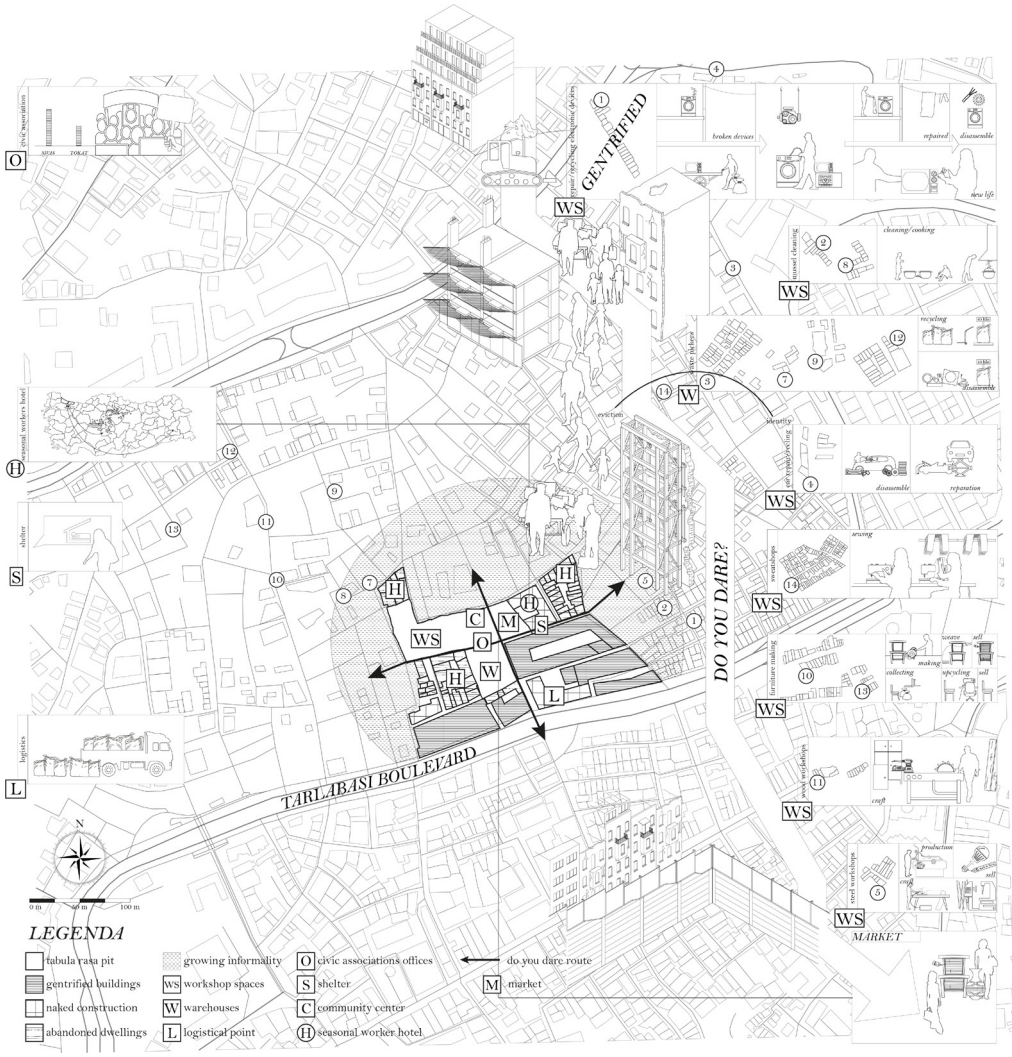


REFLECTION

Modernizing a City of Migrants

Ron Weissenburger

MODERNIZING A CITY OF MIGRANTS

The Hidden Informal World of Tarlabası

Ron Weissenburger
4676971

Reflection Graduation Project:
MSc 3/4 Architecture - TU Delft
17-05-2023

Studio:
Borders & Territories – Transient Liquidities along the New Silk Road II

Location:
Istanbul, Turkey; Tarlabası

Main mentors:
F. Geerts & O.R.G. Rommens

Building technology mentor:
G. Koskamp

INTRODUCTION

The focus of this thesis is on the phenomenon of the informal settlement and its informal economy. The location of the graduation project called Tarlabası is an informal settlement in the middle of the city centre of Istanbul. The neighbourhood has been a shelter for the poor, refugees and minorities for generations. The district functions as its own hidden and self-regulating world. This has created an informal economy that is inextricably linked to the rest of Istanbul, such as the waste/recycling industry. It cannot exist without the informal branch of waste pickers, who are responsible for 80% of recycling in Turkey. The unique district of Tarlabası is seen as bad and criminal by the authoritarian neoliberal city planners. Therefore, the neighbourhood has already been hit by gentrification processes, ignoring the unique characteristics and social roots of this neighbourhood. Urban renewal or gentrification or however you want to name it, is seen as a necessary tool to erase certain parts of social and physical identities created in the last 50 years via programs of demolition and resettlement. Residents are evicted or given unfair compensation to leave their homes or workplaces. As a result, the gentrification processes result in a displacement of the poor, driving them away from the city centre and their informal work. In 2009, at least one million residents in Istanbul were under threat of forced eviction due to the Urban Transformation Project. The unique characteristics, such as creativity, flexibility, intrinsic value and self-regulation are ignored by the top-down view of modernization, leading to generic neighbourhoods without economic flexibility and with social segregation, but also resulting in a further decline of informal settlements. This thesis aims to take a critical look at the current neoliberalist modernization processes of urban areas around the world through the case of Istanbul. Urban informality is receiving more and more attention in the literature, but there is still a lot of uncertainty about how we can deal with this phenomenon in urban design and architecture.

1. What is the relation between your graduation project topic, your master track (Ar, Ur, BT, LA, MBE), and your master programme (MSc AUBS)?
Since I studied the master's degree in architecture, I am interested in how architecture can contribute to addressing problems in complex situations and power fields. The theme of modernization and informal neighbourhoods and its practices is still a major issue in architecture and urban planning and is also an interesting and challenging theme for me to research and design with. The graduation topic is relevant for my master track architecture, because it is part of a global problem, to which architecture can offer an answer or create awareness.

The graduation project can be seen as an attempt of designing an inclusive way for a group that in reality is pushed out of the city centre. The unfamiliarity with the inclusive modernization of informal settlements is linked to a larger social and scientific framework, because practice shows that no clear strategy has yet been found for this issue. My project can contribute a small part in addressing the urgency and relevancy in finding this strategy.

2. How did your research influence your design/ recommendations and how did the design/recommendations influence your research?
