

# **INTERLACED.**

**- A 1970s mass social housing transformation interlaced with a new built social housing complex -**

## **Final reflection**

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Research mentor: Leeke Reinders

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## STUDIO THEME

The main subject of the studio is “Spolia”, that can be explained as: “the left-overs or <<spoils>> of a building, which find themselves back in a new structure”[1]. The given site offers a variety of existing material - in order to answer the studio question of “what to keep?” an analysis and evaluation of existing tissue is needed.

The use of spolia can be economically, ecologically or aesthetically motivated[2]. However, the remains of the previous buildings are not

only actual, physical elements with physical value to be assessed, but also the identity, images and atmosphere they create.

This dual understanding of the term was particularly intriguing for me and became something that later on I would like to investigate in my project, balancing between the palpable sense of connecting existing tissue with the new one in terms of structure or materiality, and interceptible relation between them of atmosphere or community.

[1] MSc3 Urban Architecture leaflet

[2] Meier Hans-Rudolf, *Spolia in Contemporary Architecture. Searching for ornament and place.*, p. 225

## INTRODUCTION TO THE SITE



The site is located in Anderlecht, one of the 19 municipalities of Brussels. With high number of population, from whom a significant amount holds a nationality other than Belgian, it is a diverse and vibrant community.

The population density is high and the residential landscape is varied: residents inhabit 19th and 20th century tenement houses, converted historical complexes and public mass housing.

## INTRODUCTION TO THE SITE



*Source: Google maps*

Anderlecht is a bricolage of different identities; a vibrant and diverse community. Blended together are industrial and residential architectural building types of different scales,

combined urban tissues of several ages, woven nationalities and entwined religions. With a gradual study of the neighbourhood many stories were unveiled.

## INTRODUCTION TO THE SITE



*Source: Google maps*

Throughout the past seven months, we have started with analysing socio-spatial relations of public places, however with the progression of Anderlecht study, we gradually

dived into the inside of the quarters, discovering new courtyards, surprising functions and meeting new people, who told us their story.

## INTRODUCTION TO THE SITE



*Tenement house - characteristic for the area*

## INTRODUCTION TO THE SITE



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## INTRODUCTION TO THE SITE



*Les Gonjons - mass social housing present at the site, a spatial dominant*



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*L'Ecole Vétérinaire, located nearby, once a veterinary school, currently in the process of being transformed into housing, hotel and offices.*

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*L'École Vétérinaire, located nearby, once a veterinary school, currently in the process of being transformed into housing, hotel and offices.*

## RESEARCH METHODOLOGY

### P1 - DOCUMENTING WAYS OF LIVING OF ANDERLECHT INHABITANTS

I have been particularly drawn to case studies revolving around residential spaces. Throughout the research, I have visited several different dwellings.

In order to show their variety, I have decided to pick to represent three most contrasting ones. Their residents vary in age, nationality and family model. They also vary in a way they inhabit their spaces, how they interact with their surrounding area and how they perceive the neighbourhood.

The cases are located in a distance of 200 metres. Despite being located in such a close proximity they vary

greatly in aspects such as type of residential building (residential apartment block vs tenement house vs adapted free standing house), their scale (total number of residents 900 vs 18 vs 7), size of the apartment, but also quality of the structure and costs of living.

Interviewing them and closely analysing the spaces they have inhabited allowed me to understand what are their needs in terms of accomodation, whar are the aspects they perceive as problematic and what do they appreciate in their neighbourhood.

RESEARCH METHODOLOGY  
P1 - DOCUMENTING WAYS OF LIVING OF ANDERLECHT INHABITANTS



Manzar & Mumfred  
inhabiting  
L'Ecole Vétérinaire

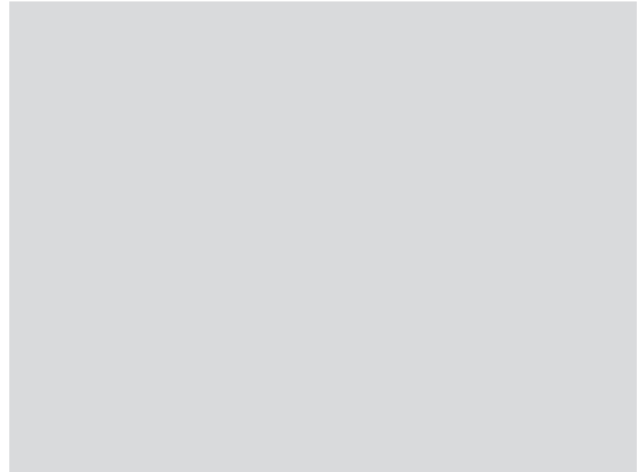
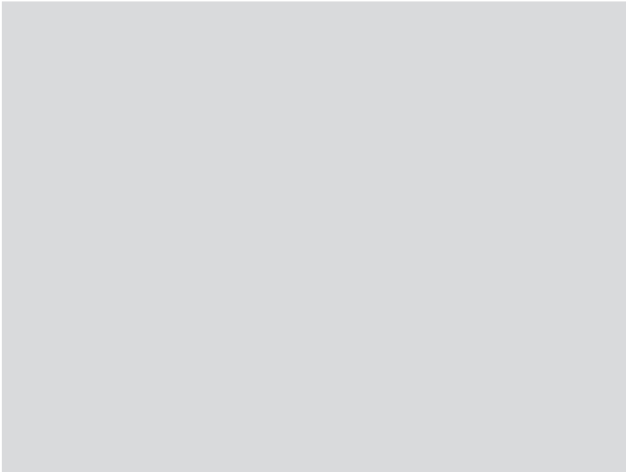


