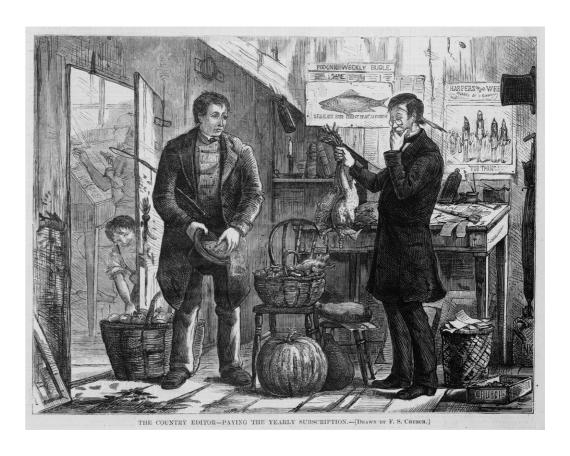
How will time banking be implemented in the NBB?

In order to have a time bank within the borders of the institution the public has to be engaged through providing various programs where everyone could find their area of expertise and more importantly an engagement and encounter has to be fostered within in order to contribute to the exchange between people. This is going to be achieved through three main approaches publicness and active plinth. Flexible and programmed spaces for appropriation. Uninterrupted space fostered circulation with points of encounter.



Collaborative Finance

Collaborative finance is a category of financial transaction that occurs directly between individuals without the intermediation of a traditional financial institution. This new way to manage informal financial transactions has been enabled by advances in social media and peer-to-peer online platforms. It has multiple proprietorship lies not with one or two persons, but the group as a whole. It does not need collateral and guarantees of repayment is ensured by, for example, peer pressure. It is not regulated by the central bank – with respect to limits and restrictions, reporting requirements etc.



Barter

In trade, barter is a system of exchange in which participants in a transaction directly exchange goods or services for other goods or services without using a medium of exchange, such as money. Economists distinguish barter from gift economies in many ways; barter, for example, features immediate reciprocal exchange, not one delayed in time. Barter usually takes place on a bilateral basis, but may be multilateral (if it is mediated through a trade exchange). In most developed countries, barter usually exists parallel to monetary systems only to a very limited extent. Market actors use barter as a replacement for money as the method of exchange in times of monetary crisis, such as when currency becomes unstable (such as hyperinflation or a deflationary spiral) or simply unavailable for conducting commerce.

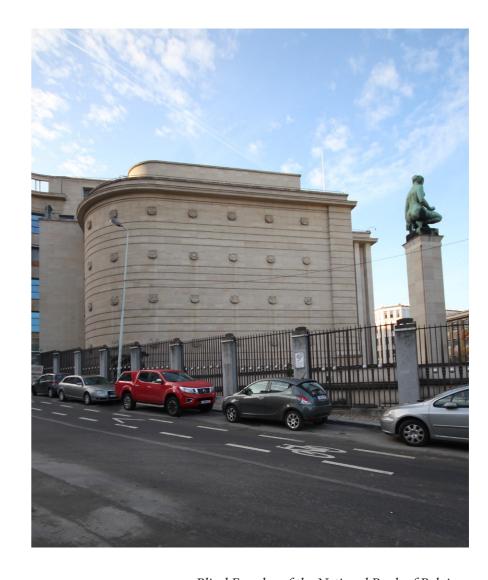
New Face for the Bank

Development



Internal (back) Facades of the National Bank of Belgium

The bank



Blind Facades of the National Bank of Belgium

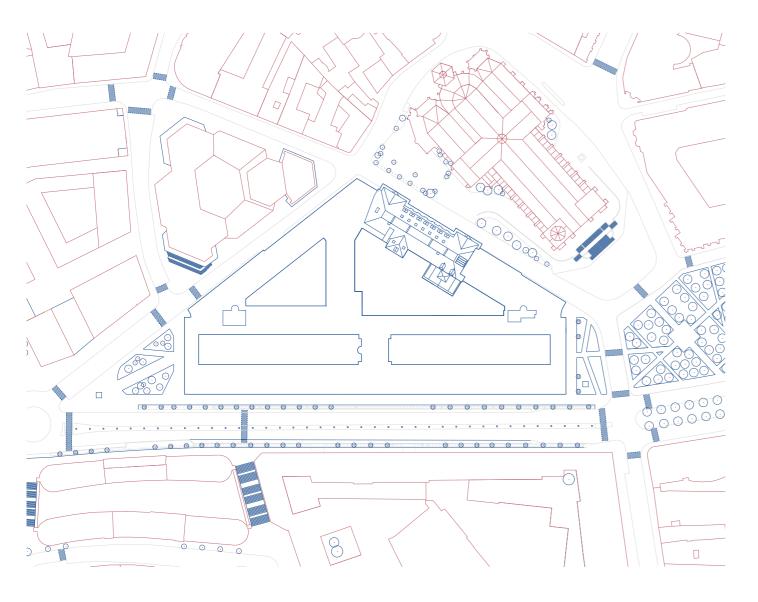
The bank is closing itself towards the most public parts of the site. There are solid boundaries which separate the public and the private.

How can the bank open itself towards the public without disturbing the security lines of the bank?



New Faces of the NBB - Proposal for P2

The new faces of the bank allows it to express a new identity to the public. I started sketching out proposals for the facade and the different languages it could have. It could be a continuation to the existing facade with a new entrance.



Site Plan - Proposal for P2

Two new faces flanking the edges of the 200m long banking hall, result in two new squares in front of the bank building which I developed in continuation of the existing park in front of the cathedral and at the same time taking into account the important pedestrian axis. A small intervention is done on the park by orientation one of the pathways towards the new entrance of the bank.





The new faces of the bank could be a fully transparent facade which would allow the public to observe the office environment and the meetings taking place from the outside.

Comment P2:

Closed facades on both ends facing the public space: why not strip the façades instead of demolishing the buildings? If the latter, does the existing facade continue around the corners or is it completely glazed?



New Faces of the NBB - Proposal for P2 retake

As my goal was to create a new face for the bank allowing it to be a better neighbor and more inviting to the public, and after your comments last week I realized I don't have to provide new entrances in order to make the building more inviting and responding to the public squares. This is why I have decided to strip the facade around the edge cores of the building and repeat the 60s facade on the edges as well.







New Faces of the NBB for internal courtyard

As my goal was to create a new face for the bank allowing it to be a better neighbor and more inviting to the public, and after your comments last week I realized I don't have to provide new entrances in order to make the building more inviting and responding to the public squares. This is why I have decided to strip the facade around the edge cores of the building and repeat the 60s facade on the edges as well.



Photograph fragment of main facade



Proposed change for main facade - P4

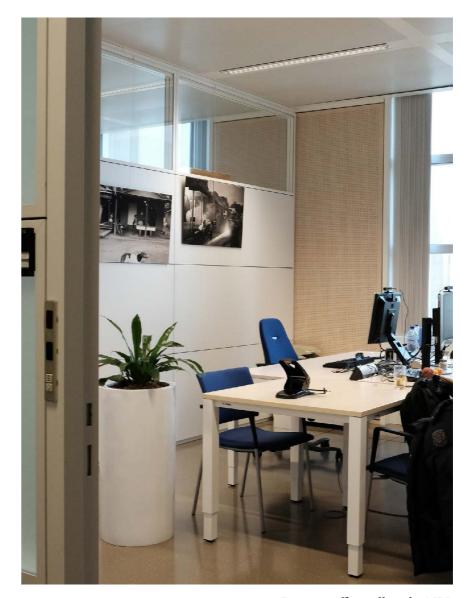
As my goal was to create an active edge which will invite people to get inside the banking hall I have decided to add new staircases which will connect the banking hall level to the street. Moreover, new doors and windows have been inserted to reach the new level.

The Office National Bank of Belgium

Development



Existing office cell in the NBB

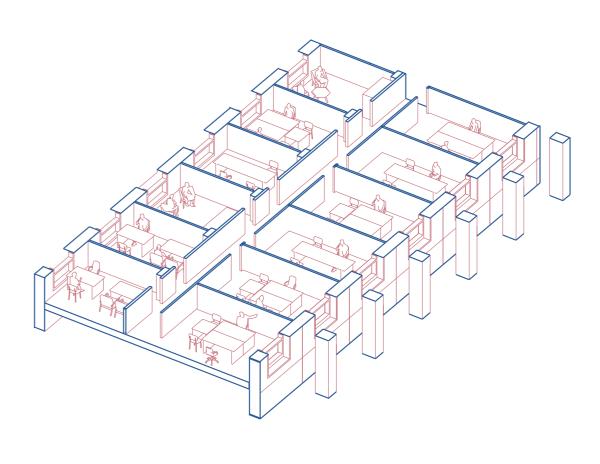


Existing office cell in the NBB



Photograph of long corridor separating the offices of the NBB.

Lack of communication between workers of the bank.



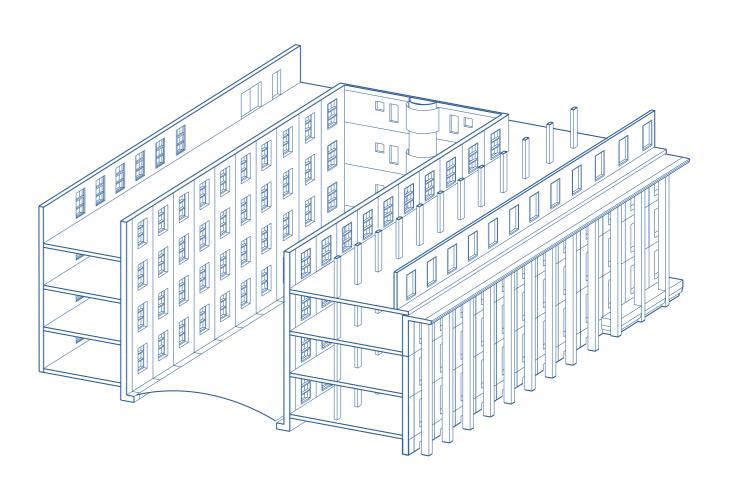
Axonometry drawing. Office layout

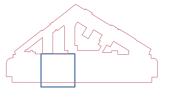
The office of the bank is characterized with separate enclosed cells which accommodate different functions such as working arrangements, recreation spaces, kitchen units, managerial offices. They differ in size and orientation, some of them look at the internal courtyards, others at the atrium or the main boulevard.



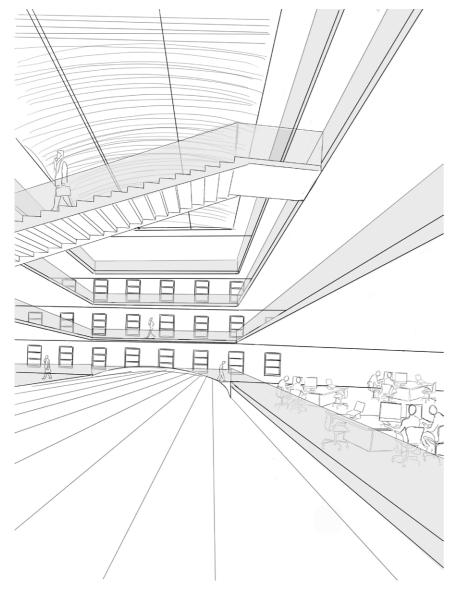
Photograph of atrium in between office the NBB.

Inefficient use of atrium. It neither connects offices nor functions for climate control .



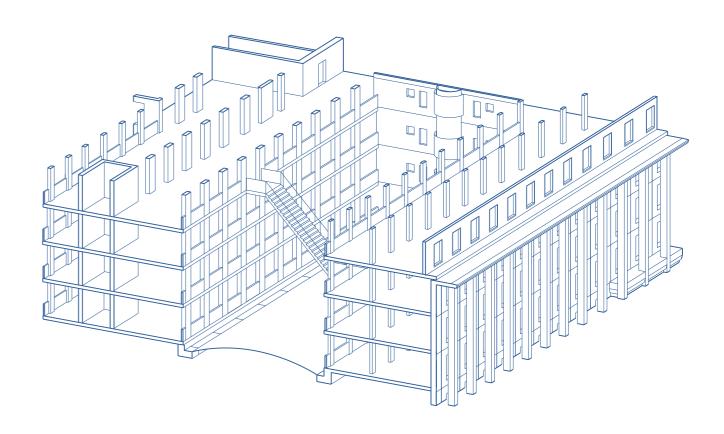


Axonometry drawing existing atrium between the office floor plates.



Sketch Proposal for atrium in between office the NBB.

Opening up of the atrium to connect offices of the bank.



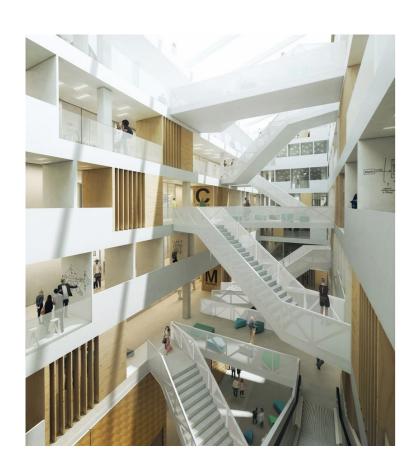
Axonometry Drawing Proposal.

P2 proposal for opening the atrium by removing the internal facade and creating connection between the offices. Expanding the floor plate of one of the wings of the bank to equalize both floor plates on the two sides of the atrium





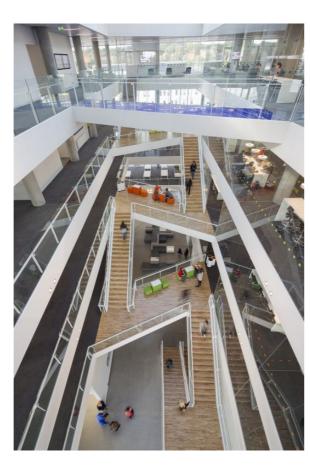
Opening the facade of the office spaces has acoustic repercussions. I understand the bridges/stairs but wonder why the facade needs to disappear? These lead to challenges in climate and other conditions.



Schmidt Hammer Lassen Architects -Project for Utrecht University of Applied Sciences

"The atrium becomes the building's meeting place where paths cross and experiences are shared"

Designing a social office environment for the employees



AART Architects + ZENI Architects Education Centre for VUC Syd, Denmark

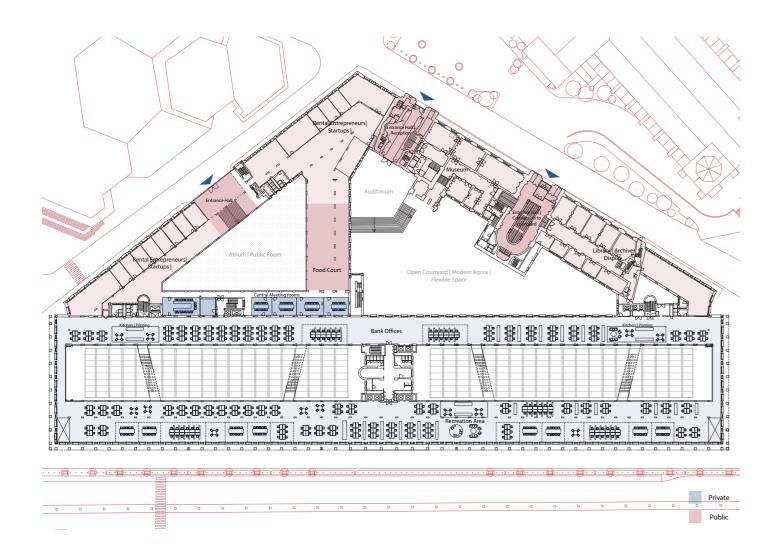


Section Proposal for atrium in between office the NBB.

Opening up of the atrium to connect offices of the bank. The internal barrier opens up and transforms into balconies.

Is the climate control affected by this proposal?