The design location of this thesis will focus on the demolished part in the Tarlabası district of Istanbul to translate the focus of the research and its questions into an architectural project. This "tabula rasa" pit is located on the edge of the neighbourhood and was originally intended for a neoliberalist way of gentrification. This building site is the connection and contrast between informality and formality. It is only a matter of time when Tarlabası and its identity and memories will disappear completely through this urban transformation project.

The location of the design project emerged from the excursion in Istanbul (see the research framework on page 3 & 4). The orientation towards a research theme in Istanbul has led to the delineation of an area of interest at neighbourhood level. The research of Tarlabasi on the layers: site, system and materials & tectonics in combination with writing the paper on the theme of gentrification, has aroused a specific interest to carry out an architectural experiment in the gentrification zone of this neighbourhood. Partly because at this location the friction and contrast formation of all layers from the research phase occur, such as between themes like formal and informal, rich and poor, neoliberal and traditional liberalism, local and global. The location of the project can be seen as an inbetween zone where the in-between can be conceived as a place where different things can meet and unite, or where polarities that conflict can intertwine again.

The design forms a shelter for informality, with a new typology providing space for the accommodation of informal practices related to recycling, dismantling, repair and upcycling. The design serves as a hybrid structure, with room for self-regulation, creativity and craftsmanship that make the informality strong in Tarlabası.

The program of the design is based on the field research in Istanbul combined with the Modi Operandi workshop and the mapping after the excursion in Istanbul. These research methods gave access to understanding the system behind the informal practices, the program needed to accommodate them and how these workplaces should be formed and who uses them. It has been the input for the design principles and the concept that form the basis of the final design.
The concept of the hybrid structure and the creation of design variants led to the analysis of case studies, in which a form of flexibility was integrated into the design. These case studies were analyzed on the design principles, systems for flexibility such as grid sizes and accessibility. These case studies have been turned into a toolbox for designing the hybrid structure for informality.

3. How do you assess the value of your way of working (your approach, your used methods, used methodology)? *
The research started by mapping 4 themes that are relevant for the entire Marmara region in Turkey:
- Border/migration map
- Infrastructure/congestion map
- Soil/fault lines map
- Water/aquifer map

These maps were made in groups and distributed throughout the B&T studio. By sharing information through maps, everyone was able to form their own interest in the complex and large scale of the research area. In this phase my interest in the informal settlement and its practices has developed.

During an excursion in Istanbul, an ethnographic research method was used to better analyze the inner workings of Tarlabası. The first few times, purely observation, mapping and photography was used to understand the complexities of the district. Later on during the excursion, a more interactive way of ethnographic research was applied to understand the system behind the informal activities, but also where the people behind this system come from. This was done through interviews. In addition, the interviews were used to analyze ownership, self-regulation and the social functioning of the neighbourhood and how this is expressing itself in spaces and physical contexts.