Tom  
inhabiting tenement house  
at Rue de Georges Moreau 182

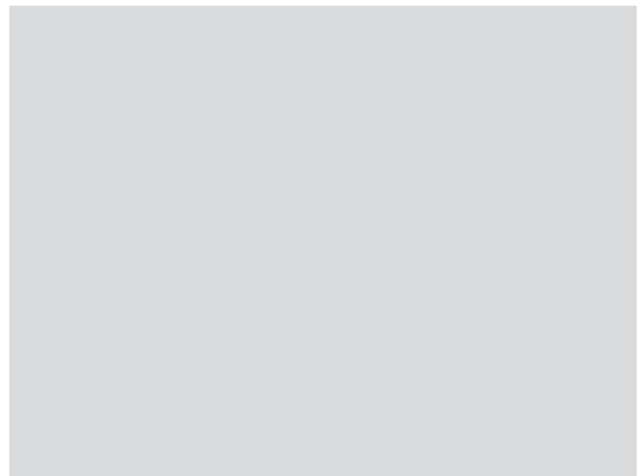
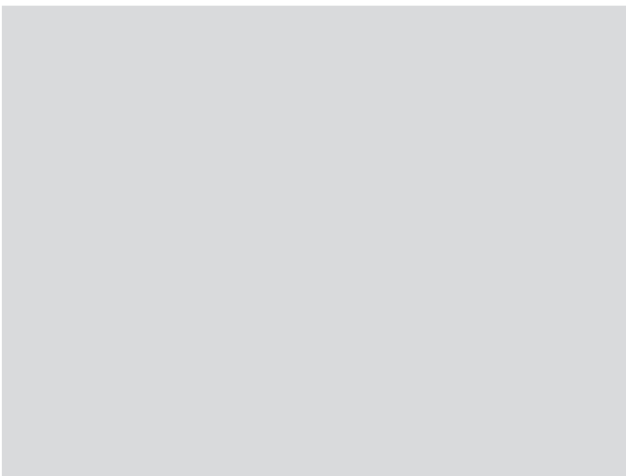


Salma, Karima, Youssef, Yassine,  
Mohamed & Mohamed  
inhabiting Les Goujons

RESEARCH METHODOLOGY  
P1 - DOCUMENTING WAYS OF LIVING OF ANDERLECHT INHABITANTS



- Exterior \* -

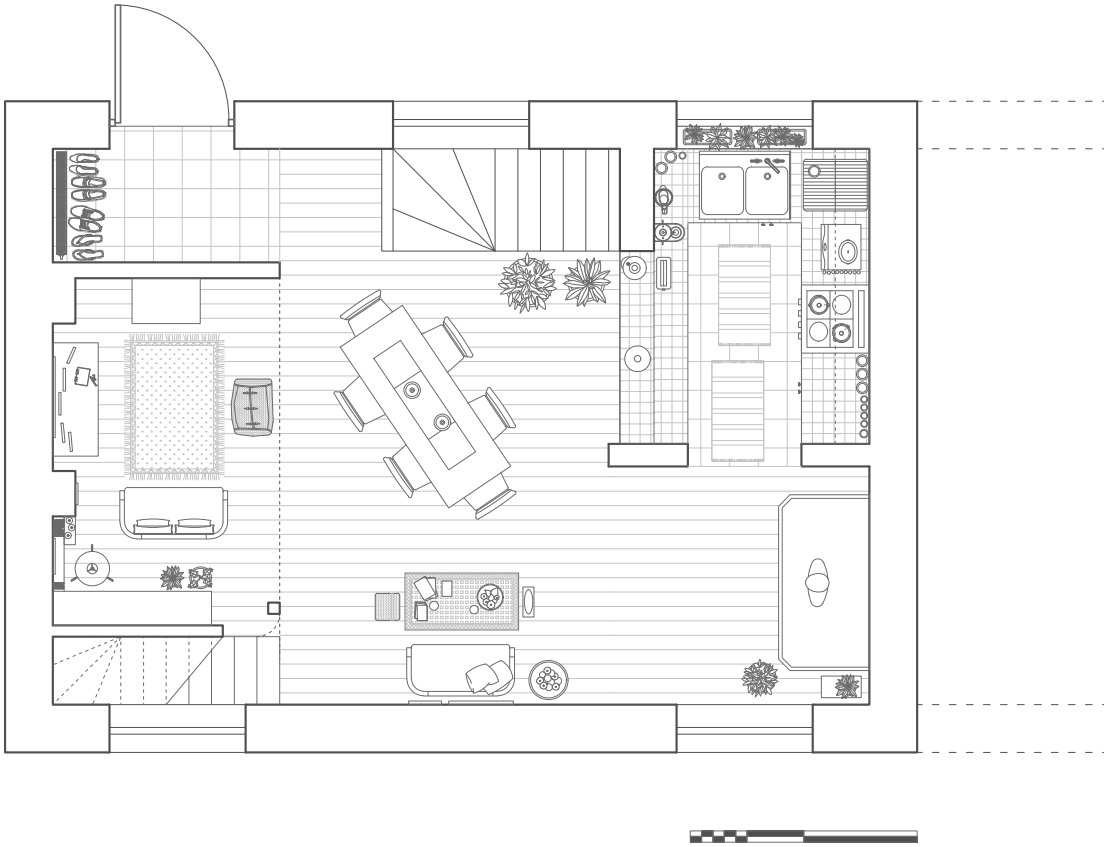


- Interior \* -

*P1 Research outcome - photo documentation of an apartment in L'Ecole Vétérinaire complex*