Rumyana Toncheva 141 142

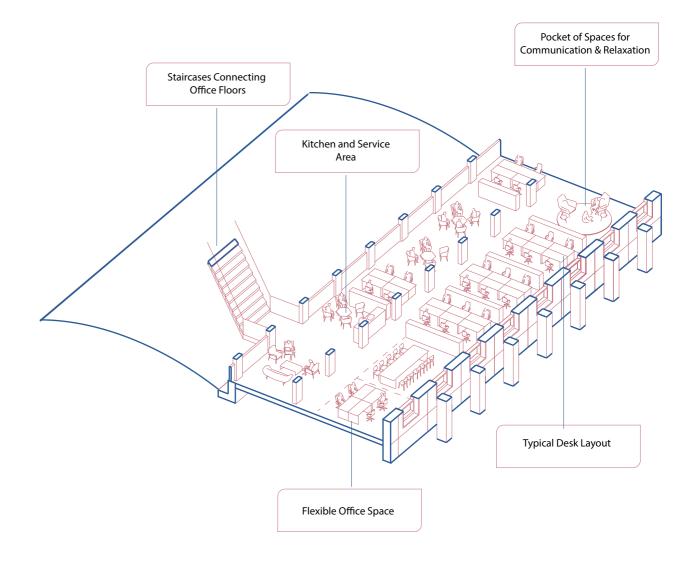


Typical Office Floor Plan proposed for P2

Removed complete internal facade. There are stair connections between different office floors. The office layout is a mixture of landscape office and closed units.

P2 comments:

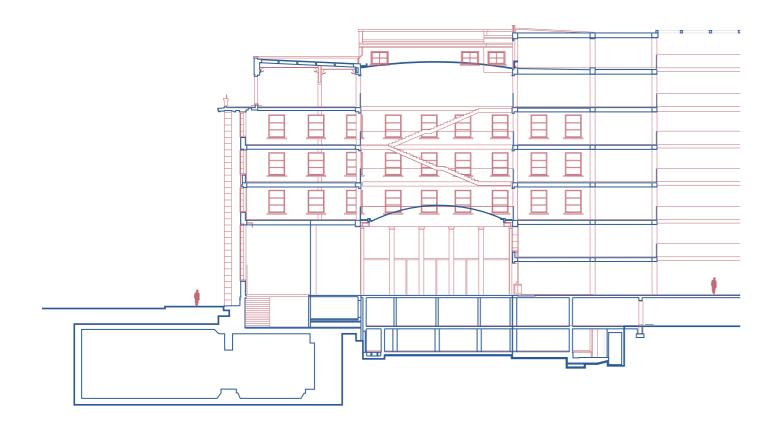
Rental offices are in cubicles, those in the bank offices are landscape offices.



Axonometry Drawing Office. Proposal for P2.

In order to remove hierarchies, stimulate social and knowledge exchange, I propose an open floor plan that is flexible. There are standard working spaces as well as flexible ones which could be enclosed with movable walls in case of a meeting. There are relaxation and communication pockets where employees could spend their free time. There recreational areas which are reached through the internal connections in the atrium.

Private



Public Trading Hall Offices Semi-Private Offices Offices Public Meeting roor Central Meeting rooms Offices Offices Recreation Offices Public Banking Public Education Room Art Gallery

田田

Offices

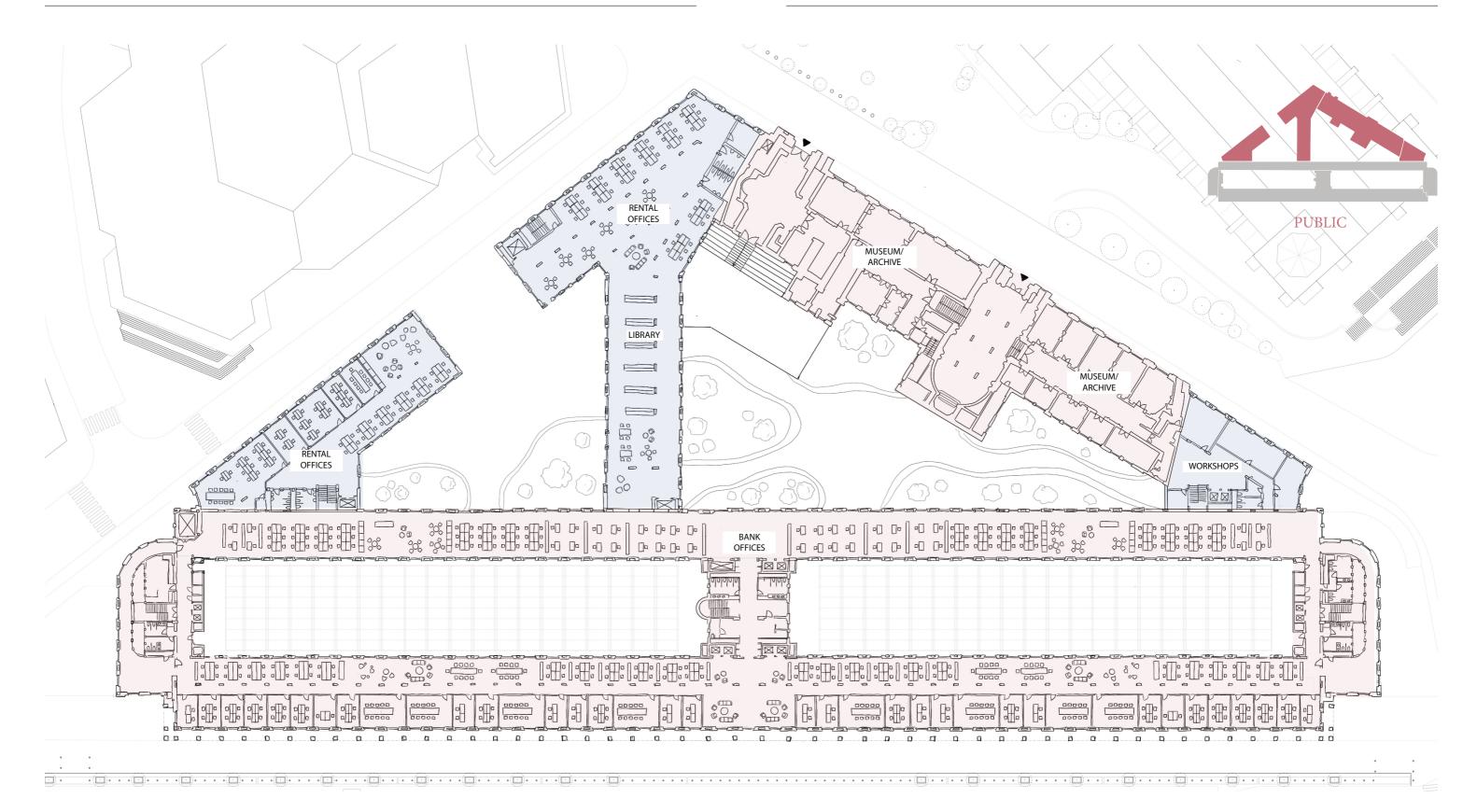
Section proposed for P2

What is your position as a contemporary architect about people in a wheelchair?

Section with programs proposed for P2

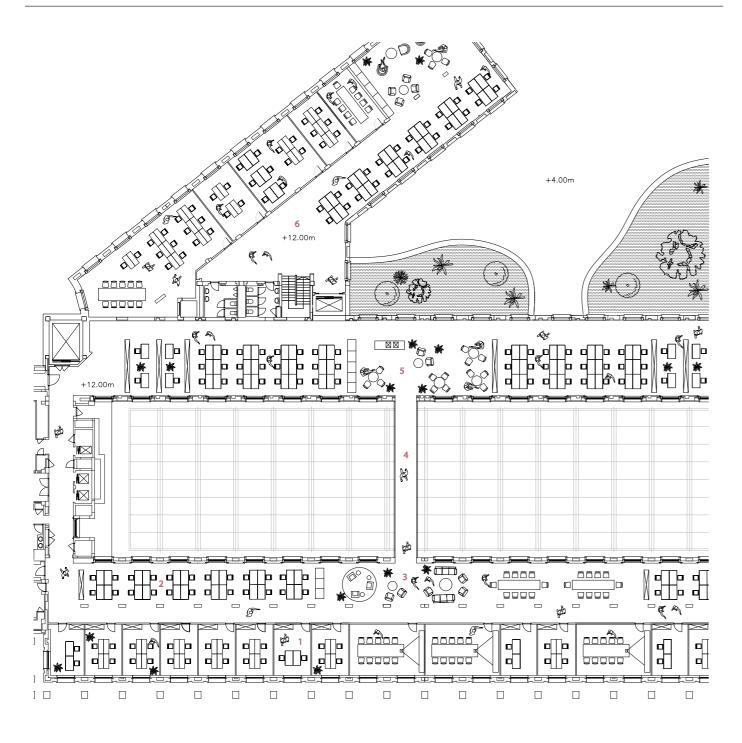
Atrium transformation. Public ground floor with private bank offices above.





Typical office plan proposed for P2 retake

I have provided an office environment with both open floor and closed offices both for the bank and the rental. The building on the corner has mostly open office floor plan due to the inefficient light within. If one edge is closed for separate offices there wont be enough light since the building is deep.

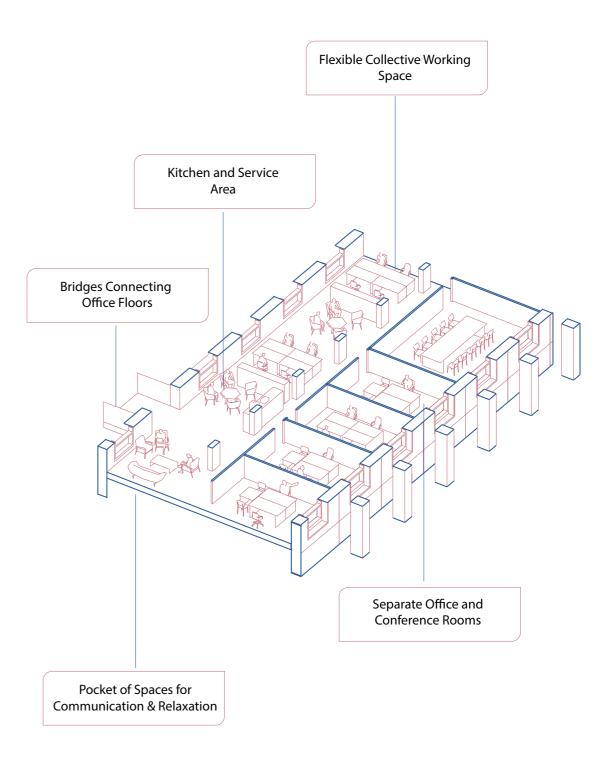


- 1. Separate Office Rooms
- 2. Flexible Collective Workspace
- 3. Social Pocket
- 4. Bridge Connecting Social Pockets
- 5. Kitchen, Printing, Social Pocket
- 6. Rental Offices



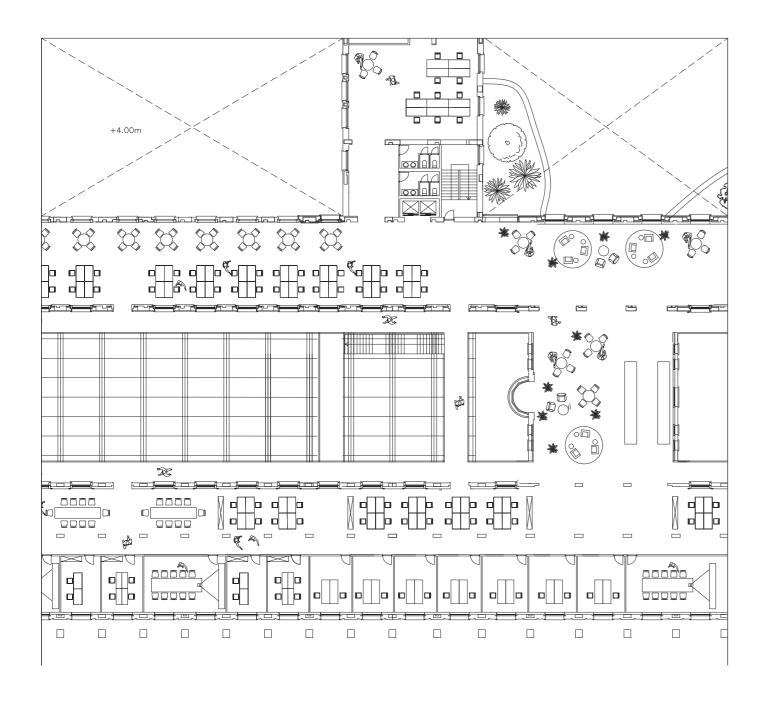
Close up typical office plan proposed for P2 retake

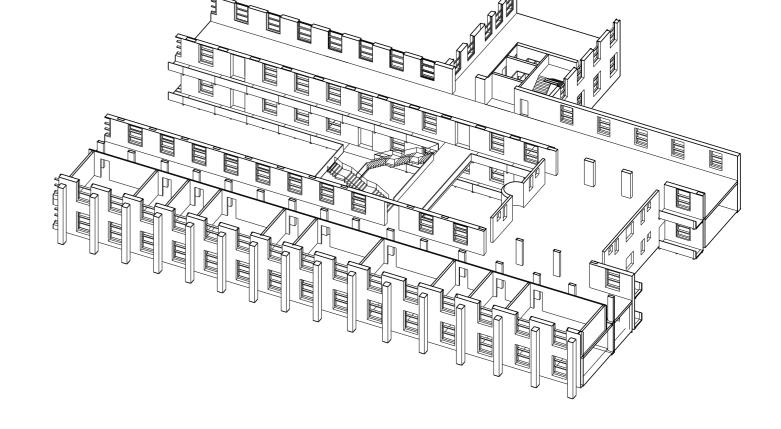
Offices are a mixture of the closed separate office in relation to the open floor plan. I have provided pockets for social interaction, recreation and connected them through bridges in order to foster interaction and provide easier access. The two buildings are acting as separate units and are divided in between to provide a security line for the bank.



Axonometry Drawing of office proposed for P2 retake

I have decided to preserve the internal facade and strip a part where the recreation pockets are connecting them with bridges instead of stairs. I have preserved part of the internal distribution opening more mixed offices and conference rooms behind closed doors. As for the rest there is a flexible working environment.



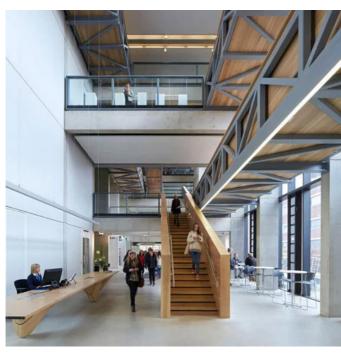


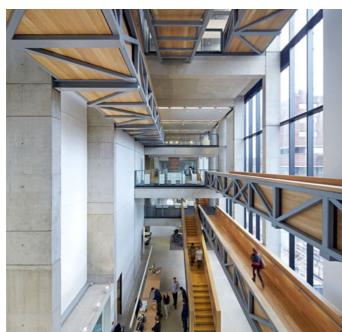
Close up typical office plan proposed for P3

What about circulation throughout the offices? One of the bank wings feels very disconnected from all vertical connections. Addition of circulation gallery in the atrium?

Axonometry Drawing of office proposed for P2 retake

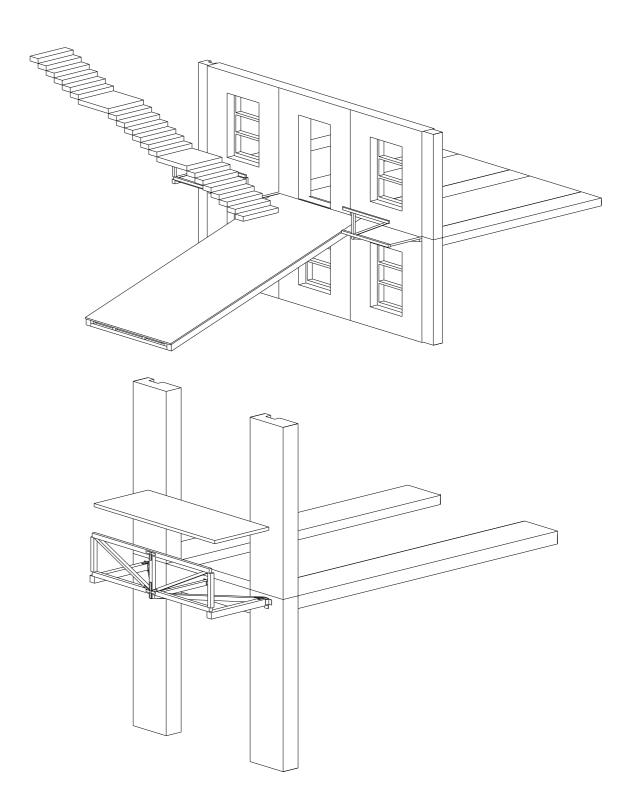
Combination of bridges, stairs and gallery for circulation through the working space. One can reach their working unit using only the vertical connections and bridges in the atrium.