After the excursion, a theoretical paper was written to investigate the political position and context of the informal settlements in Turkey on the basis of literature. In addition, this method has been used to investigate the current urban and architectural context in relation to the informal settlement. The ultimate goal of this method was the creation of a conceptual framework that attempts to break the vicious circle of decline into a virtuous circle of improvement using the self-regulating effect of the informal settlement. The theory paper was therefore used as a design tool.

Furthermore location-oriented analysis was carried out on the themes, waste/recycling system, gentrification processes and materialization and tectonics using drawings and maps. Part of the input for these methods was created by field work and part by literature research.

*(*on page 3 & 4 an overview of the research and its methodology is given)*

During the Modi Operandi workshop organized by the studio 2.5D models were made. In this workshop phenomena or techniques have been analyzed that cannot be done on the basis of drawings. I analyzed how the techniques of disassembling and reassembling can be used to create an architectural assemblage and how to lose control of a spatial situation in order to analyze the self-regulating aspect of the topic.

After the P2 the focus of analysis was mostly oriented via drawing and 3D modelling. Most of the analysing was done via design. Input from case studies formed a design toolbox on the topics that formed input for the design, especially for creating a flexible system inside the hybrid structure.

During the design process, a 1 to 20 detailed model is also used for testing material and construction methods, climate systems and the connections between them.

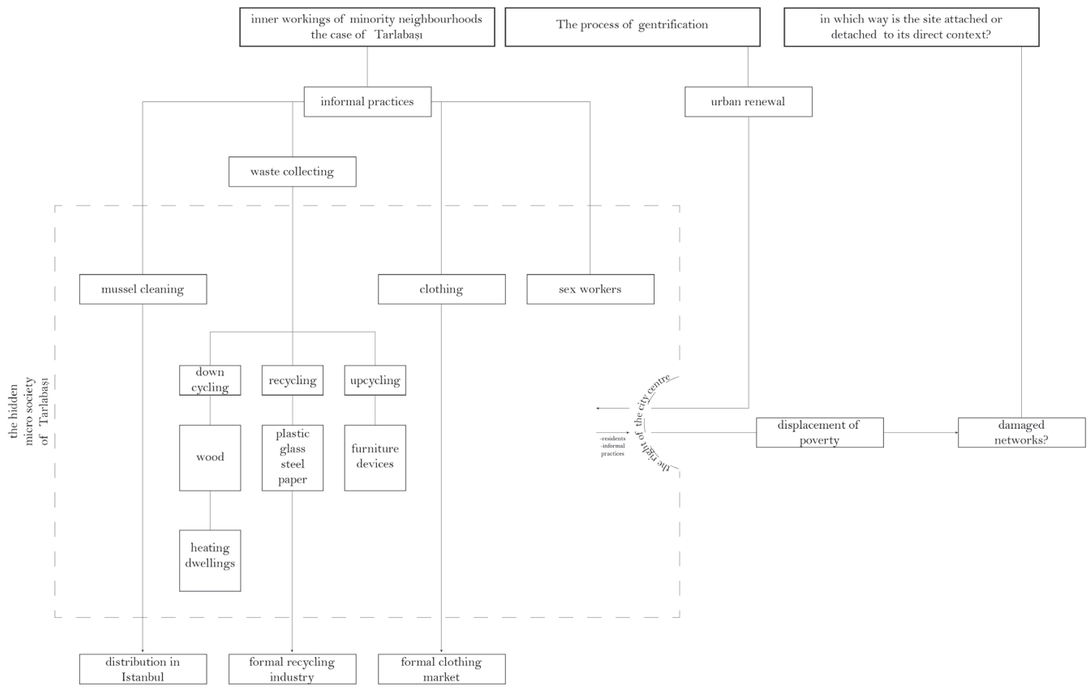
Many different methods were used during the project that shaped, tested and questioned the design. However, another research method could be used to take the project to a higher level, namely interviews and input from experts on flexible systems or of combining architecture in informal contexts.