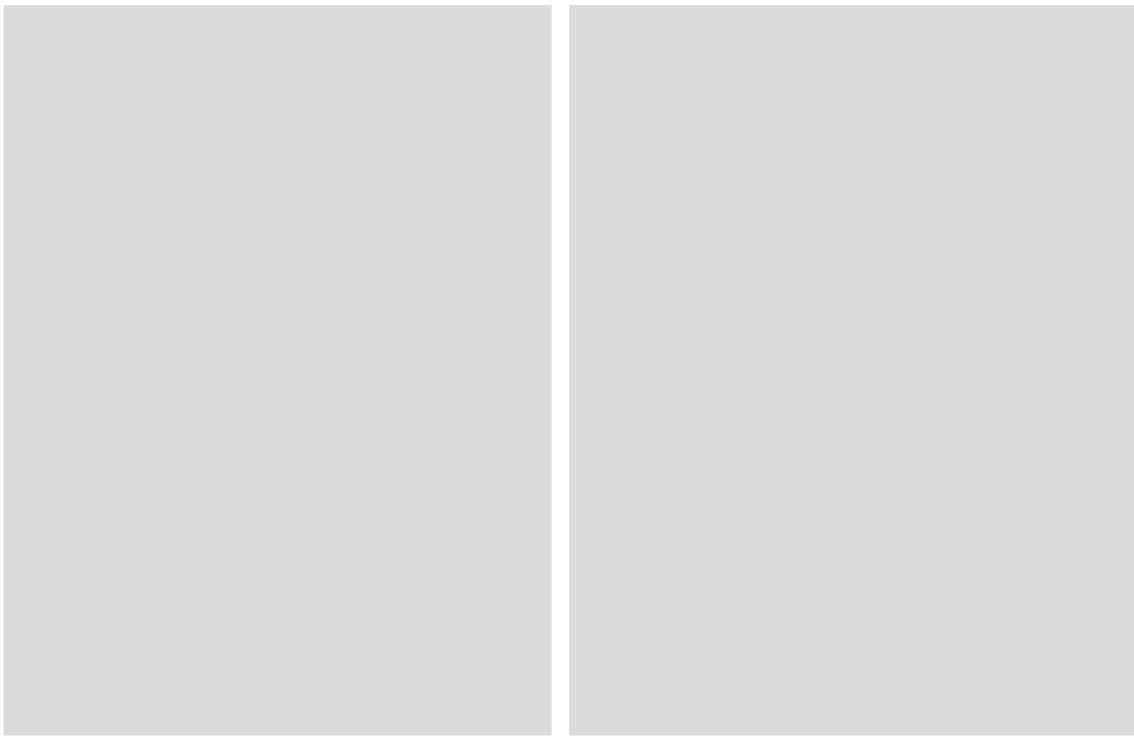
\* Photos were retracted in published version to protect the privacy of the interviewees

RESEARCH METHODOLOGY  
P1 - DOCUMENTING WAYS OF LIVING OF ANDERLECHT INHABITANTS

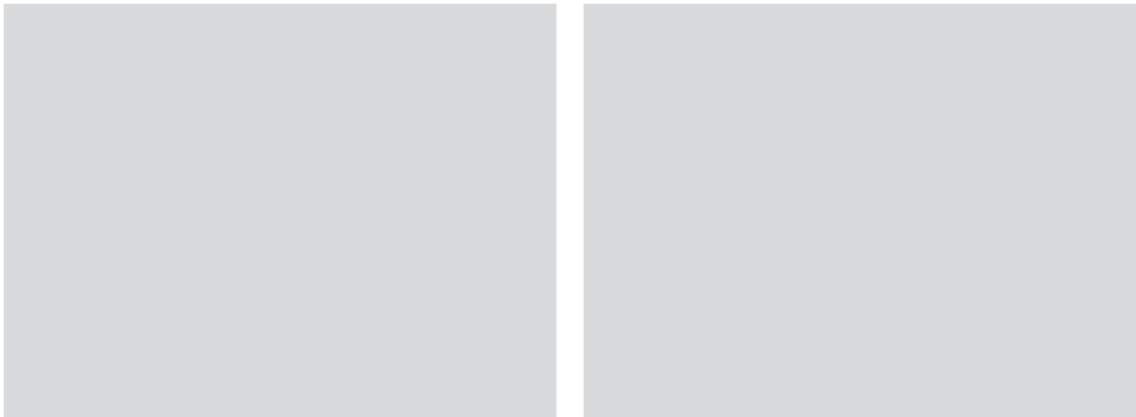


*P1 Research outcome - detailed plan drawing of an apartment in L'Ecole Vétérinaire complex*

RESEARCH METHODOLOGY  
P1 - DOCUMENTING WAYS OF LIVING OF ANDERLECHT INHABITANTS



- Exterior -



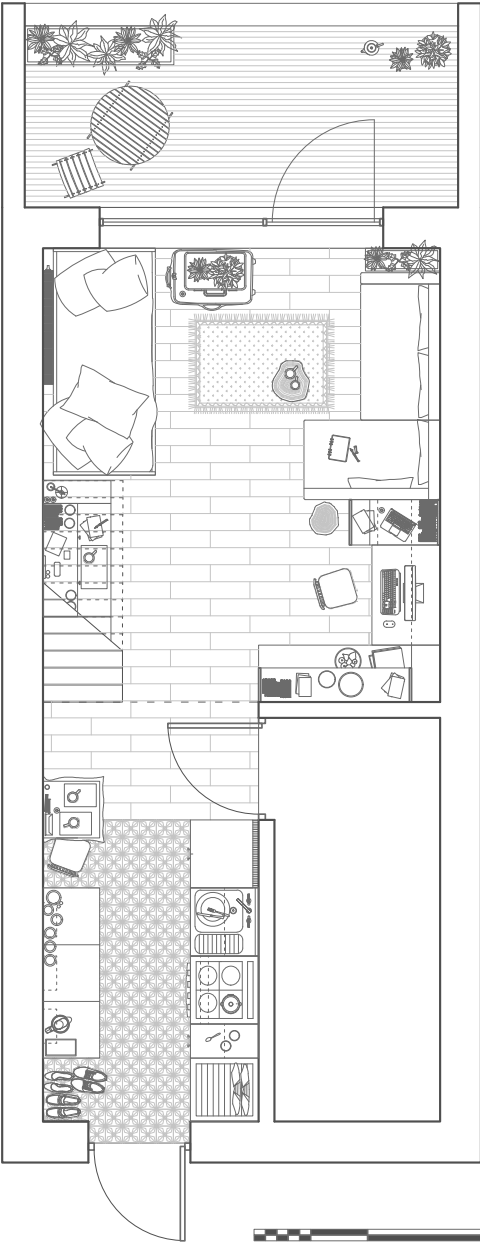
- Interior -

*P1 Research outcome - photo documentation of an apartment in Rue de Georges Moreau tenement building*

\* Photos were retracted in published version to protect the privacy of the interviewees