Manchester School of Art by Feilden Clegg Bradley Studios

Inspiration for secondary structure added to the existing one. Galleries and bridge construction through steel beams and covered with CLT plates.



Axonometry Drawing construction of bridges and galleries proposed for P3

Possibility to work with timber instead of steel with combination of CLT? The window of the internal facade is removed and a door is inserted.

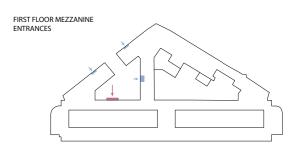
GROUND FLOOR ENTRANCES

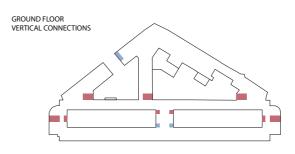


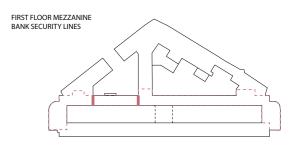


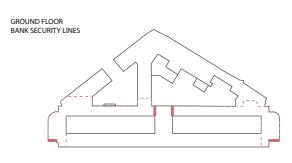
This configuration limits the connections and also makes employees walk a longer way before reaching their desk.

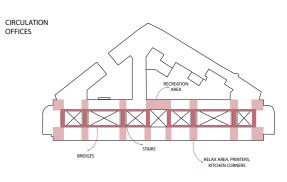
PRIVATE



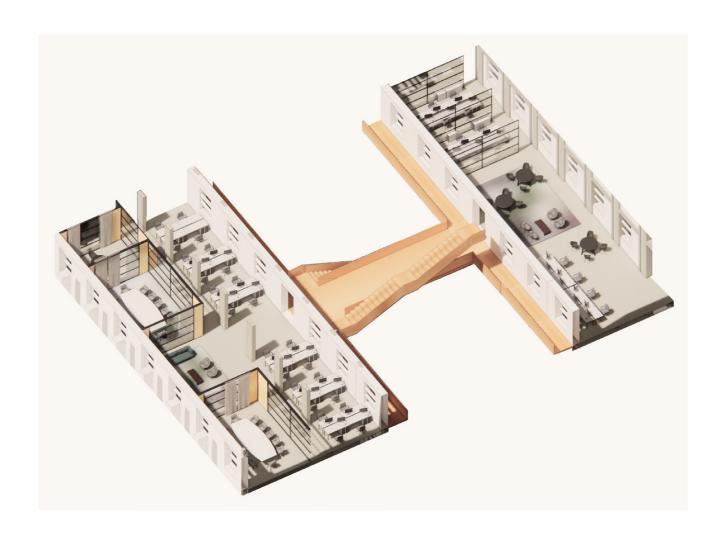


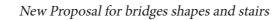






Diagrams on circulations and security lines





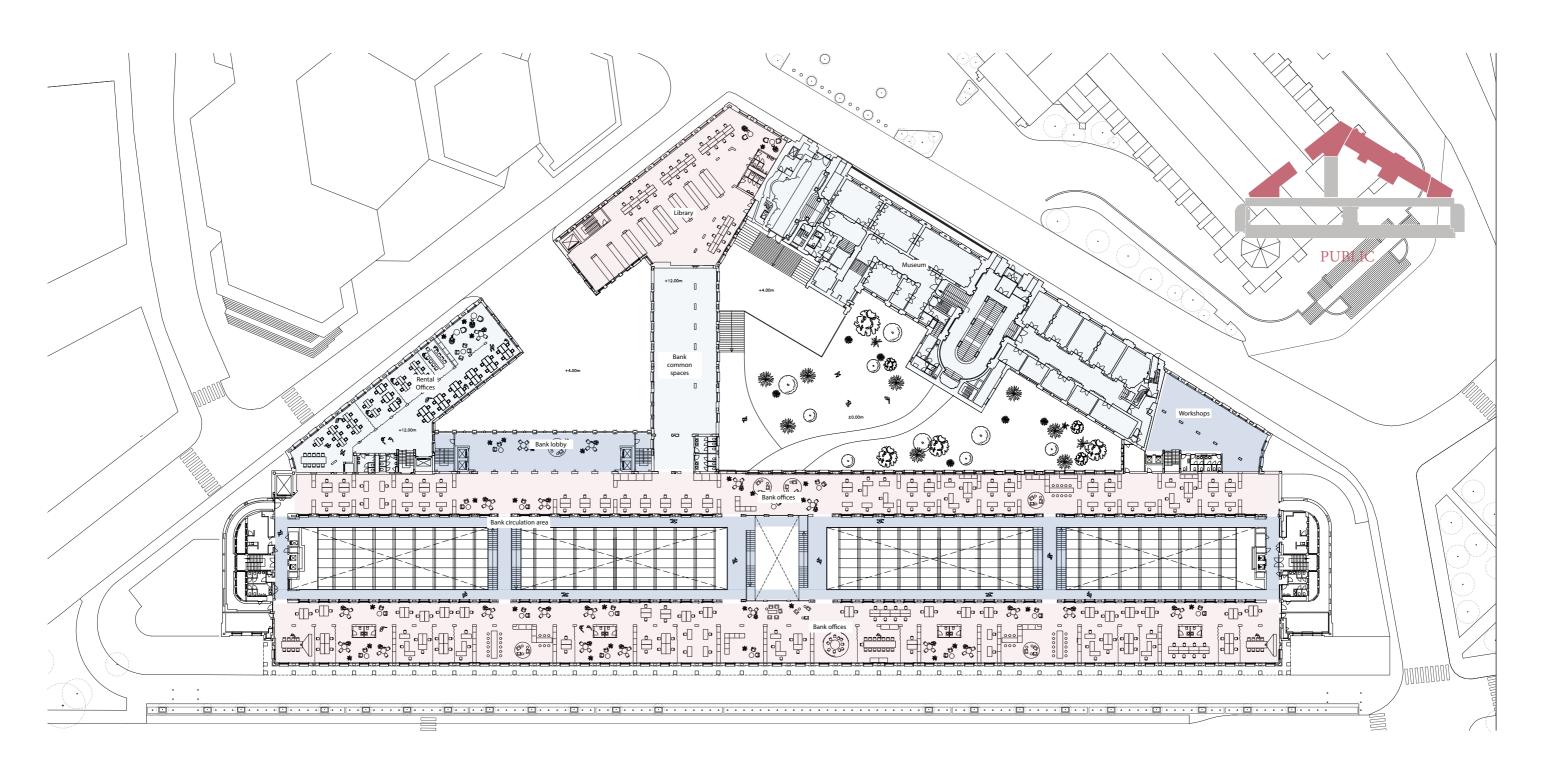
The bridge and stair connections are now moved to the center of the atrium providing a new vertical connections which connects the south wing of the bank to the rest the building.





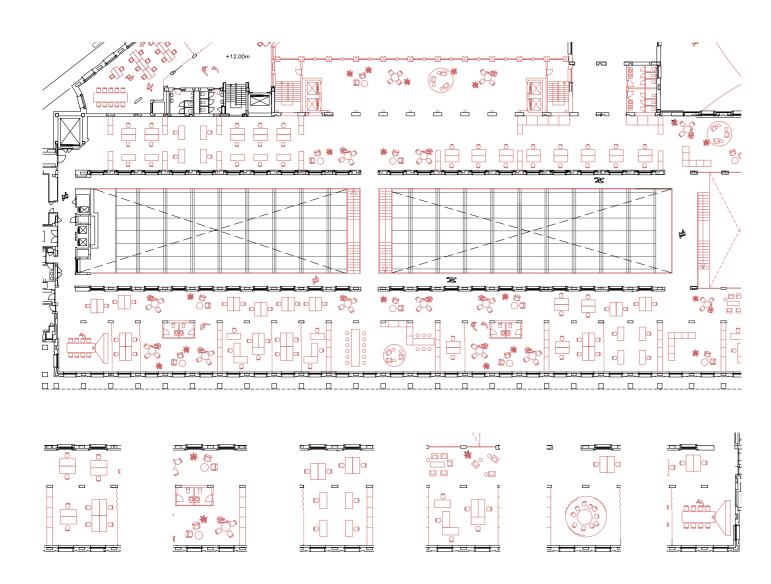
Proposal for office interiors materiality

Reusing the existing division panels for the offices again, mixing it with wooded panels and wooden doors.



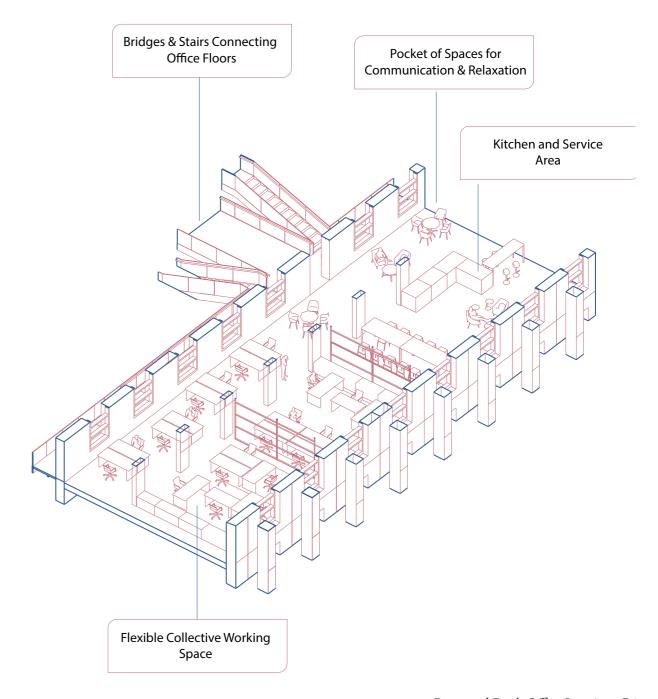
Typical office plan proposed for P2 retake

The typical office floor plan of the bank is now organized based on the circulation being moved in the atrium (in order to utilise them) which gives enough space for an open floor plan which could be easily appropriated and adopted.



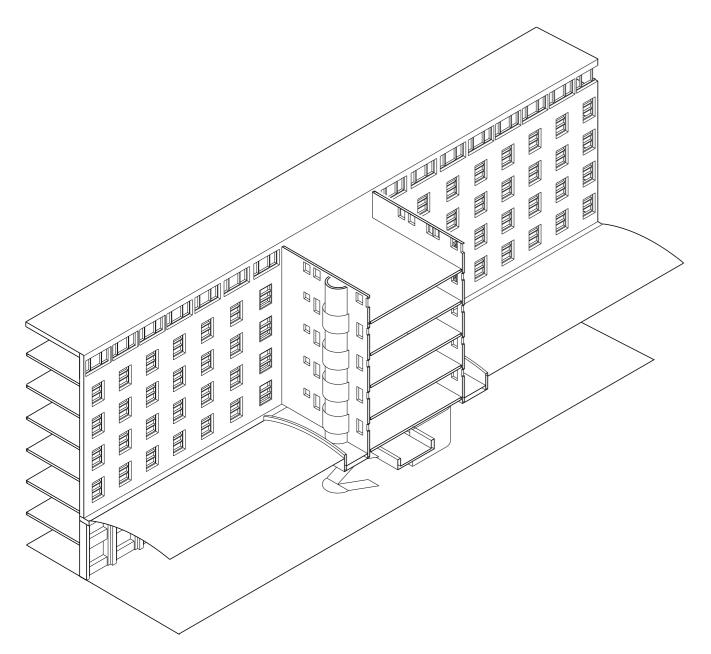
Typical office plan proposed for P4

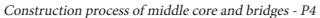
I have organized the office floor plan based on Bank offices are organized once again as Hertzberger's idea of module design which could alter function with time. The 200 m long corridor is divided by the columns in equal grid - dome are conference spaces, other different desk layouts or services areas.



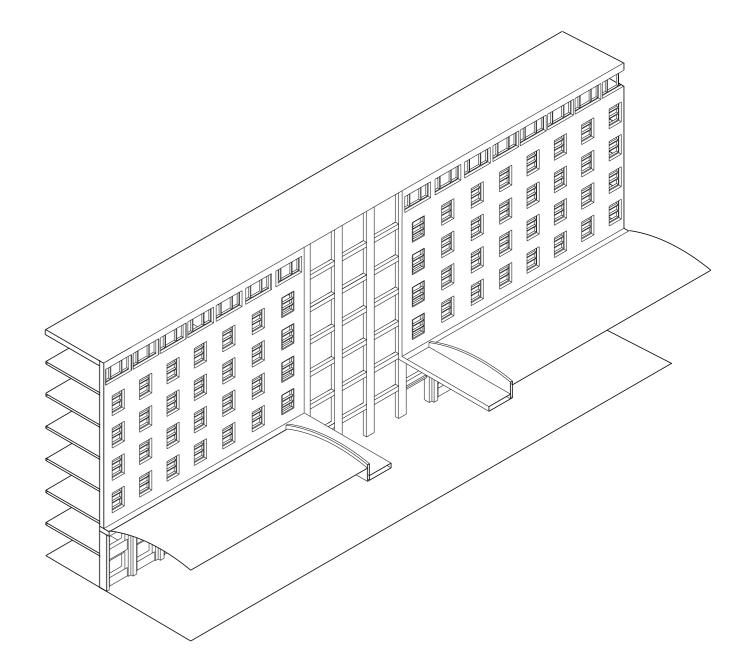
Proposed Bank Office Interior - P4

I have provided an office environment with both open floor and semi-closed offices both for the bank employees. The offices are now designed without corridors as they were before in order to foster the circulation happening in the atriums' bridges, galleries and new middle core.





In order to develop a new atrium and utilize the existing ones I have removed the existing core as the glass roof as left out as they are. This leaves exposed structure and empty space in the middle which unites atrium and leaves banking hall as one long uninterrupted public interior

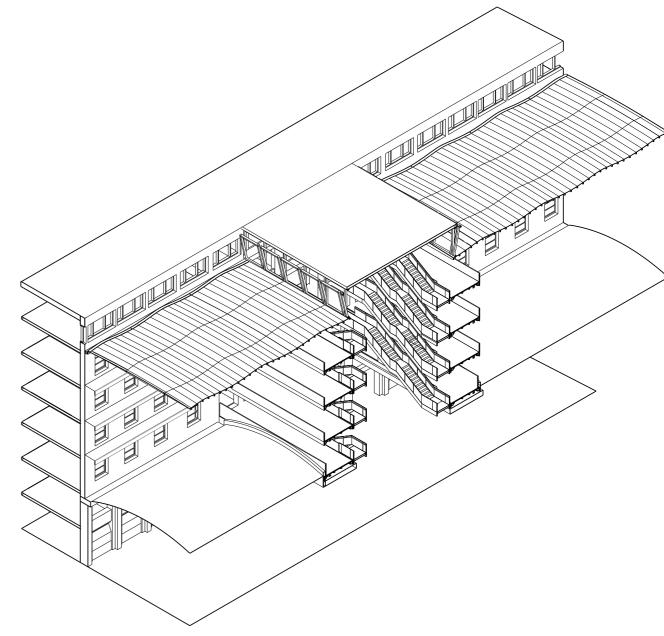


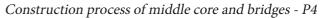
Construction process of middle core and bridges - P4

164

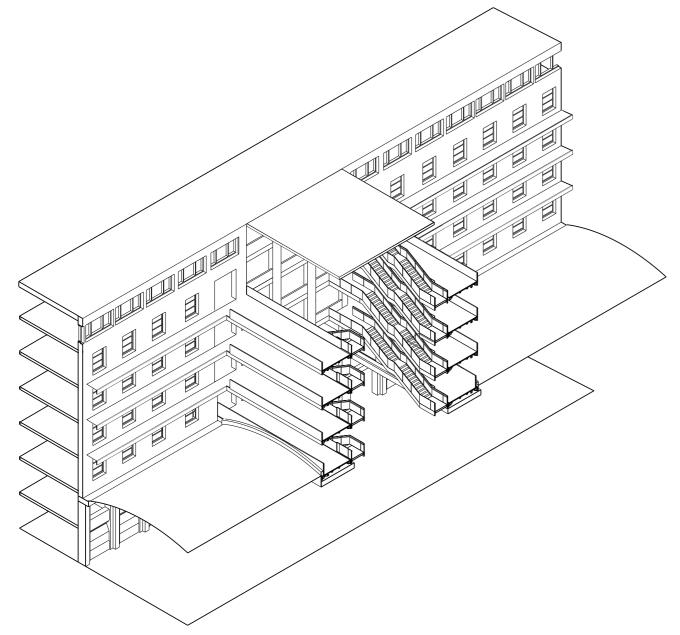
I am preserving the existing iconic roofs of the banking hall as well as the glass roofs which cover the atrium.