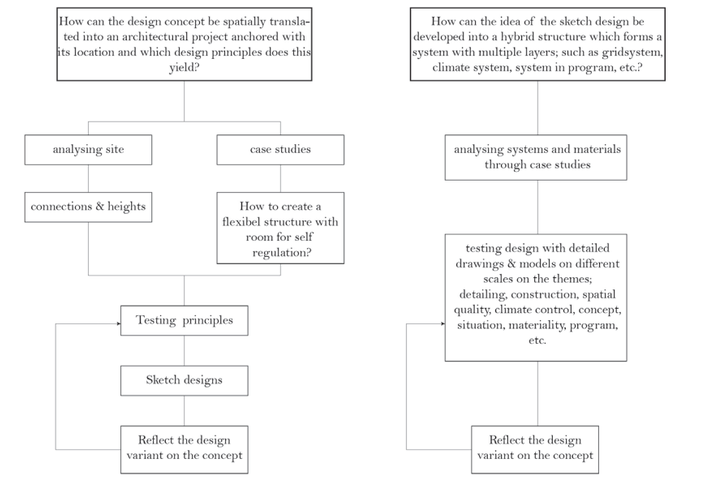
ORIENTATION	*EXCURSION*	*RESEARCH*	*MODI OPERANDI*	*DESIGN BRIEF*	*SKETCH DESIGN*	*FINAL DESIGN*
RESEARCH TOPICS - Border/migration - Infrastructure/congestion - Soil/fault lines - **Water/aquifer**	- The informal settlement - Informal pratices - Displacement of the poor / gentrification	- Site - System - Materials & tectonics	- Site - Assemblage - Spatial situation	- Site - Strategy - Program	- Site - Form - Program - Building methods	- Materials - Program - Building methods - Construction & detailing
METHOD Mapping topics in the Marmara region in group work devided over the B&T studio	Ethnographic research: field work by observing, photography, drawing & interviewing	Drawing, mapping & literature research: Analysing the site, how my topic is connected to a larger system & how it manifest itself in architecture/materiality via drawings and mapping. Also a paper is written via literature research	Model making: Analysing how the techniques of disassembling and reassembling can be used to create an architectural assemblage and how to lose control of a spatial situation in order to analyze the self-regulating aspect of the topic.	Conclusions research: Using the input of the research to translate it in a design strategy.	Sketching, analysing & 3D modeling: Using a mix of analysing the site & case studies to implement spatial interventions and to create clear design principles in order to meet the concept of the project. And testing different design variants.	Sketching, analysing, modeling (corner workshop) & 3D modeling: Using detailed drawings to test the design and its concept on different scale levels. Also

WATER MAP → *FIELDWORK DATA* → *DRAWINGS* → *THEORY PAPER* → *2.5-D MODELS* → *DESIGN STRATEGY* → *DESIGN VARIANTS* → *FINAL DESIGN*