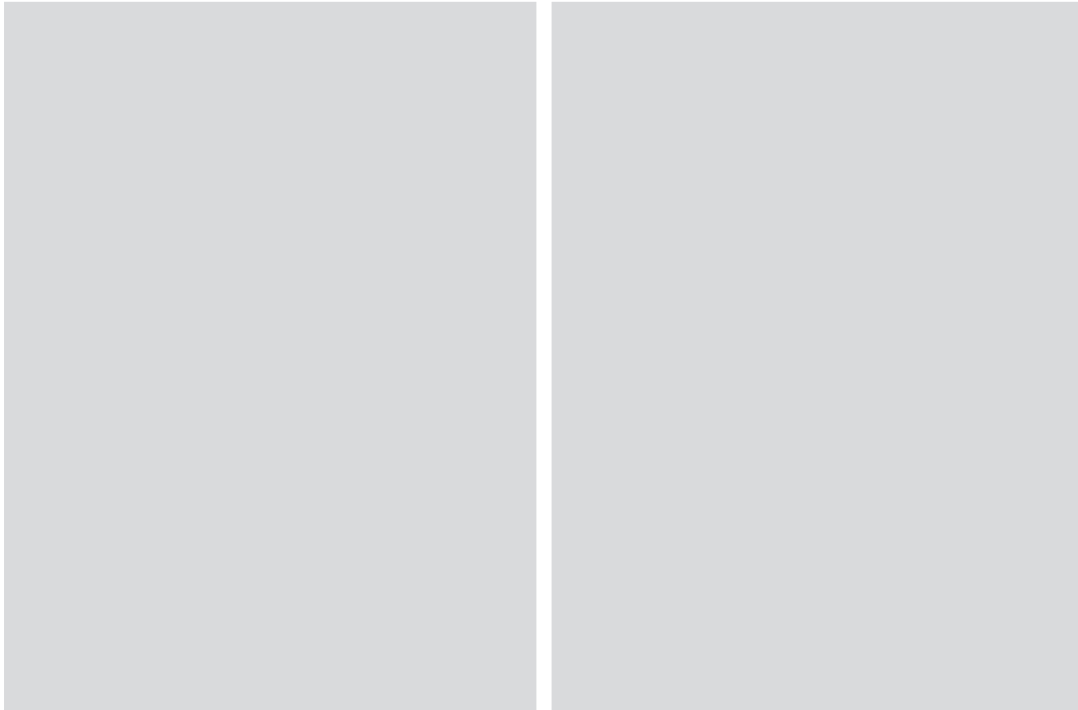


RESEARCH METHODOLOGY  
P1 - DOCUMENTING WAYS OF LIVING OF ANDERLECHT INHABITANTS

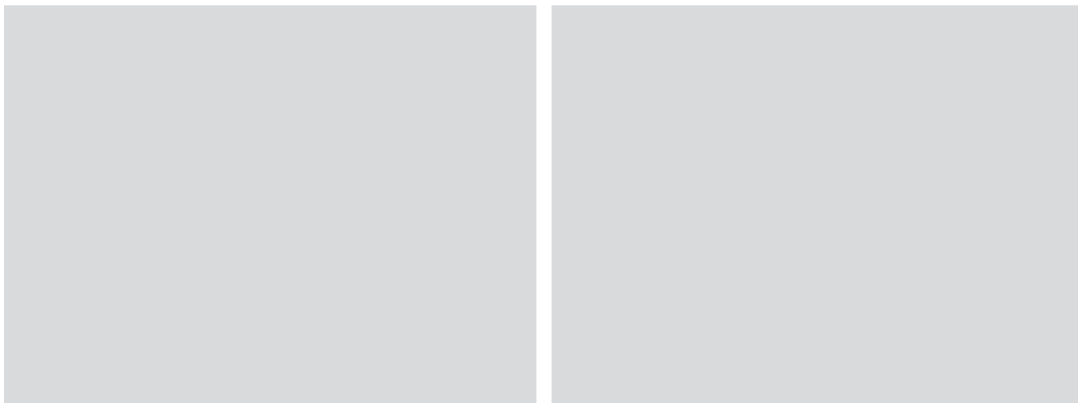


*P1 Research outcome - detailed plan drawing of an apartment in Rue de Georges Moreau tenement building*