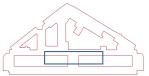


This is the final outcome; there is new solid roof added which is one floor higher from the existing wavy glass roof. This is for functional and climatic purposes. This core becomes a mediator between the office environment and the alternative banking public environment. It gives a visual access to the bank.



Construction process of middle core and bridges - P4

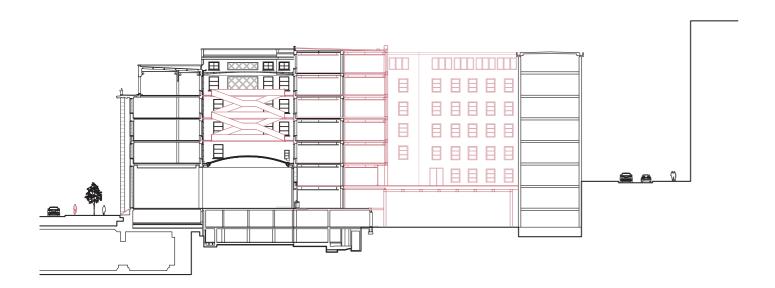
The structure for the new vertical connections are added as well as the structure for the galleries which will now host the circulation of all the office floors





Section with what is removed - proposed P4

This section shows the level of the old courtyard as well as the existing block 17 and floor differences.



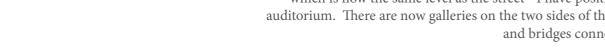
Section with what is added - proposed P4

This is the final outcome; I have added a new second facade which becomes the new face of the bank. Under the elevated courtyard which is now the same level as the street - I have positioned an auditorium. There are now galleries on the two sides of the atrium and bridges connecting it.



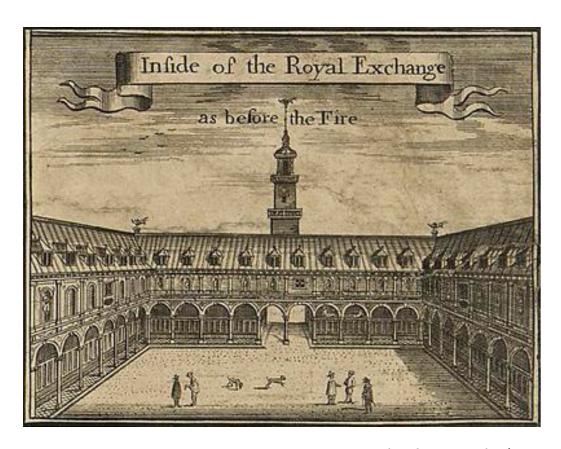
View showing new galleris and bridges in a trium - P4 $\,$

This is the final outcome; there is new solid roof added which is one floor higher from the existing wavy glass roof. This is for functional and climatic purposes. This core becomes a mediator between the office environment and the alternative banking public environment. It gives a visual access to the bank.



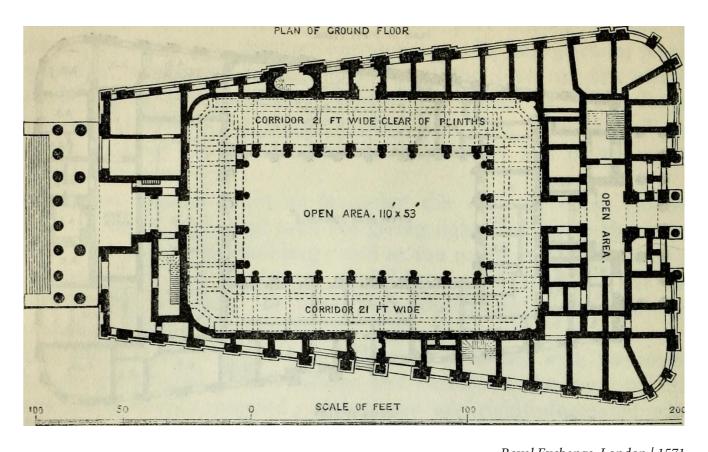
*The Bank Courtyard*National Bank of Belgium

Development



Royal Exchange, London | 1571

Very essential part of this network were the courtyards. Historically with the emergence of the bank typology they were the central place for the bank. The courtyard was a place of exchange, mediator between the bank the citizens.



Royal Exchange, London | 1571

Bank Courtyard Typology Project Journal Future Bank



Stock Exchange, Amsterdam | 1608



The first stock exchange began in Antwerp, Belgium in 1531

My research started from looking at precedents of the bank typology and how it operated back in the time. This is the first stock exchange in Belgium 1531 which was built for the merchants and banker. The architectural scheme was different - an open space surrounded by cloisters. It was a place where bankers would meet to discuss business, government and individual debts.

Architect: Domien De Waghemakere

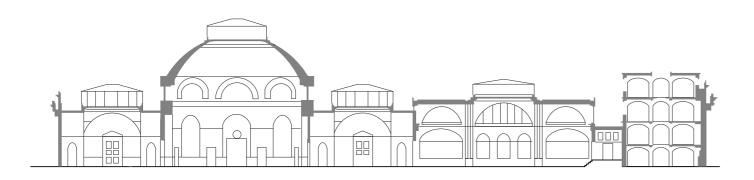


Danish National Bank, Copenhagen, 1971 architect Arne Jacobsen

Slowly the publicly accessible courtyard was replaced by the private courtyards or banking halls. You have to trust the institution without actually going in. And it the national bank of Belgium these courtyards are currently used for servicing the building and making deliveries.



Danish National Bank, Copenhagen, 1971 architect Arne Jacobsen



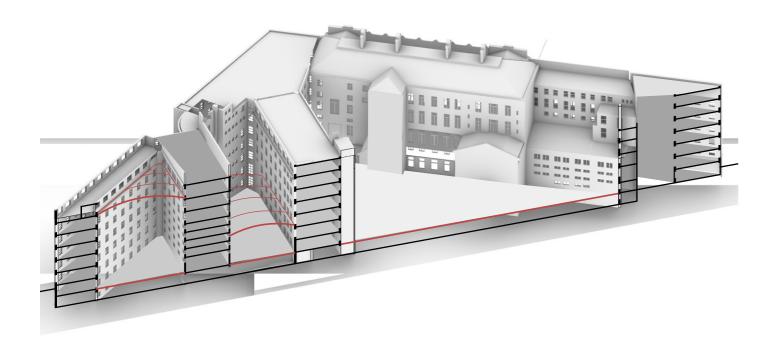






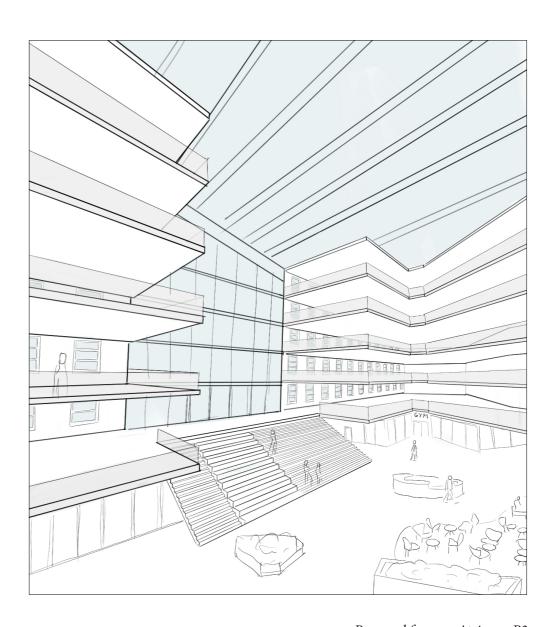
Bank of England, Soane

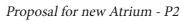
In the Bank of England the courtyards were integrated and part of the network of spaces that were present. The courtyards were part of the route from one end of the bank to the other. The building became and extension of the city network.

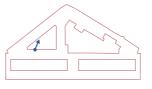




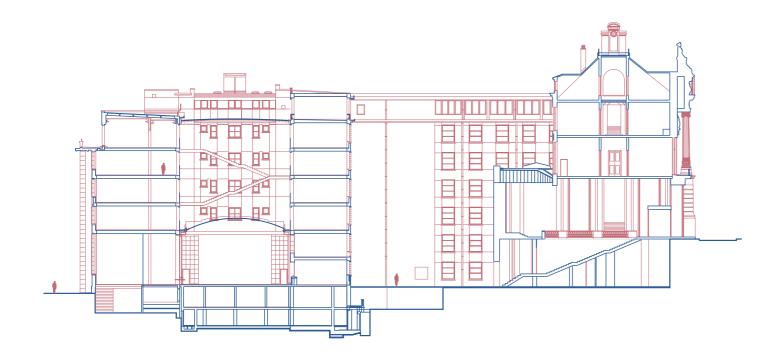
Coming up with this analysis, I decided that the national bank should become part of the permeable city by opening it to the public on the ground floor and creating one network which is connected through the courtyards. In this initial proposal I treat the three different courtyards in three different ways as an open one, as a covered on the second floor and as an atrium.







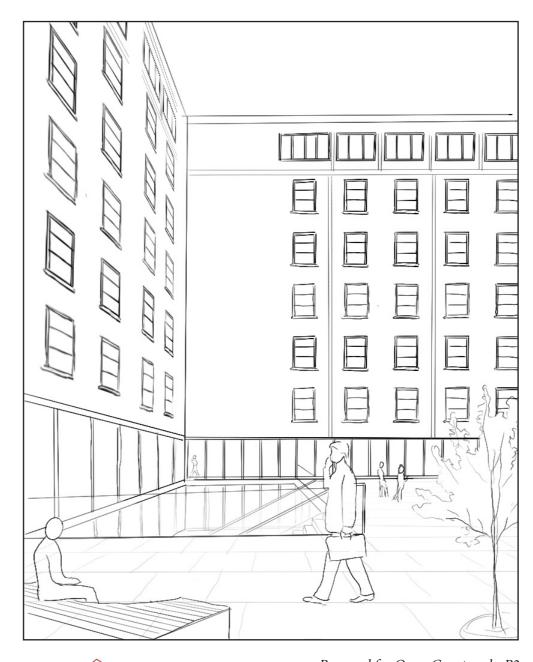
This is a provisional view of the atrium atmosphere and the public room with an entrance towards the police station. All of the existing structures are kept, only the facades are dismantled.



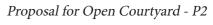


Section through elevated courtyard - P2

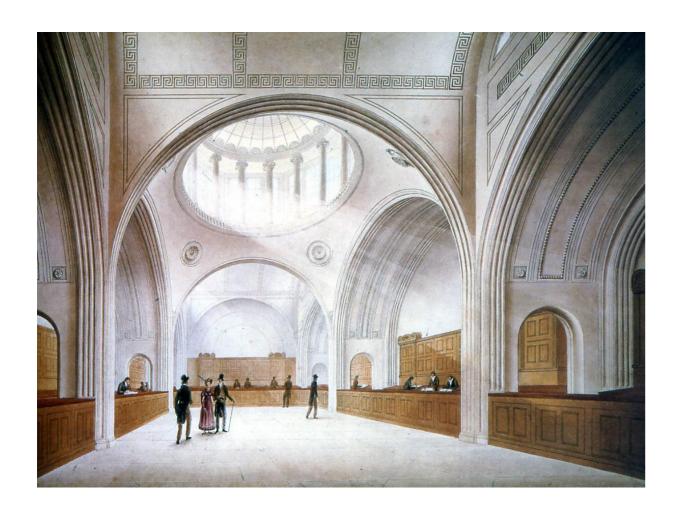
This section illustrates the new courtyards which connects the existing palace connection to the level of the banking hall.



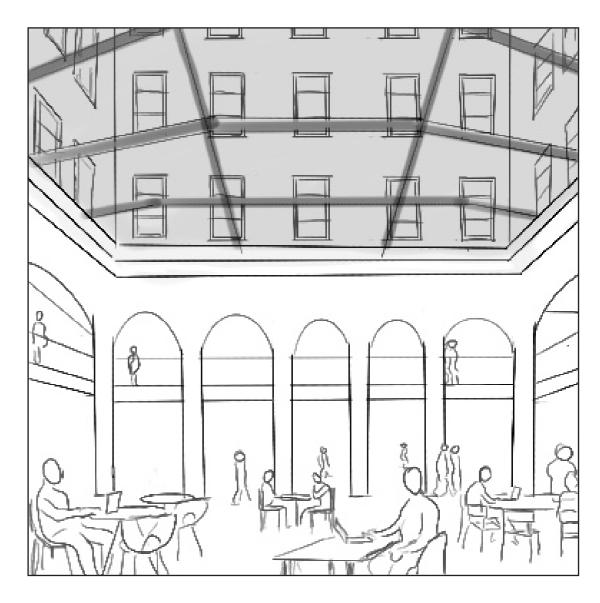




Sketch of courtyard located between the bank and the palace. Looking at the entrance towards the bank and connection with the basement level.



Infinite Sequence of Interior Space: John Soane's Bank of England



Proposal for Covered Courtyard - P2



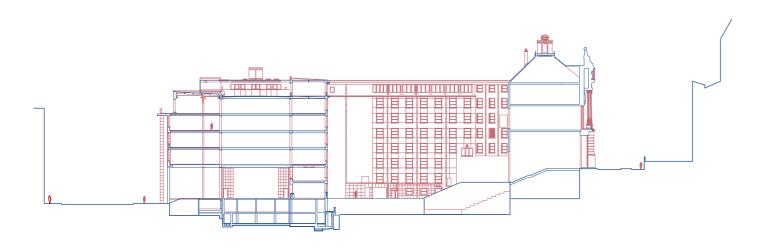
Sketch of covered courtyard acting as an extension of the banking hall. Public room. Possibility for temporal activities

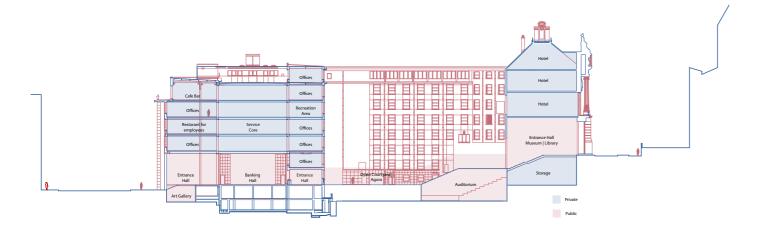


Section of Bozar, Brussels by Victor Horta



Network of public interiors in the bank site

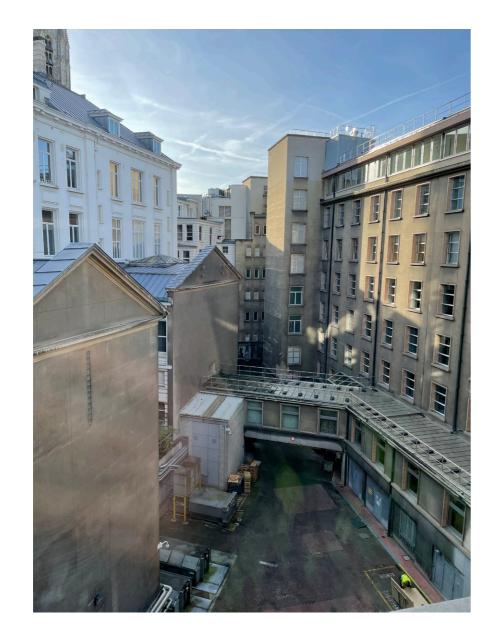




Section - proposal for elevated courtyard P2

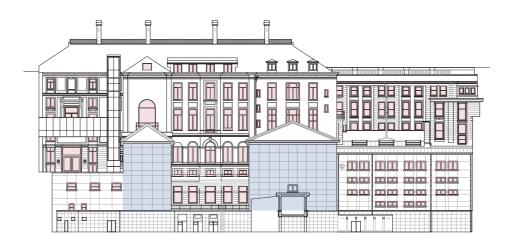
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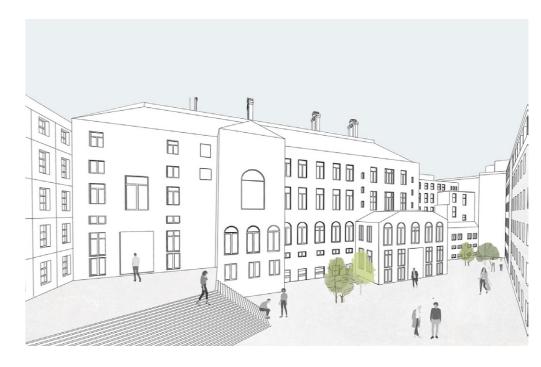
This section goes through the second entrance of the palace and the banking hall. In order to connect the street and the courtyard there is an additional volume added where the auditorium will be positioned. The central core of the bank continues to function as until now with the exception of the ground floor where the stairs are repositioned and the interior street axis remains open.