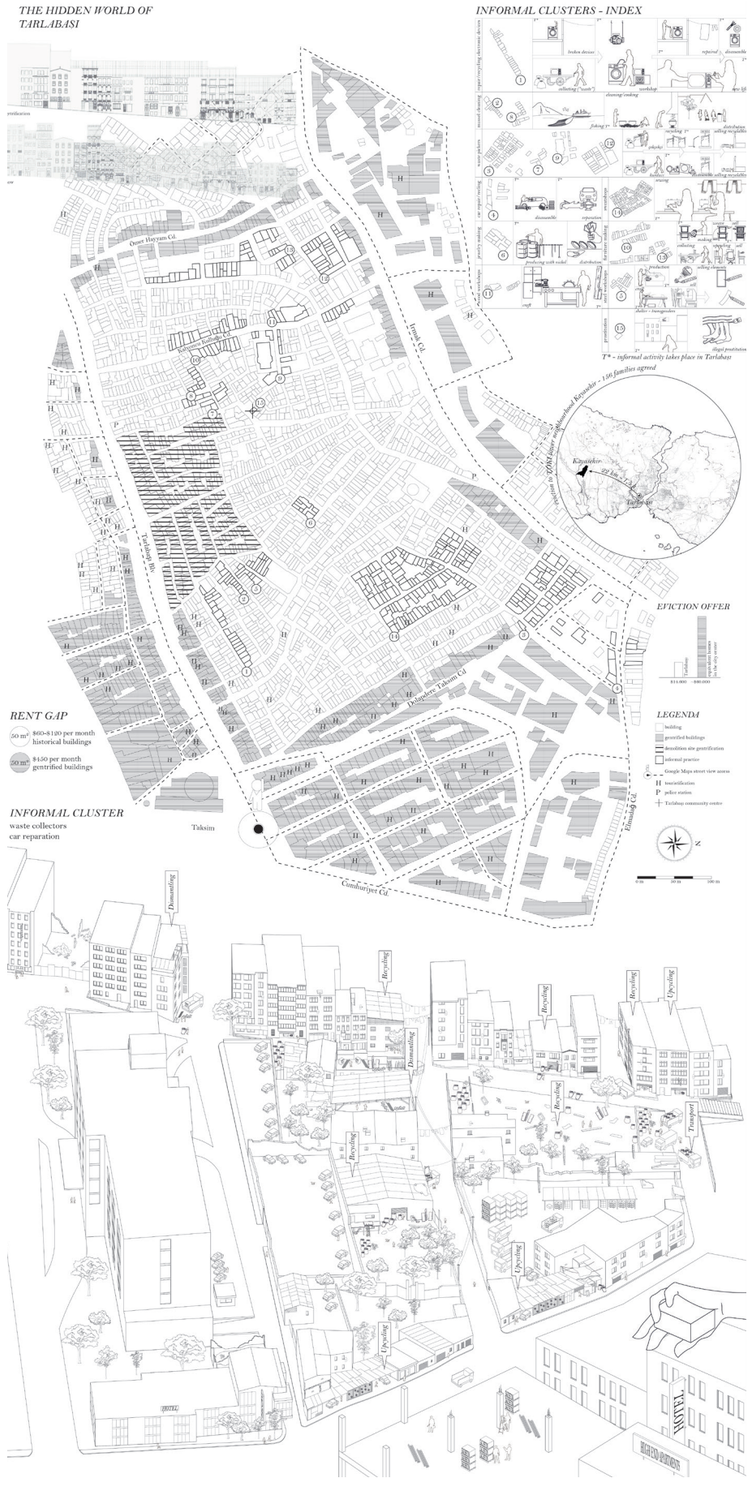
P1 P2 P3 P4

LAYERS





Research framework of the graduation project



Site research drawing - The Hidden World of Tarlabasi

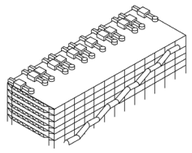
Modi Operandi model - how to lose control?

DESIGN PRINCIPLES

SYSTEM

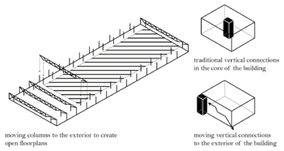
ACCESSIBILITY

CONCLUSION

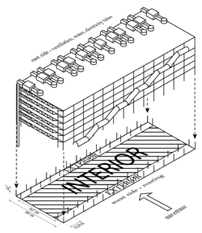


CENTRE POMPIDOU

Renzo Piano, Richard Rogers
France - Paris
Centre for modern art
101.355 m²
1977



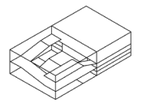
CREATE FLEXIBLE OPEN FLOORPLAN BY MOVING ITS SERVICES, CORRIDORS, ELEVATORS & STRUCTURAL MEMBERS ON ITS EXTERIOR



THE INNERWORKINGS OF THE BUILDING BECOME VISIBLE ON THE EXTERIOR

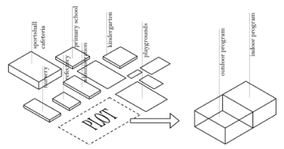
OPEN FLOORPLAN
ACCOMONDATING
THE PROGRAM

TURN BUILDING LITERALLY INSIDE OUT

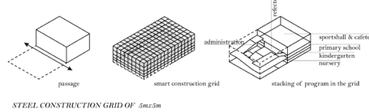


MELOPEE SCHOOL

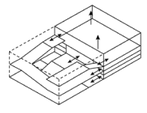
XDGA - Xaveer De Geyter Architects
Belgium - Ghent
School
4.630 m²
2020



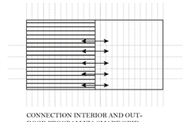
CREATE COMPACTNESS BY STACKING PROGRAM



STEEL CONSTRUCTION GRID OF 5m.x5m

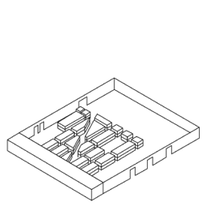


EFERY FUNCTION HAS ACCESS TO OUTDOOR PLAYGROUND TWO VERTICAL CONNECTIONS IN INTERIOR



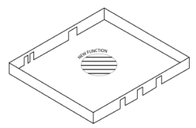
CONNECTION INTERIOR AND OUTDOOR PROGRAM VIA SMART GRID SYSTEM

COMPACTNESS CAN CREATE DIRECT ACCESS TO OUTDOOR PROGRAM WHICH FACILITATES ITS INTERIOR PROGRAM

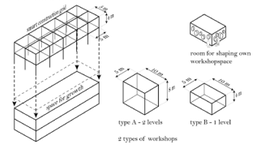


NDSM LOODS

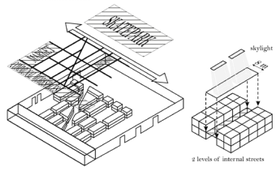
Dynamo Architecten
Netherlands - Amsterdam
Maker spaces
7.300 m²
2005