RESEARCH METHODOLOGY  
P1 - DOCUMENTING WAYS OF LIVING OF ANDERLECHT INHABITANTS



- Exterior \* -

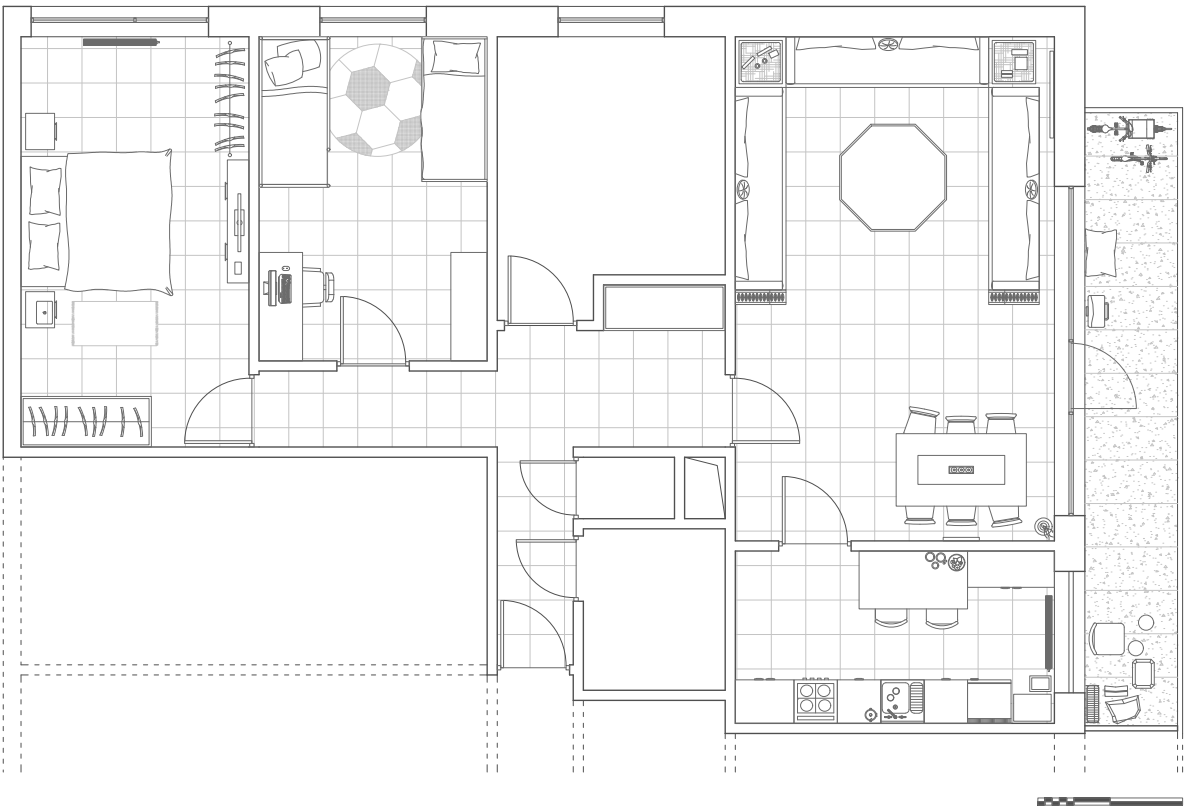


- Interior \* -

*P1 Research outcome - photo documentation of an apartment in Les Goujons mass social housing*

\* Photos were retracted in published version to protect the privacy of the interviewees

RESEARCH METHODOLOGY  
P1 - DOCUMENTING WAYS OF LIVING OF ANDERLECHT INHABITANTS



*P1 Research outcome - detailed plan drawing of an apartment in Les Goujons mass social housing*

## RESEARCH METHODOLOGY

### P2 - LES GOUJONS AS A 1970S MASS SOCIAL HOUSING CASE STUDY

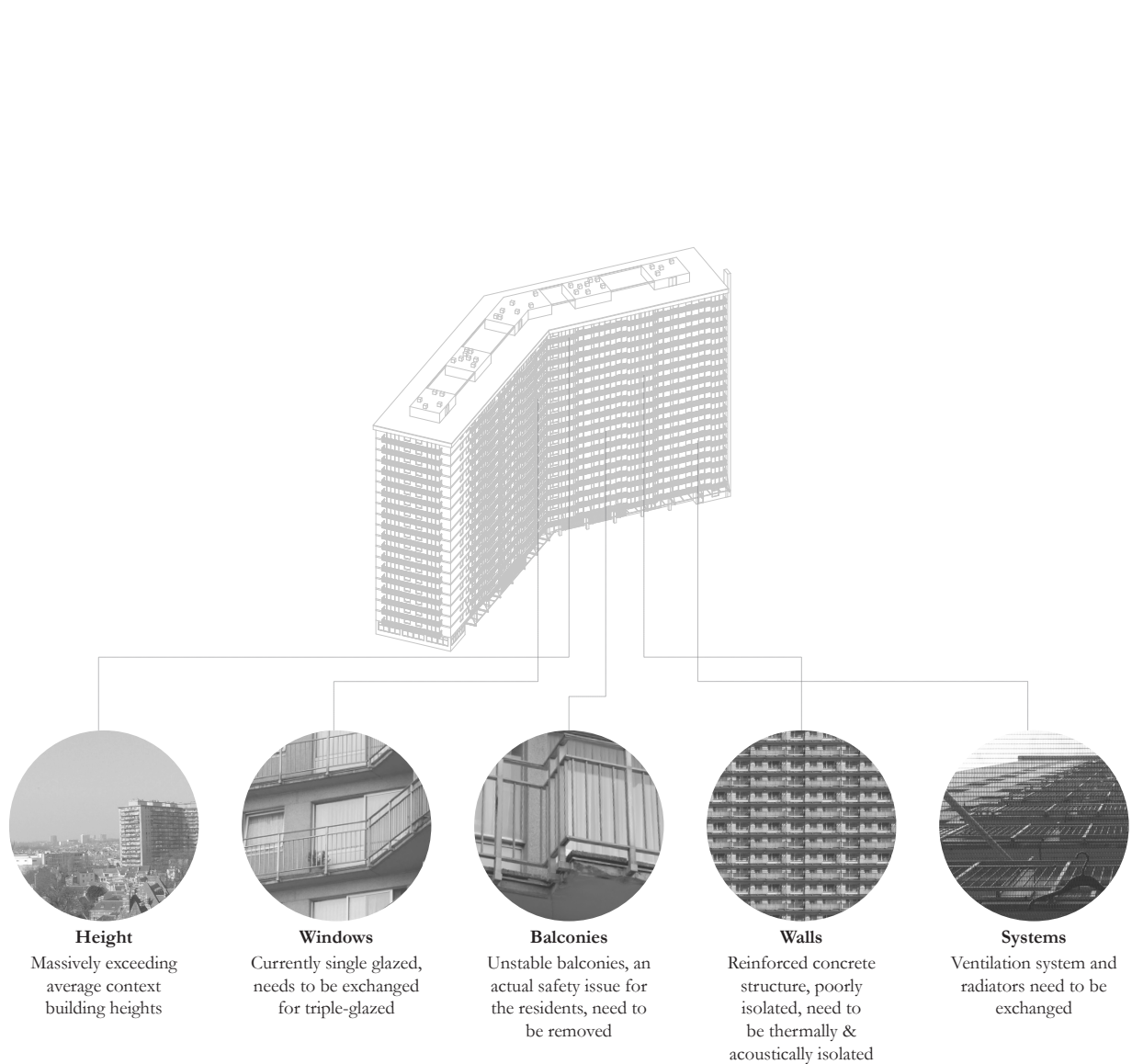
Those different lifestyles and different values are especially visible in Les Goujons – a mass social housing of enormous proportions and density. Built in 1970s as a solution to housing crisis, it is now in a state of decay and deterioration. It is a massive project, housing over 900 inhabitants, with 382 apartments spreading over 18 floors. Lacking any human-scale, directed at one social group, designed without any consideration of fostering community or allowing socialization, with age it has gained a not-so-pleasant recognition.