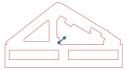


Governor's Hotel Back Facade

Blind facades and service courtyards

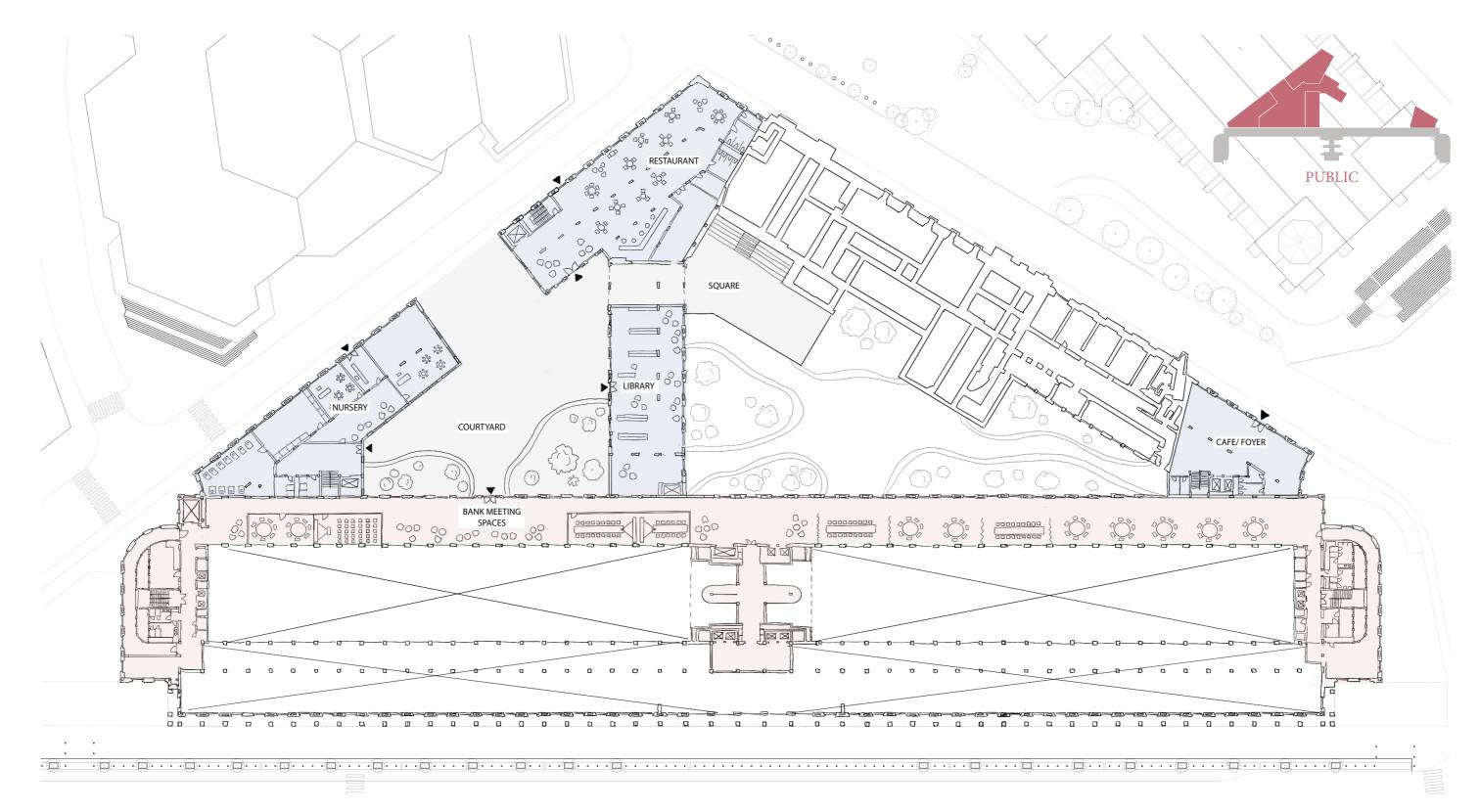






Governor's Hotel Back Facade - proposed for P2

Blind facades and service courtyards

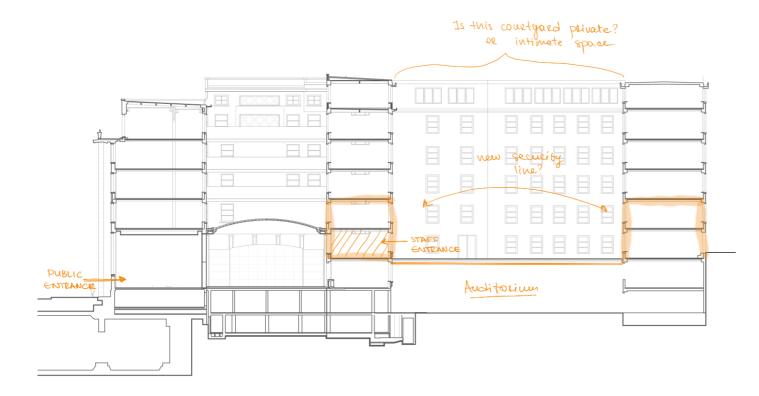


Mezzanine floor plan - proposal for P2 retake

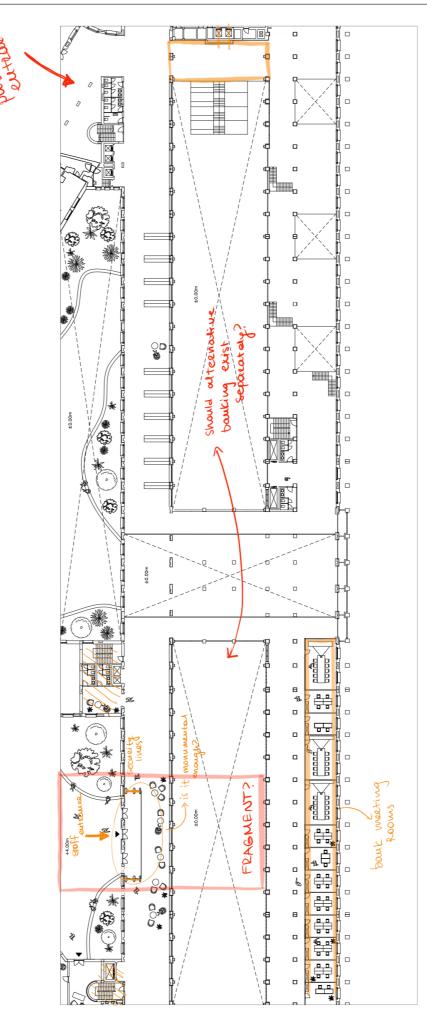
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This is the first level floor plan or the mezzanine of the main block. I have elevated the courtyard with two levels from -1 in order to level it with the street and create and open courtyard, a space of encounter where all the buildings have their entrances. I have activated the edge conditions by putting public programs which could be accessed from the street as well . There is a restaurant and a nursery. From the inner courtyard the public library could be reached. There is an entrance to the bank meeting space.

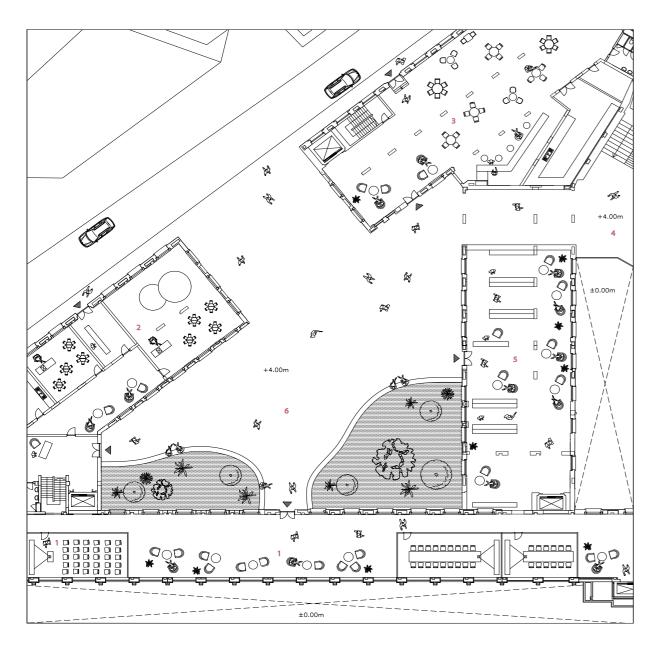
Rumyana Toncheva Interiors Buildings Cities



Sketches for threshold and new entrance for the bank



Public vs. Private diagrammatic distribution

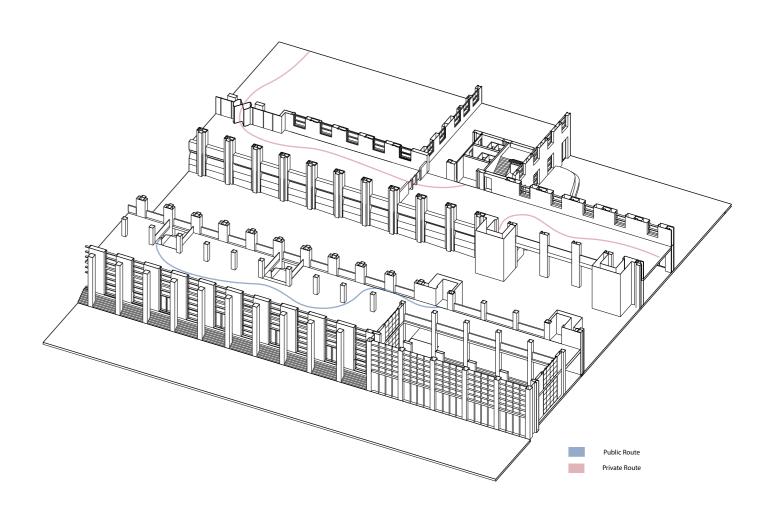


- Bank Meeting Spaces
 Nursery
- 3. Restaurant
- 4. Small Square Connected to
- 5. Library
- 6. Open Courtyard Garden



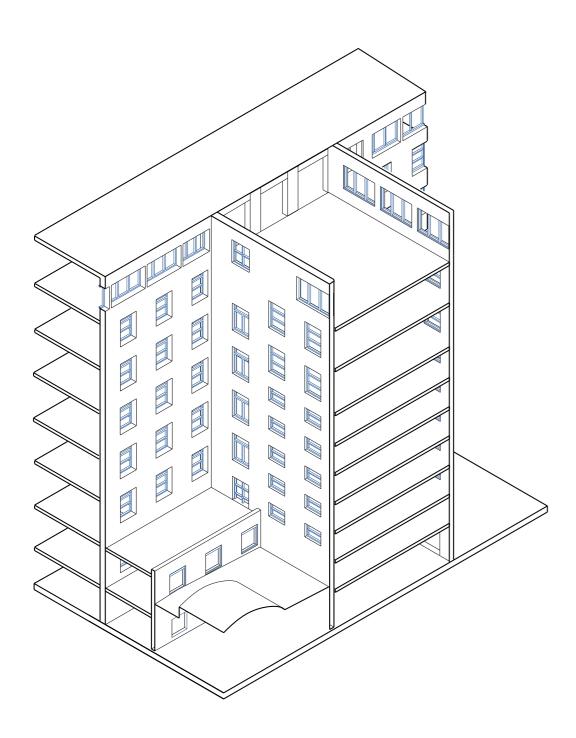
New elevated courtyard and face for the NBB - P3

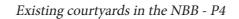
The bank has no longer a front and a back face, as I have provided a new elevated courtyard where the bank employees would enter on daily basis to reach their work space.



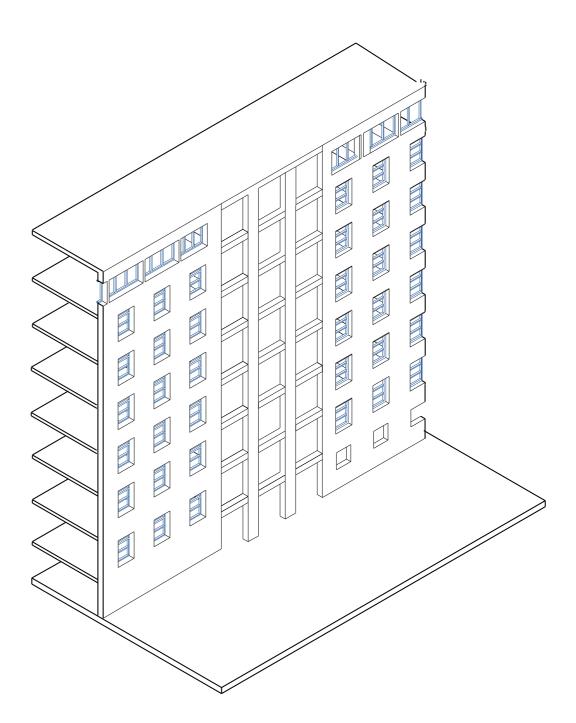
New elevated courtyard and face for the NBB - P3

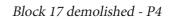
The mezzanine level of the banking hall becomes the new lobby for the bank employees in order to give a full access of the banking hall to the public.





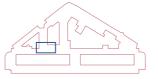
Currently block 17 is dividing the courtyards and is blocking all the light entering. The courtyards are inefficient and unused.



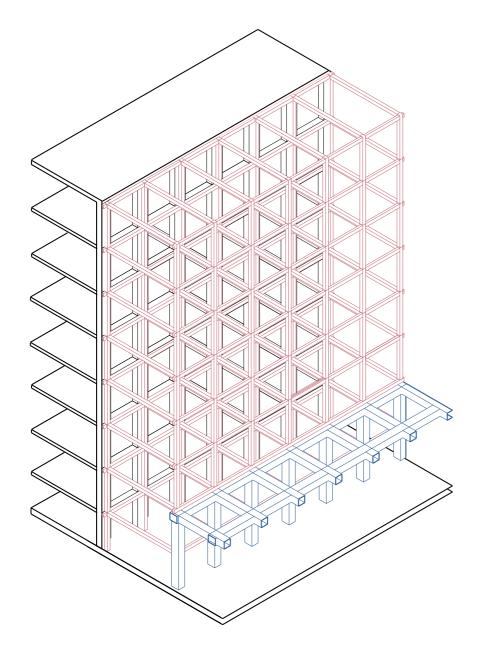


196

By removing block 17, I provide one bigger courtyard, leaving the exposing structure.