CREATE CREATIVE BREEDING GROUND IN VACANT OLD INDUSTRIAL HALL



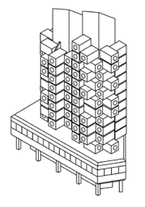
CREATE CREATIVE BREEDING GROUND IN VACANT OLD INDUSTRIAL HALL



CREATE INTERNAL STREETSYSTEM WITH PRODUCTIVE SPACES, PUBLIC SPACES AND COMMUNAL SPACES

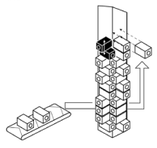
USE OF URBAN GRID WITH PRODUCTIVE SPACES

CREATE A CITY INSIDE OLD INDUSTRIAL HALL WITH ROOM FOR SELF-REGULATION AND CREATIVITY BUT WITH THE GUIDANCE OF THE ARCHITECTS VIA AN "URBAN" PROGRAM AND A SMART CONSTRUCTION GRID

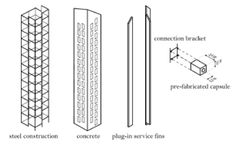


NAKAGIN CAPSULE TOWER

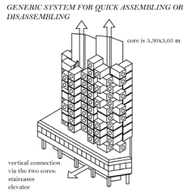
Kisho Kurokawa
Japan - Tokyo
Dwellings & workspaces
3.091 m²
1972



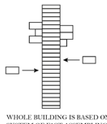
MASS PRODUCTION OF GENERIC DWELLING UNITS THAT CAN BE REPLACED OR COMBINED OR ADDED TO THE BUILDING



GENERIC SYSTEM FOR QUICK ASSEMBLING OR DISASSEMBLING

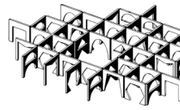


THE TWO CORES FORM THE VERTICAL CONNECTION BETWEEN THE CAPSULES AND THE GROUND FLOOR



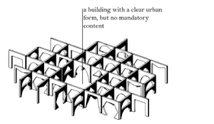
WHOLE BUILDING IS BASED ON A SYSTEM OF FAST ASSEMBLING AND DISASSEMBLING OF CAPSULES

CREATE VIA INDUSTRIALIZATION A SYSTEM WHICH IS FLEXIBLE AND CAN GROW, LITTLE ROOM FOR SELF REGULATION IN THE PHYSICAL FORM OF THE BUILDING

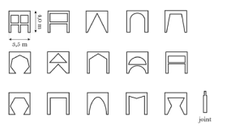


ABBOTOIR FOODMET

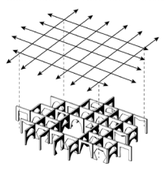
OBG
Belgium - Brussel
Food market
21.000 m²
2013



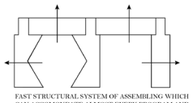
CREATE A BUILDING THAT COMMUNICATES THE CURRENT VALUES AND ASPIRATIONS OF THE COMMUNITY VIA FLEXIBILITY



OVER-DIMENSIONED PLATONIC PANELS FORM DOZENS OF LARGE IDENTICAL ROOMS THAT CAN ACOMMODATE ALMOST ANY USE



NO CLEAR ROUTING - ROUTING IS PART OF THE FLEXIBLE STRUCTURE SYSTEM

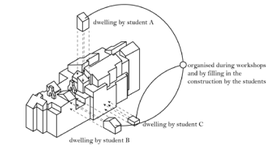


FAST STRUCTURAL SYSTEM OF ASSEMBLING WHICH CAN ACCOMONDATE ALMOST EVERY PROGRAM AND EXPANSION IN ALL DIRECTIONS POSSIBLE

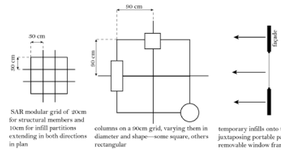
THE SYSTEM PLATONIC PANELS ARE FORMING A CLEAR URBAN FORM, BUT THE PROGRAM INSIDE CAN CHANGE BY ITS NEEDS AND CAN EASILY GROW AND ACCOMONDATE NEW OR CHANGE IN PROGRAM DUE ITS OVER-DIMENSIONED PANELS

LA MÉMÉ

Simone en Lucien Kroll
Belgium - Lambrechts-Woluwe
Student homes
1971



PARTICIPATORY DESIGN WITH THE USERS OF THE BUILDING

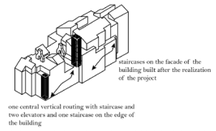


SAR modular grid of 20cm for structural members and 10cm for infill partitions extending in both directions in plan