It was that building that has sparked my interest of post-war mass social housing and their legacy.

Les Goujons is not the only example of 1970s post-war mass housing deterioration. Similar projects of social housing were built all over Europe and world. Majority of them are facing the same problems: partial vacancy, neglect and poor safety condition, short life-span of housing and pauperization of its inhabitants.

## RESEARCH METHODOLOGY

### P2 - LES GOUJONS AS A 1970S MASS SOCIAL HOUSING CASE STUDY



*“Request for an urban planning permit for the renovation - Rue des Goujons 59-61-63 in 1070 Anderlecht”, rapport by Karbon Architecture and Urban Planning, p. 7*

## RESEARCH METHODOLOGY

### P2 - LEARNING FROM SIGNIFICANT MASS SOCIAL HOUSING CASE STUDIES

Perhaps Les Goujons has succeeded in certain extent in providing a physical shelter from weather elements, it has not provided much more, and neither have many other mass social housing projects from its era.

Many mass social housing cases were an outcome of post-war housing shortage. Unprecedented housing deficit led to design and construction of enormous government-financed housing projects. Modernist architects were faced with enormous challenge: mass housing.

However, great quantity did not always go with great quality. Prefabricated, using cheaper construction technique mass towers did not always reflect the idea of “sun, space, greenery”. The anonymous atmosphere was causing many social issues, the buildings needed constant maintenance and renovation, the need for individuality was out of the question.

Proclaimed by some as a failure of Modernist architecture, it inspired many architects to search for alternatives to mass housing and ask very important, profound questions: how well-functioning residential architecture should be designed? What are the qualities that make a house a home? What are the most important factors for users?

The 1970s and 1980s brought a certain rebellion against standardised mass housing. New visions of more liveable, user- or human-oriented residential architecture were emerging.

With pass of time, their successfulness as a project can be evaluated. Therefore in my next part of research I looked into different case studies of significant mass housing examples to learn in what ways were they differing from standardised approach and whether those methods were more successful.

# RESEARCH METHODOLOGY

## P2 - LEARNING FROM SIGNIFICANT MASS SOCIAL HOUSING CASE STUDIES

- Some of the significant aspects of analysed case studies -



**Les Goujons**

- Density issue - need of de-concentration (less people, more spacious apartments)



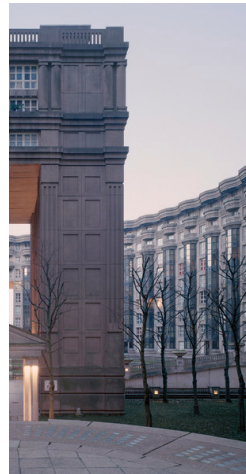
**Rotterdam, Ommoord**

- [before and after renovation] Importance of active grounds



**Robin Hood Gardens**

- Open galleries, full circle circulation



**L'espace de Abraxas**

- The theatrical form and details



**The Barbican Estate**

- Importance of connection to the outside

## RESEARCH - DESIGN TRANSLATION

The carried out research helped me to understand socio-economical and political situation, as well as extensiveness of the problem.

Due to lack of political support, changing demographics and economics, public housing often becomes not a temporary solution, but a solution for chronically poor. Propelling the vicious cycle, the economic situation of the residents makes them even more vulnerable for social difficulties. Currently, there is a housing shortage in general, but social housing in Belgium amounts to 6% compared to 30% in The

Netherlands, or 24% in Austria [3]. And Les Goujons isn't the only mass social housing in Brussels. Located on the outskirts of the city, those project face often similar issues.

Housing offers more than just a shelter: it provides stability (both in terms of economics and in terms of peace of mind), feeling of security and a sense of belonging. Current social system does not always foster the situation of those who are in need. Could social housing be designed in a better way?

[3] Alice Pittini, "The State of Housing in The EU 2019, Housing Europe", the European Federation of Public, Cooperative and Social Housing Brussels, September 2019, pdf accessed on 12.01.2020 available at: <http://www.housingeurope.eu/resource-1323/the-state-of-housing-in-the-eu-2019>



## MAIN DESIGN GOAL

The goal of the project is to propose an alternative for social housing. Haunted by problems such as neglect, vandalization, safety decrease, high turnover rates, the social housing complexes often seem to be a transit accommodation.

Les Goujons, the building at the site, is currently experiencing many of those problems. The project will suggest transforming it through means of decreasing its density,

modernisation of existing structure and addition of new functions. At the same time, in order to compensate for the lost units and provide more social apartments, a new housing complex will be designed, complementing the existing one. The neighbourhood will gain more residential buildings of better quality, aiming at their longevity. The introduced strategies will impact also the atmosphere of the place, improving its current state.