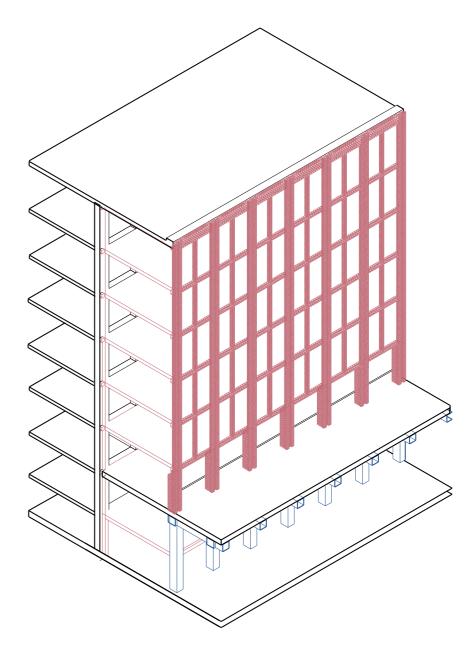
195 Rumyana Toncheva Interiors Buildings Cities



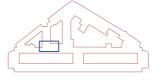
Secondary structure added - P4



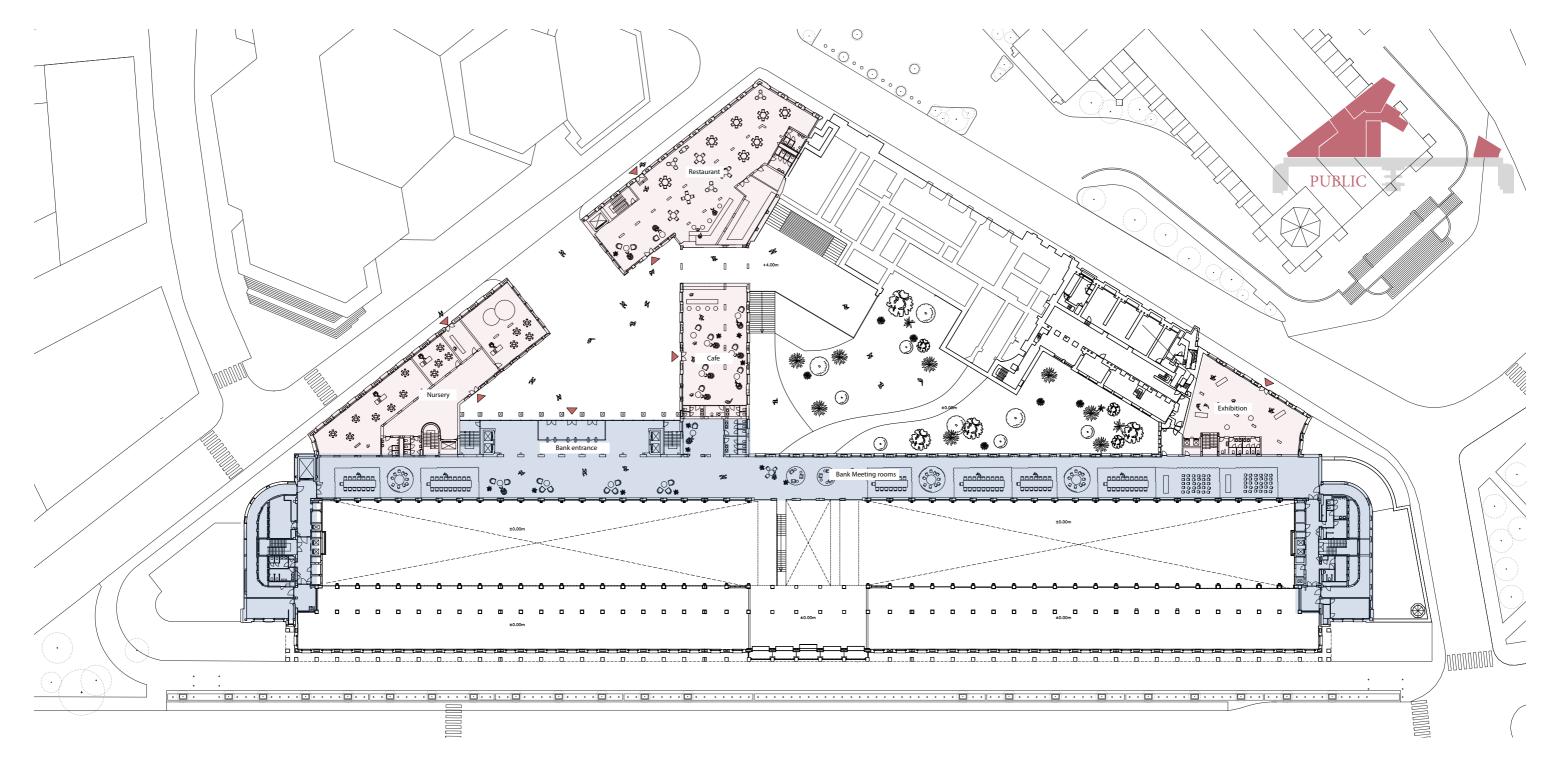
In order to elevate the new courtyard and position an auditorium underneath, a secondary structure is added.



New Face for the NBB - P4



A new facade is added to the elevated courtyard which will serve as an entrance for the bank employees.

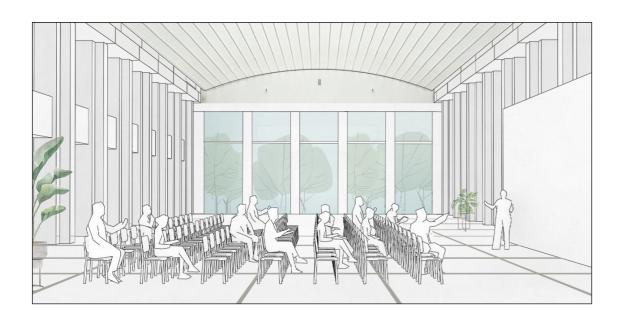


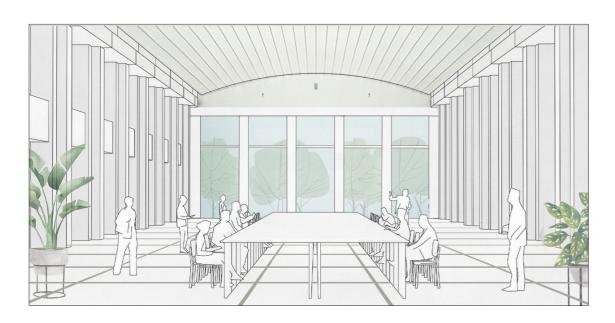
Mezzanine floor plan - proposal for P4

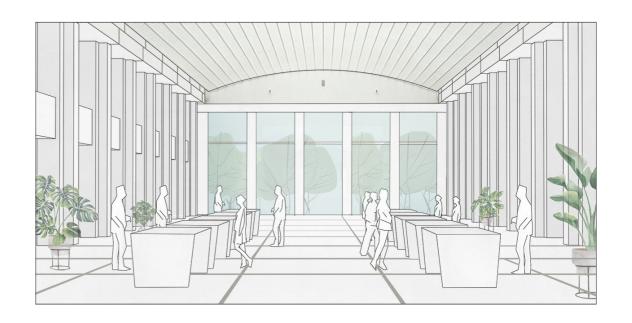
This new elevated courtyard is connected to a small square in front of the palace which connects its existing entrance to both levels, to the banking hall and to the new courtyards and entrance to the bank. I have activated all the edges of the mega structure by removing all fences and providing public functions towards the street. There is a restaurant and nursery in this two building. As for the one in the middle it is a cafe which entrance is again directed towards this new elevated courtyard.

The Banking Hall
National Bank of Belgium

Development





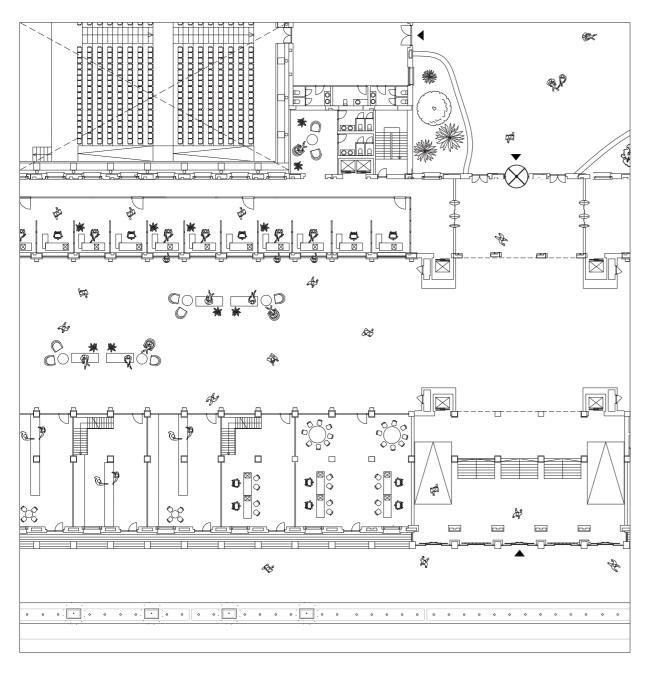


Banking Hall Proposal - P2

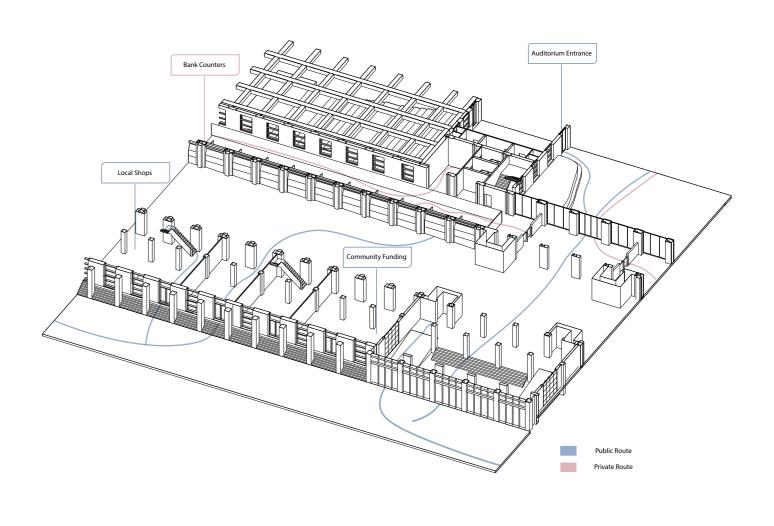
The banking hall that I proposed for P2 is flanked with its two new ends and is planned to be an accessible street interior which could transform and host different programs during the week. There will be open lectures held as well as discussions, official events. During some days of the week there could be a market for an exchange of tangible things.

Comments P2

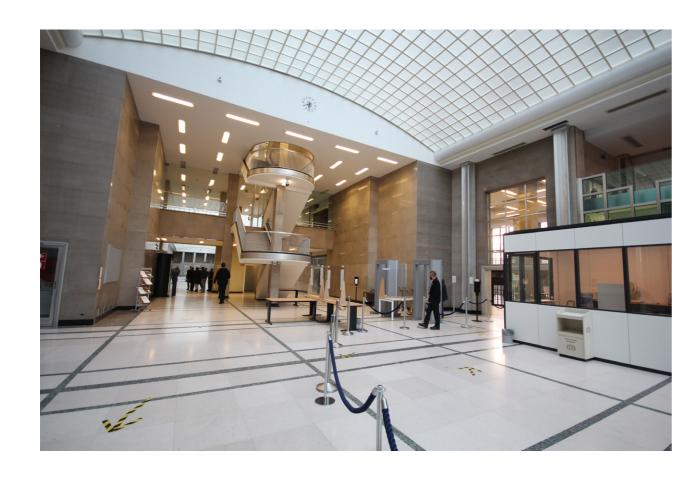
What does it mean to create a permeable building? For example, you show a transparent façade but tell us you would like to repeat the historic fifties/sixties façades.

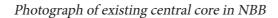


Ground floor plan close up - proposed P3



Axonometry of ground floor plan fragment - proposed P3



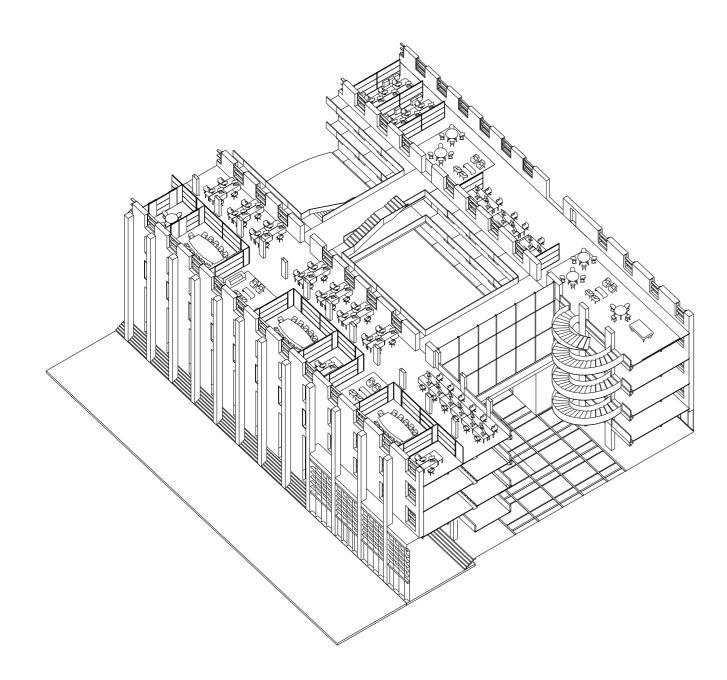


The existing banking hall is divided into two parts by the central core which serves as a for bank employees to the office floors. However, it is inefficiently used and also limits the entrance for the public completely.



Proposal for new central atrium

The existing central core is removed and a new functional atrium is proposed which will serve as a vertical connection for the employees but also would provide visual connections between the bank workers and the public within the alternative banking hall.

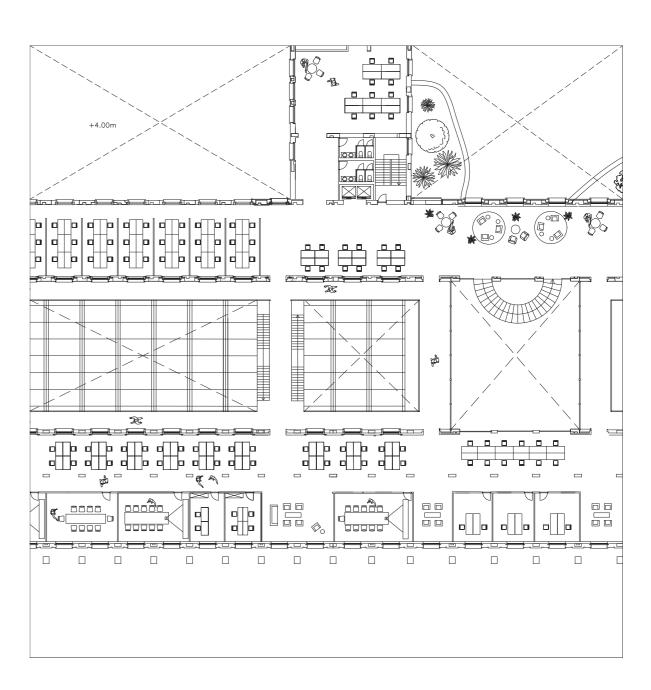


Proposal for new central atrium

The new circular staircase connects the mezzanine level of the banking where the private entrance for the bank is positioned and all the office floors above including the ones above the existing glass ceiling.

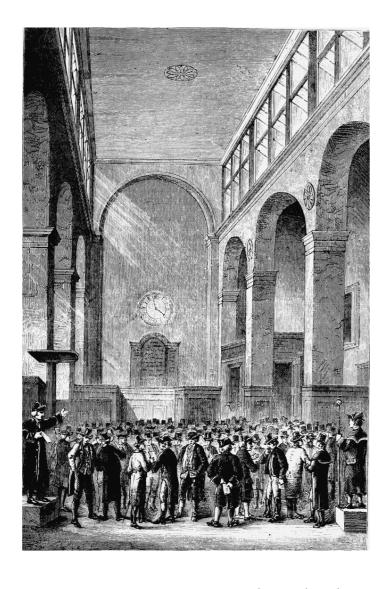
Removing of central staircase: how is the roof mended?