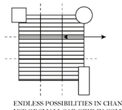
columns on a 90cm grid, varying them in diameter and shape—some square, others rectangular

temporary infills onto the façade, juxtaposing portable partitions with removable window frames

KROLL IS GUIDING THE PROCESS BY USING SAR MODULAR GRID

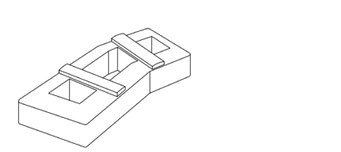


PART OF THE ROUTING IS DESIGNED WITHOUT FLEXIBILITY, BUT ON THE EXTERIOR STAIRCASES ARE BUILT BY THE STUDENTS, SO ALSO ROOM FOR SELF-REGULATION IN THIS ASPECT



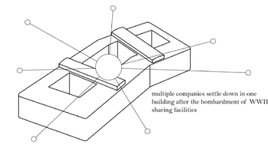
ENDLESS POSSIBILITIES IN CHANGE OF SPACE DUE TO USE OF SMALL SAR GRID IN COMBINATION WITH A CATALOGUE OF COMPATIBLE COMPONENTS

THE BUILDING IS DESIGNED VIA A PARTICIPATED DESIGN PROCESS VIA A SMART GRID SYSTEM A FLEXIBLE FLOORPLAN IS INTEGRATED IN THE DESIGN, THE BUILDING BECOMES AN PHYCICAL ENVIRONMENT REPRESENTING ITS SOCIAL ECOLOGY

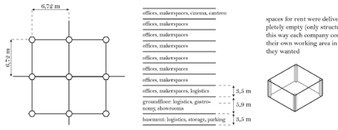


GROOT HANDELSGEBOUW ROTTERDAM

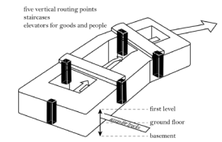
Huig Aart Maaskant & Willem van Tijen
Netherlands - Rotterdam
Multi-company building
128.000 m²
1953



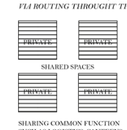
ACCOMONDATE SPACES FOR OFFICES, WAREHOUSES, SHOWROOMS FOR WHOLESALERS, BUT ALSO INTEGRATE THE BUILDING WITH ITS CITY LIFE FORMING A WHOLE ECONOMY AND NETWORK IN ONE BUILDING



USE OF SMART CONCRETE STRUCTURAL GRID SYSTEM , THE PROGRAM IS DESIGNED AND LAYERED IN SUCH A WAY THAT IT ACCOMONDATES MORE THAN AN OFFICE BUILDING, BUT ALSO SPACES THAT ACCOMONDATE SOCIAL INTERACTIONS AND LEISURE

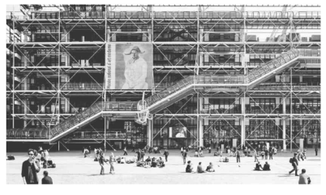


CREATE ROUTING THAT CAN ACCOMONDATE WORK, HALLWAYS ARE WIDE ENOUGH FOR FORKLIFT TRUCKS, TRUCKS CAN ACCESS WHOLE BUILDING ON THREE LEVELS VIA ROUTING THROUGHT THE THREE COURTYARDS



SHARING COMMON FUNCTION SUCH AS LOGISTICS, CANTEENS, ETC.

SMART USE OF SHARED SPACES AND PRIVATE SPACES TO ACCOMONDATE A BUILDING FULL OFF DIFFERENT COMPANIES WHILE INTEGRATING IN ITS CITY LIFE, WITH ALSO SPACE FOR OWN PREFERENCES IN FORMING THE PRIVATE WORK ENVIRONMENT OF COMPANIES



Analysis of case studies

4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?
In addition, the design offers an anonymous safe haven for minorities and the poor, as Tarlabası has functioned for decades. By making the location of the design and the informal world more accessible to outsiders, the building aims to avoid the stigma and further alienation of this important work. The hybrid informal structure for the poor will also influence its environment, because surrounding new homes will be cheaper than originally intended. In this way, the design will take over its new gentrified environment and keep it accessible for low incomes.

Due to the location and new typology of the design, this thesis aims to take a critical position with regard to the contemporary mode of urban modernization in many areas of the world, but above all to address the value of economic and social sustainability that characterizes these informal neighbourhoods. Because informality often takes over the system when the mechanism of formality fails.