## SOCIAL SIGNIFICANCE

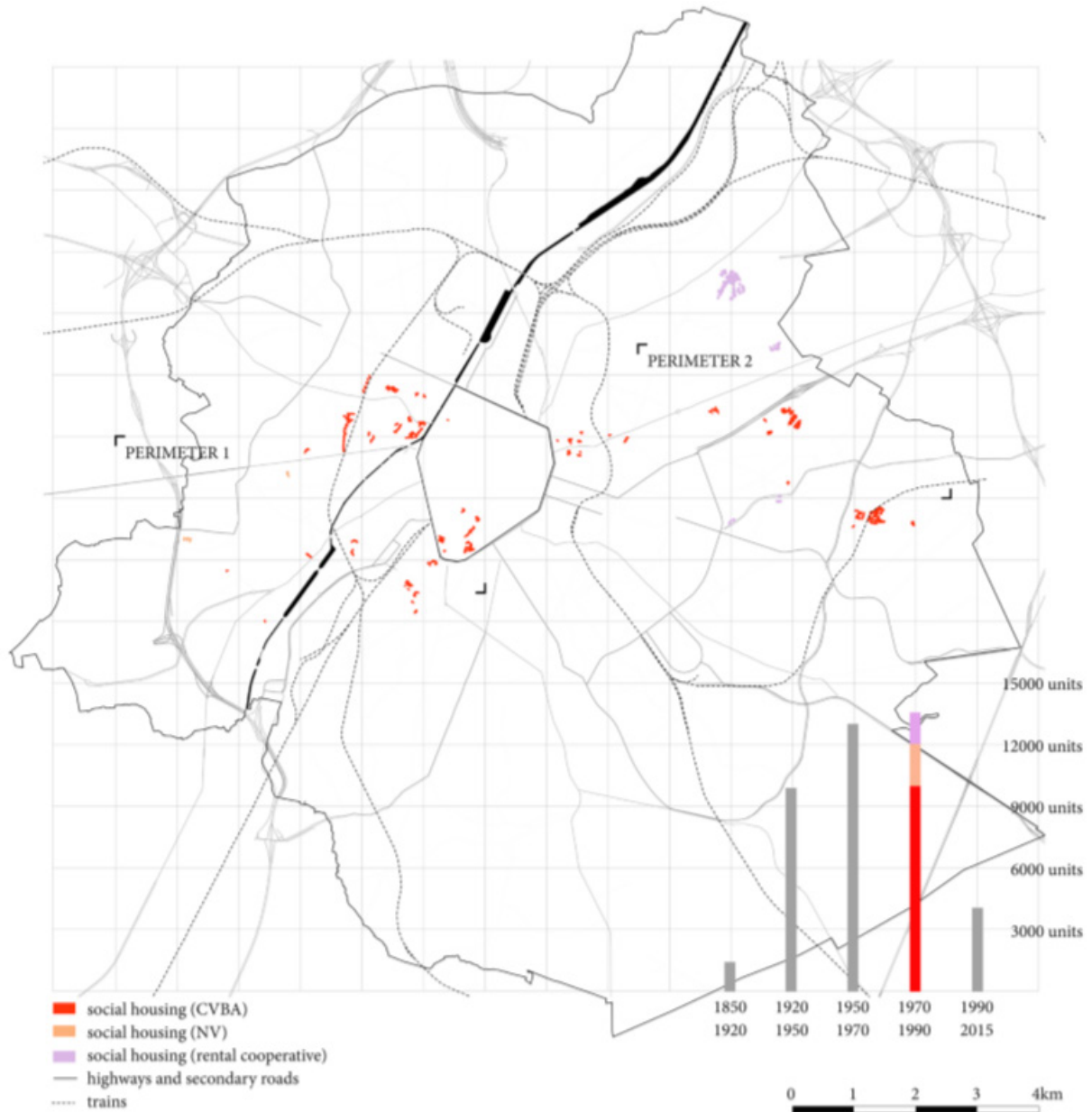
The goal of the project is to show an alternative design of social housing. The project has a significant social relevance: mass social housing, similar in some extent to Les Goujons, is still present all over Europe and still even now holds a certain stigma. Paradoxically it is stagnant in the way how it approaches habitation, ignoring all other functions (e.g. socializing or working), reducing it to merely accommodation, but also provides a lot of uncertainty for its users. However, it holds an enormous potential of being a social asset.

Therefore, it is surprising that the complex subject of housing and social housing in particular has been in some ways discarded from architectural discourse for quite some time. The perspective of housing for everyday people has not been perceived as an exciting opportunity but more as a social obligation of providing an absolute minimum. That approach has created a certain

paradox: a huge investments of mass social housing complexes functioned for a limited amount of time, and due to being carried out with economical aspects as often primary design aspect, they have not fulfilled their long-term goal. Focusing on quick, efficient and cheap providing of apartments resulted in their very poor quality and expensive maintenance. Furthermore, discarded, under-supported massive complexes have a massive influence on their whole neighbourhood, affecting it many ways.

Considering the sheer amounts of post-war mass social housing built that have reached their short expiration date, the subject of re-designing those existing complexes seems to be particularly relevant now. The visible outcomes of those projects, tested by time and multiple users, also open up a dialogue on how the next generation of social housing complexes should be designed.

## SOCIAL SIGNIFICANCE



*Social housing construction in the BCR (1971-1990)*

*Aernouts, N., Maranghi, E. & Ryckevaert, M. (Eds.) (2020). The regeneration of large-scale Social Housing estates. Spatial, territorial, institutional and planning dimensions, Brussels: Sobolab*

SOCIAL SIGNIFICANCE  
EXAMPLES OF SOCIAL MASS HOUSING IN BRUSSELS REGION



- Marius Renardlaan -



- Noordresidentie -



- Résidence La Palmeraie-L'Edelweiss-La Roseaie -

SOCIAL SIGNIFICANCE  
PRUITT-IGOE CASE OF MASS HOUSING DEMOLITION



Pruitt-Igoe, St. Louis, USA  
<https://www.archdaily.com/153704/the-pruitt-igoe-myth-an-urban-history#>

## STUDIO THEME AND DESIGN

The project will consider the theme of the Urban Architecture studio “Spolia” through juxtaposition of an existing, but transformed social housing building with a new residential complex.

It will suggest transforming Les Goujons through means of decreasing its density, modernisation of existing structure and addition of new functions. At the same time, in order to compensate for the lost units and provide more social apartments, a new housing complex will be designed, complementing the existing one. The neighbourhood will gain more residential buildings of better quality, aiming at their longevity. The introduced strategies will impact also the atmosphere of the place, improving its current state.