Connected to the existing glass block roof?



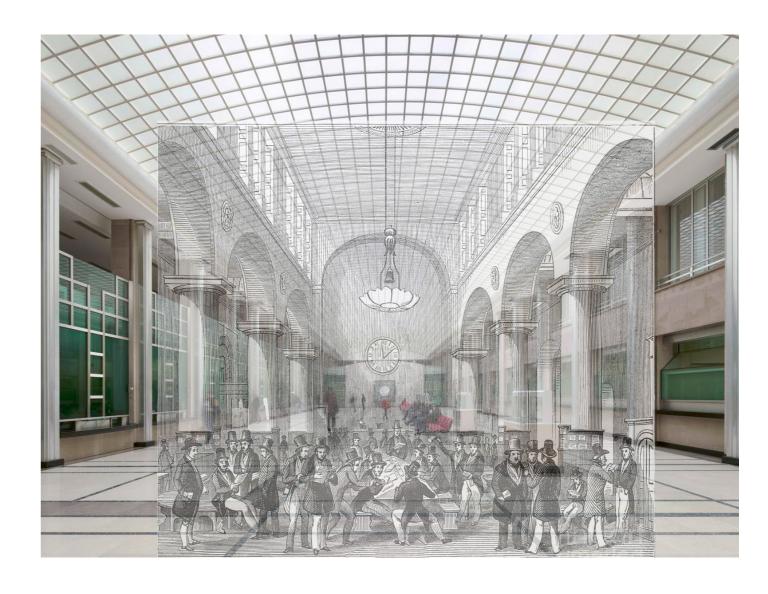
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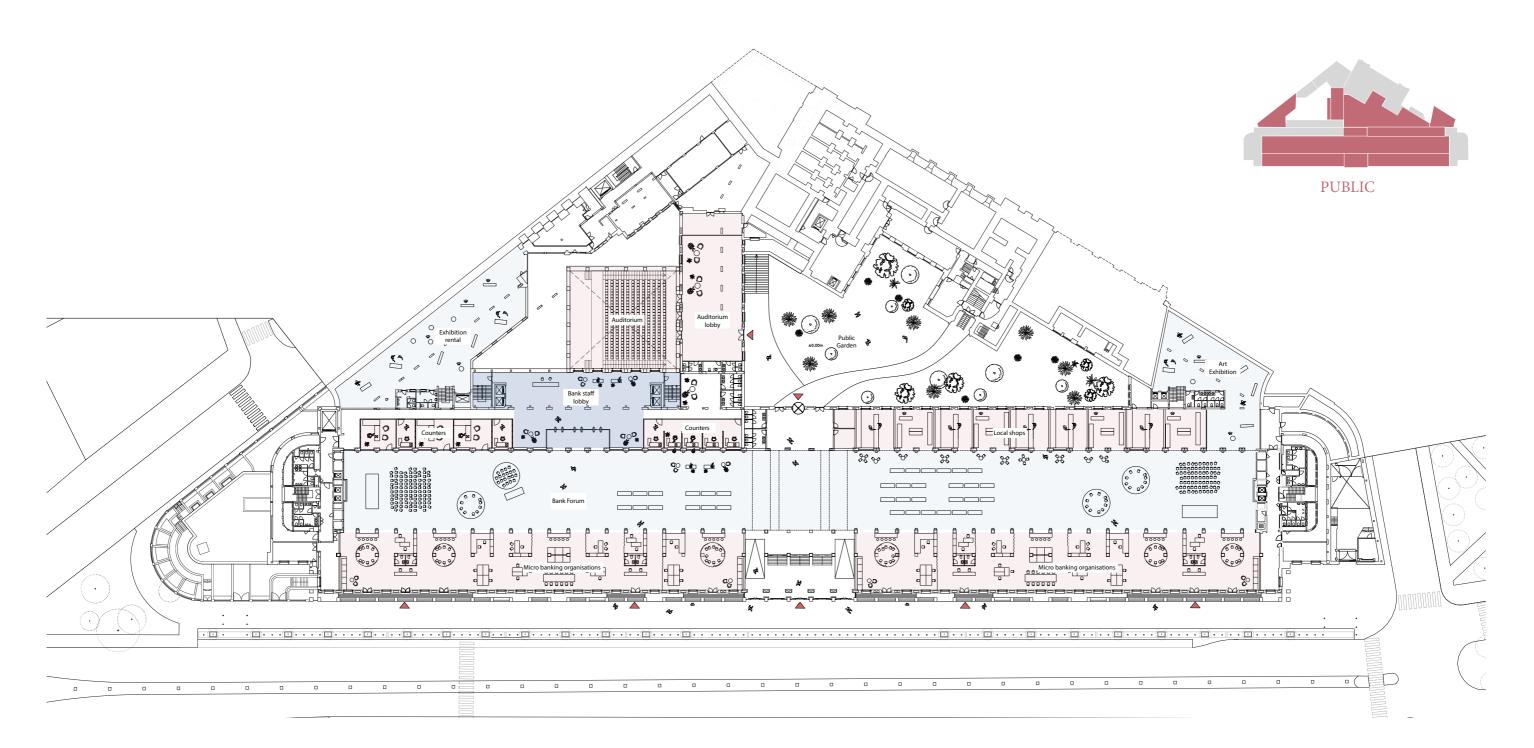
London Stock Exchange

What if the banking hall becomes a City forum - a democratic and protected place without hierarchies which the bank supports



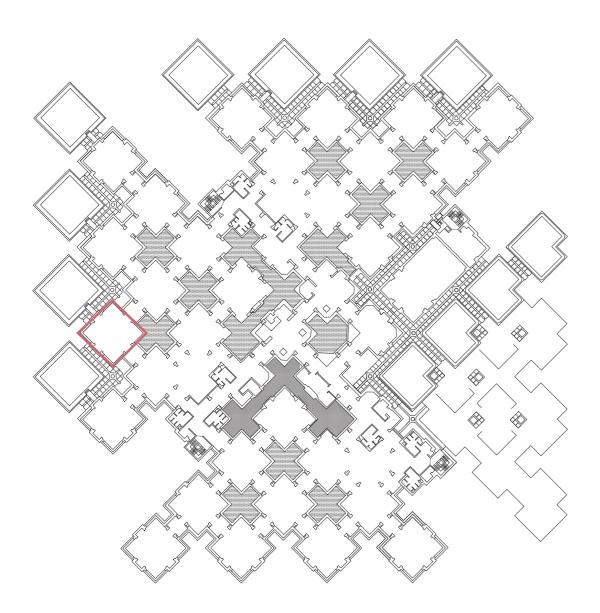
Collage of current banking hall in NBB and London Stock Exchange

I did a collage juxtaposing the banking hall of the national bank of Belgium and the stock exchange of London. My goal for the future bank is for the banking hall to return back to its roots and turn into a city forum. It is a democratic and protected place without hierarchies which the bank supports. It will be venue for speeches, marketplace, place for bartering, place for exchange of knowledge and other valuable things.



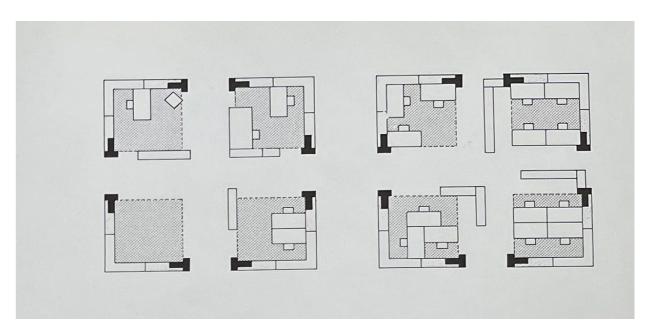
Ground floor plan - proposed P4

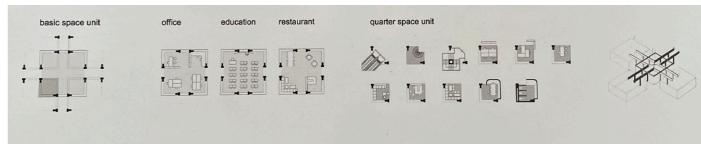
What i have aimed to created is an interrupted public interior in the banking hall. Without the middle core not there are two crossed main axis one towards the garden and the other is the city forum. On this side of the banking hall i have designed a plan which is hosting organisations all related to alternative banking. Some of them are associated with time banking systems and services, others with environmental care or homeless people where people could volunteer their time to take part in their activities. Since the bank accommodates local currencies this segment of the banking hall is hosting local communal shops where this local currency could be used. On the other side, there are the bank counters for the public and the new entrance for the employees. In order to devote the ground floor completely without interrupting the security line of the bank, this new intruded entrance in created. On the back we see the elevated courtyard with a garden which is leveled with the banking hall and is publicly accessible. The second courtyard now has an auditorium underneath which could be accessed from the garden at this point.



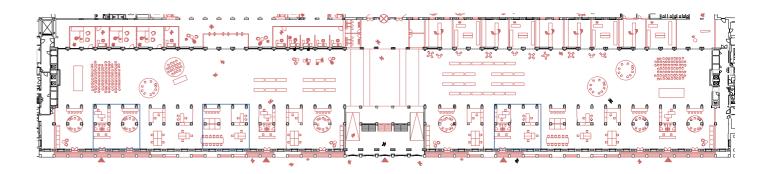
Ground floor plan, Centraal Beheer - Hertzberger

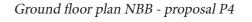
In our first quarter our group worked on the model and drawings for Centraal Beheer. The plan consisted of this repeated 9 by 9 square structure and within different functions were hosted. This created an almost infinite structure that could easily expand if there is a need to and easily could be transformed into a different program. Some of the units hosted different desk layouts, kitchens, restaurants, services and many other. I used this typology as inspiration for the organizational layout of the ground floor and for the bank offices above.





Herzberger, H., McCarter, Robert. Herman Herzberger. Nai010 Publishers, [2015]



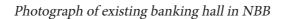




This is a zoom in of the ground floor plan. As we can see following similar example, since the building is 200meters long, following the grid created by the columns, I have decided to organise this space.

Some of the squares contain more service space, other only desk layout or could be more of a meeting space as in this case.





The public is not very welcomed in the current building of the bank.

There are a few bank counters in this enormous banking hall for money exchange. The rest is inefficiently used and empty.



View of new banking hall - proposed P4

The new banking hall is a lively place, where people interested in micro banking could meet and exchange ideas and services. On the right is also positioned the new entrance for the bank employees on the ground floor.

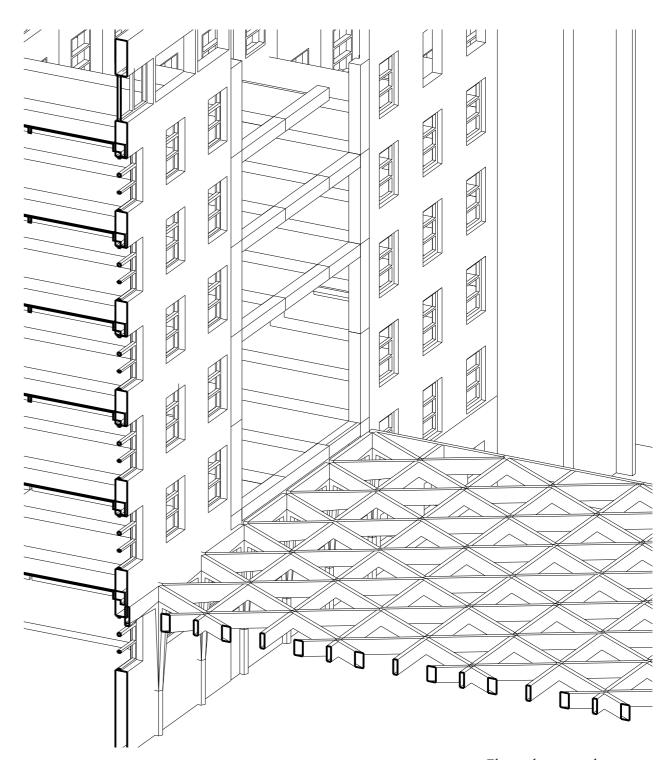
Building Technology
Construction Details

Inspirations & Development





Assen Station, Netherlands Powerhouse Company + De Zwarte Hond

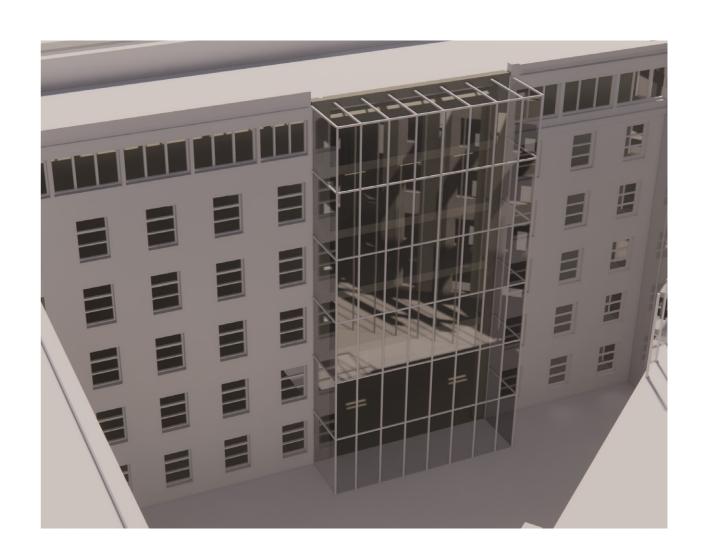


Elevated courtyard structure

I have adopted the structure from Assen Train station to elevate the courtyard and place an auditorium underneath. The problem with this structure is that in order to use it for this big span the timber beams have to very massive and then a lot of space is used.



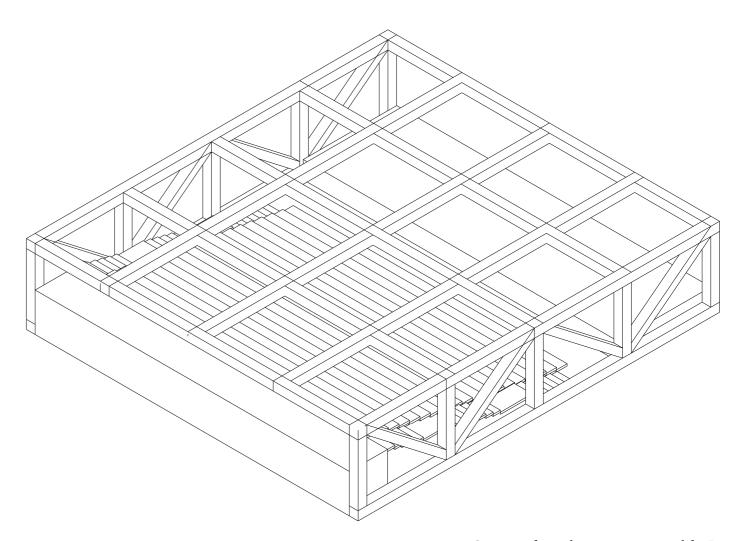
3D model view of elevated courtyard and proposal for new facade



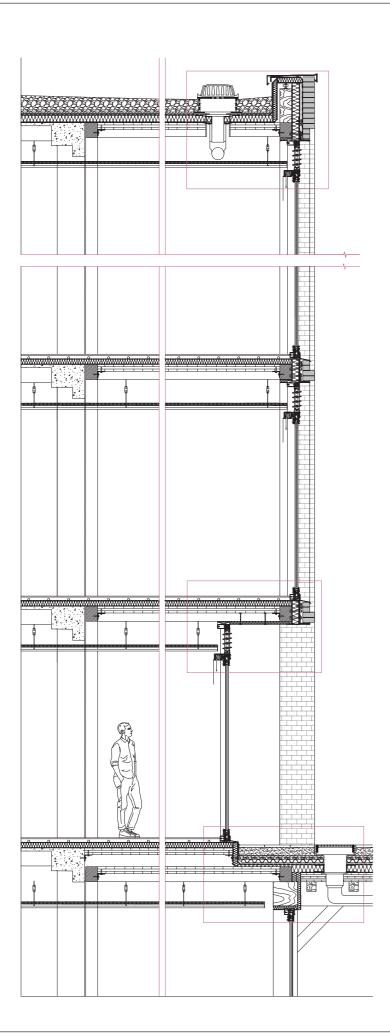
New glass facade on elevated courtyard - proposed after P2