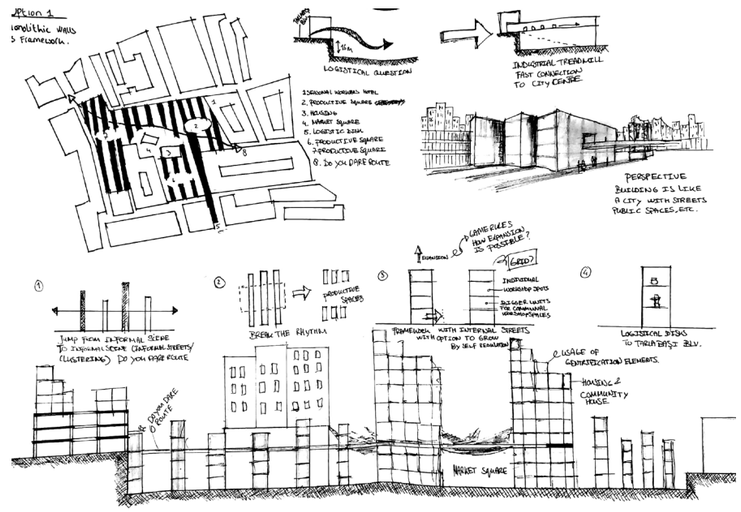
This project also helped me to position myself in the architectural field and to be aware of the impact of architecture in transformation projects. I hope that this project helped me to specialize more in inclusive designing and to gain more knowledge in elements and systems beyond architecture that can create spatial (in)justice in order to create social and economical sustainable and and formal design proposals.

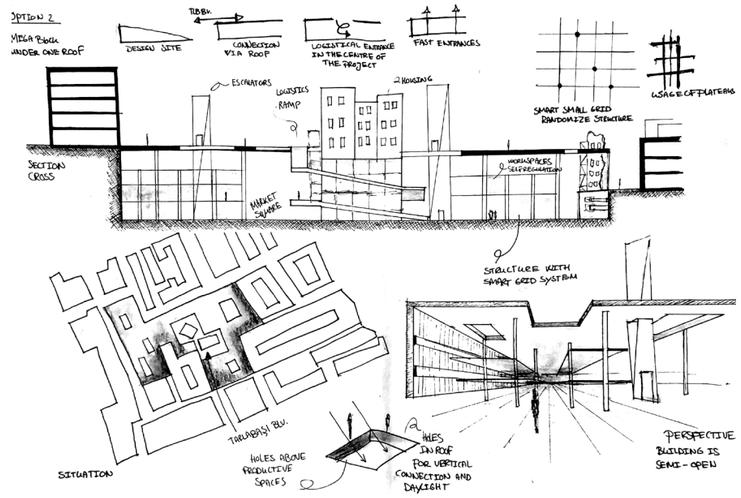
5. How do you assess the value of the transferability of your project results?
It is difficult to make statements about project results, because of course the project will not be realised. Therefore, it will not be possible to test whether this experimental project will actually work as planned, or whether it will not work at all. Therefore, this project is mainly relevant in the field of concept formation of designing with and for informal economies and neighbourhoods. Mainly in a generic way, where this project - or rather the system behind the project - can be used as a reference for other areas of the world than just Tarlabasi. Because the question of how architecture and urban planning can contribute to the revitalization and modernization of informal areas is a global issue. With this I hope that the project inspires and informs people about the importance and strengths of informality and its integration in the formal discipline of architecture.

6. Own question:
How was the division between research and design, and was this devision valuable?
The research phase in the Borders & Territories studio takes longer than most other studios, partly due to the great freedom we are given in choosing a theme for the graduation project. A longer period for orientation is therefore reserved in the study programme. After the P2, the design started. Although at first glance there is a clear dichotomy in the study program between research and design, the reality is different. I noticed that after the P2 I had a clear concept for what I wanted to design, but did not yet have collected information in terms of references / case studies of projects with similar themes. As a result, a deeper layer of research is sometimes missing in the design project, Mostly on existing systems that could have been relevant for my own design. In retrospect, it would have been more valuable if I had linked architecture projects to the themes of my research earlier, or maybe even had to let go of research for a few days before the P2 to carry out quick sketch design analyses, allowing more research by design.

7. Own question:
How is your graduation project connected to the graduation studio: Borders & Territories?
The Borders & Territories studio offers space and helps to create experimental architecture in socio-political contexts, in which my graduation topic fits well.

However, the design could have been more innovative in terms of logistics systems. For example, phasing plans could have been made in how the logistics system in the hybrid structure could have changed and modernized in the future. In this way, the project will be more sustainable, simply because further design could be done in terms of future scenarios. This could also have been a nice connection to the borders & territories studios.





First sketches based on input of research & case studies