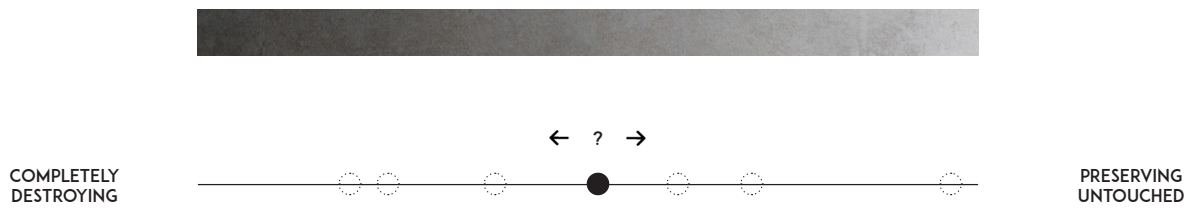
The renovated complex will answer better to the needs of its residents

and harmonize with the closest neighbourhood. It will be connected to the new build project not only through juxtaposition of forms as one composition or architectural consistency, but also through actual, physical mean of material re-use. The process of the transformation of Les Goujons will strip it down to its bare structure. The received resources, which would be discarded otherwise, will be implemented into new building complex, diffusing them into each other and interlacing them together also in a physical sense.

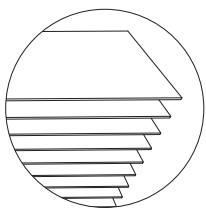
The two parts of the complex will be working together as one, new composition, connected in palpable sense of shared scale, building geometry (the platform or architectural elements) or materiality, but also in imperceptible sense of atmosphere, community and identity.

# STUDIO THEME AND DESIGN

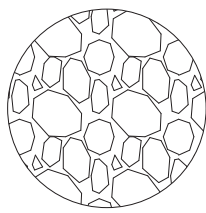
## What to keep?



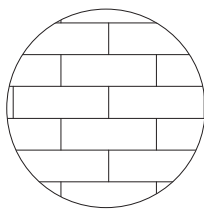
## What to keep?



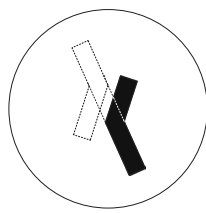
- LG main structure



- Re-use of the materials from altered LG



- Recycled materials coming from the neighbourhood



- Keeping the form, repeating it in the new structure



- Providing new apartments for the people already living within LG and preserving their social initiatives

## DESIGN

In the project I take into consideration many aspects, which were determined by the carried out research of existing context as well as research of important precedents, and my approach towards the studio theme of spolia.

The scale of a building has a great importance in design of the social housing. Les Goujons, as many different social housing complexes, is simply too big. Its monumental structure is overwhelming the surroundings, influencing the atmosphere. It is also too densely populated, and the apartments it is packed with are too small for the needs of its residents. Its volume needs to be altered, and apartments enlarged. The main part of the project will focus however on the new built part.

In the new complex, the conclusions from LG will be implemented as well - the new building will be designed forming two semi-enclosed courtyards, producing semi-private spaces, available mostly to its residents. The general volume of the new build complex will be subdivided into smaller units, providing more human-scale of better proportions and height which still makes possible to create a contact with the life on the ground level.

Since the Les Goujons requires major alterations, its build will be changed: only main concrete structure of concrete slabs and supporting walls will be left, while majority of the outside materials will be removed. Those materials will be implemented into new building, physically connecting both buildings. Discarded concrete from exterior walls will be processed and used as an aggregate for a concrete for the new build part of the complex.

In order to create a connection to the surroundings, the finish material of both complexes will be also coming from recycled sources. For consistency of the whole complex, all building units will be covered with brick, however the recycled brick kind will be differing depending on its original source, giving slightly different identity to each of the units.

Les Goujons design placed it on an elevated platform, separating it from the surroundings. The projects proposes continuing this platform in order to connect existing complex with new one, however it also suggests providing a mix of functions located within it. It ranges from social initiatives to commerce. It will provide more lively atmosphere and better access to services to previously monofunctional complex. The platform will be accessible now from multiple stairs, but also through the ground floor services.



## DESIGN

The public spaces within the courtyards will be providing a semi-private environment, with facilities directed at children, teenagers and adults of various group-ages.

Special care will be also put into design of interior semi-private spaces, such as entrance hall or apartment building corridor. In its current state, Les Goujons does not offer any public spaces and its corridors are a perfect depiction of the aspect which pushed this project forward: economic efficiency. Long, dark and narrow, they do not offer any possibility of socialisation other than overhearing private conversation of adjacent neighbours. The renovated corridors, as well as the new built ones, will offer more space and daylight. Introduced door with adjacent glazed part will make it possible to create apartment-corridor relation, while still giving the residents enough privacy.

Finally, the apartments in both parts of the complex will be more spacious than average social housing apartment. From the carried out research, it has become also clear that the family models currently living in the neighbourhood are mostly either quite small households of two people, or rather large families of five or six people. Therefore

the apartments provided, will also reflect those family models, instead of providing rooms only for average models.

A different approach will be also implemented into design of the interior of each of the apartments as well, trying to understand the families routines and what activities carried out in the apartments are very important for them and reflecting that in the design.

The old and new will be interlaced on range of levels, starting from sharing common scale, influencing each other geometry, standing on common level, re-using each other materials, reflecting each other details, providing space for already existing social alternatives within the its boundaries and through that creating a harmonious whole.

## P4 RE-TAKE

With my second attempt of passing P4 I have upkept a lot of responses to aspects described earlier. The site research and the analysis of mass social housing problematics are still valid, however their conclusions became implemented into the design with slightly different manner.

Additional time before re-taking the presentation allowed me to reassess certain design aspects starting with the master plan. The previous one, although ambitious in its attempt, seemed to be rather limiting in its geometrical form, both in terms of functionality as in aesthetics. The new urban plan allows more light and more spaciousness, while creating more pleasant architectural atmosphere.

Limiting the focus to only new built part allowed more detailed approach. Furthermore, letting go of the constraint of keeping the

same amount of apartments within the complex resulted in creating more context-appropriate form and allowed to adhere to the main rule of un-densifying more closely. The remaining amount of apartments taken from the Les Goujons will be realised in the third part of the complex, which, however, will not be depicted within this project further than in the masterplan.

Furthermore, the apartment buildings were simplified as well, which turned out beneficial both to the form of the building and to probable cost of production. The design of the apartment layouts and the building facades are clearer and based on simpler principles.

Simpler design decisions resulted into simpler detailing as well, which was furtherly developed with special care being put into the aspects of structure, façade design and climate.



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2019/2020