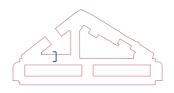
Inspiration for auditorium structure /Truss bridge/



Structure for auditorium - proposed for P3

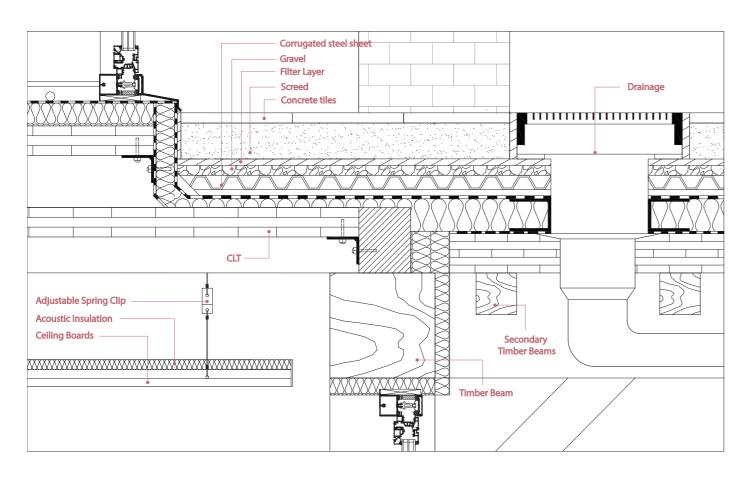


Detailed section of new facade /elevated courtyard/

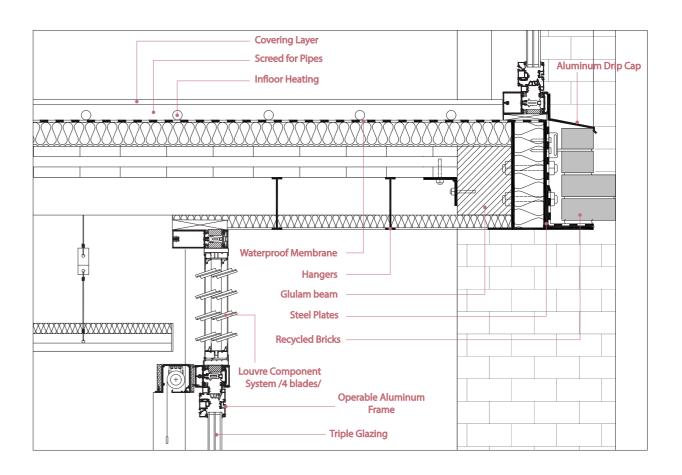




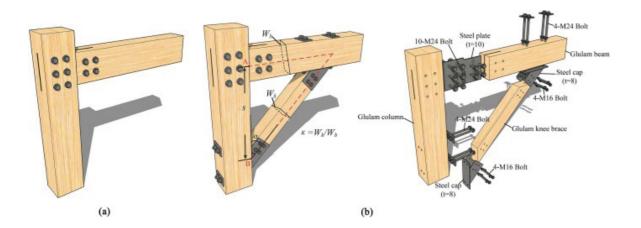
Detailed elevation of new facade /elevated courtyard/



Detail 1:10 roof atrium /elevated courtyard/

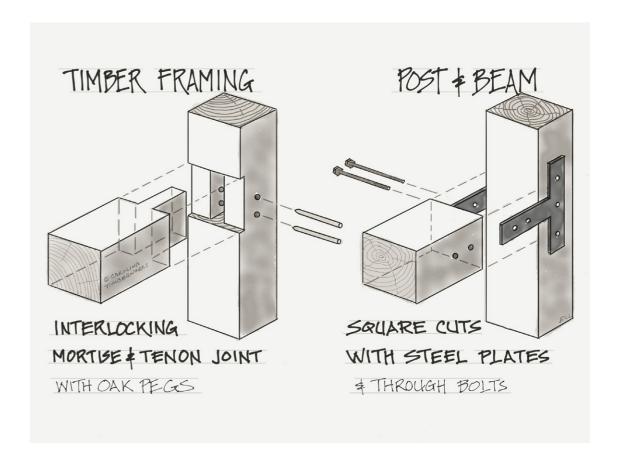


Detail 1:10 ground floor

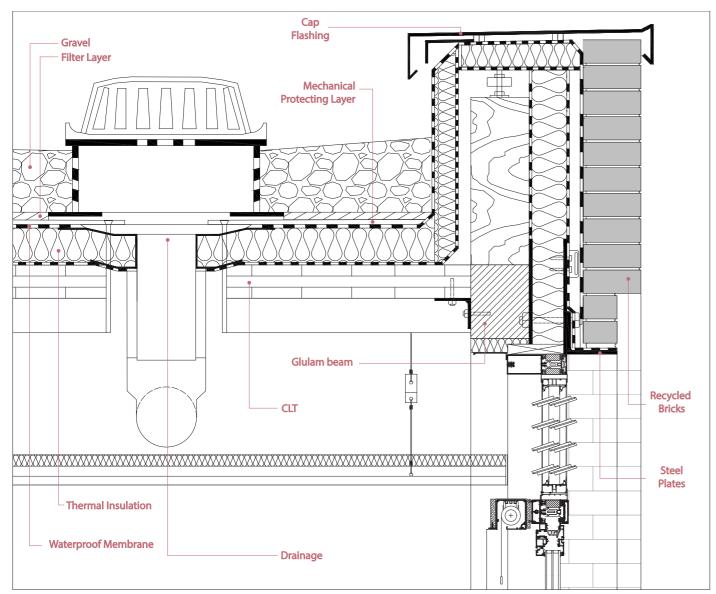




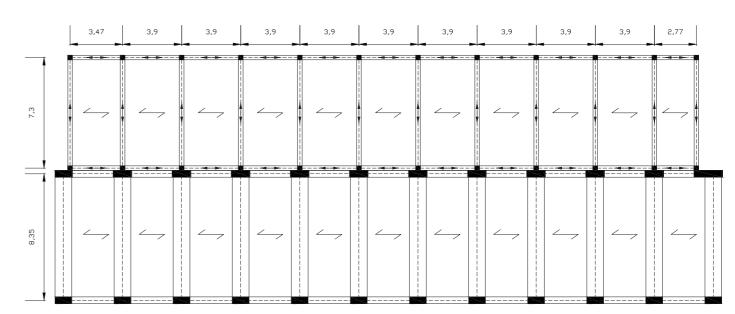
Glulam columns & Beams Connections Inspirations



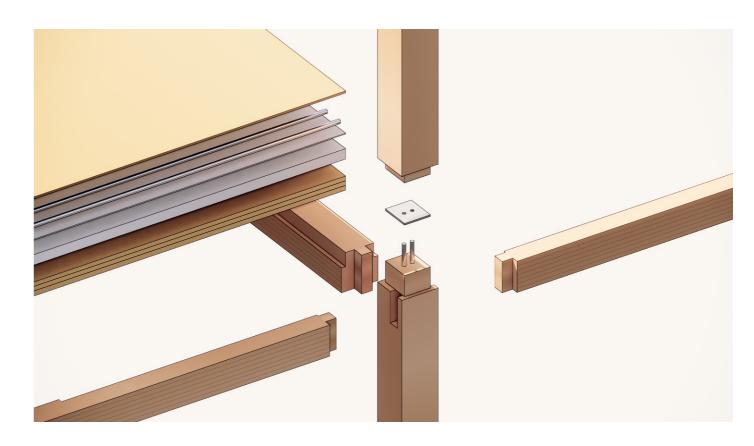
Glulam columns & Beams Connections Inspirations



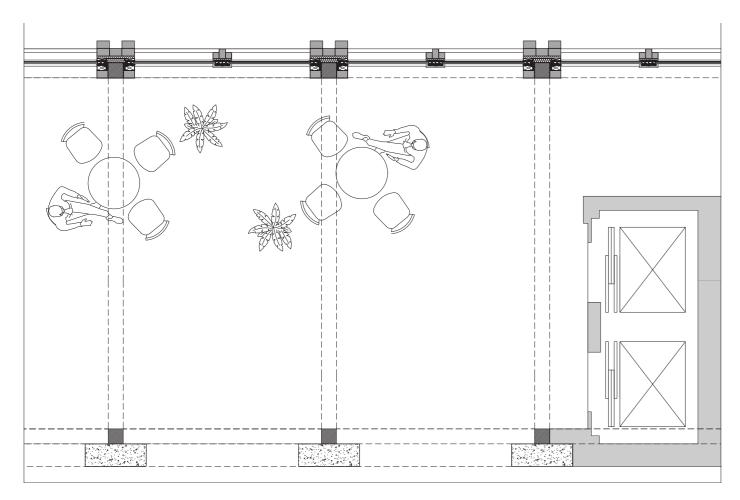
Detail 1:10 roof new facade



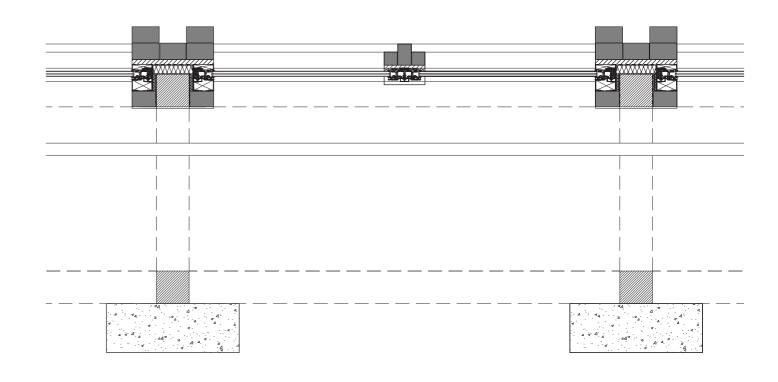
Load distribution diagram



Glulam beams & columns construction



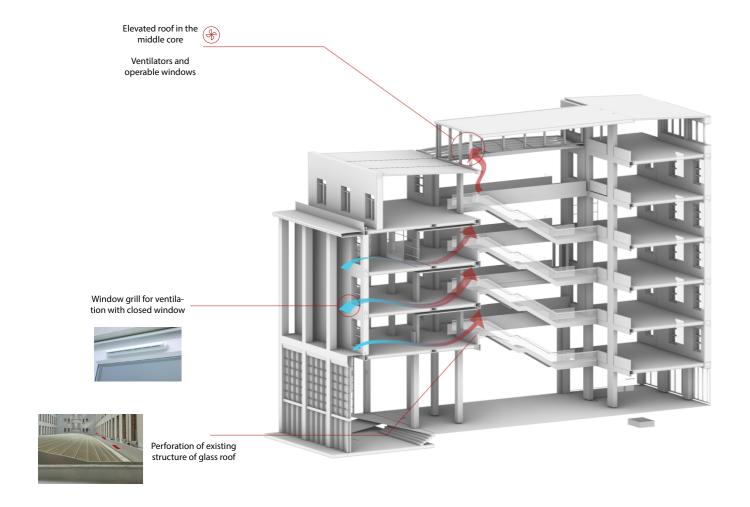
Close up of new facade for employees



Horizontal detail of new facade for employees

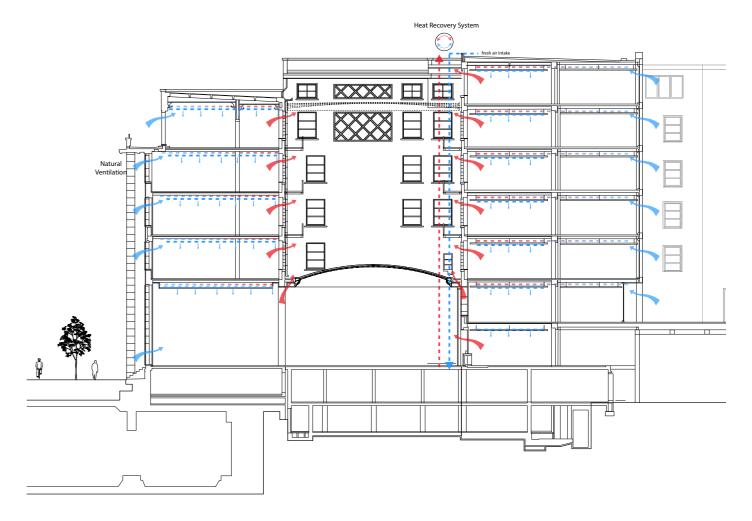
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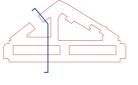


New functional atrium in the NBB

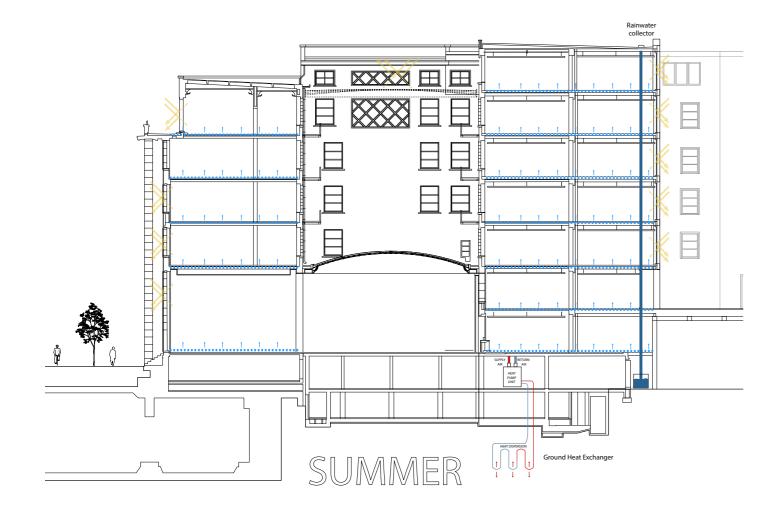
With the removal of the middle core that interrupts the banking hall, I have designed new atrium which is one level higher than the existing glass ceiling. It is covered with operable windows which server for taking out the still air out of the atrium through the use of fans.

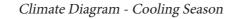


Natural and Mechanical Ventilation

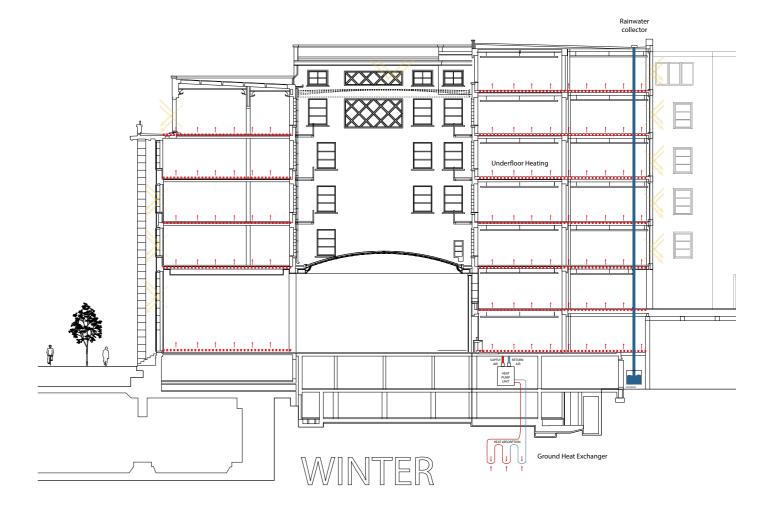


By adding a new second facade, I have provided an opportunity for natural ventilation in the building. Due to the stack effect, the atrium will be used for taking out the warm air. Using heat recovery system the exhausted air will be cooled and used for mechanical ventilation within the building.





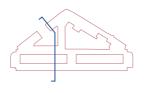
In order to propose more sustainable climate system which will provide comfort both to the workers and visitors, I have decided to use geothermal system, which will be taking advantage of the earth temperature during summer to cool the building through underfloor cooling.



Climate Diagram - Heating Season

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In order to propose more sustainable climate system which will provide comfort both to the workers and visitors, I have decided to use geothermal system, which will be taking advantage of the earth temperature during summer to cool the building through underfloor heating.



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Physical Model - 1:200

Physical Model - 1:200