

The Urban of Art

Designing an affordable communal live-work environment for artists and cultural workers

Research report

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Dutch Housing Graduation Studio 2020
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Introduction

All designs throughout history are based on prior knowledge. Whether this is research or experience. This knowledge is essential to design as it informs us about the context of our design. It allows us to understand what we are responding to. As it is exceedingly difficult to come up with an effective design solution if we are ignorant about the problem that we are trying to solve. And so it is for architecture.

The Dutch Housing Graduation Studio is no different. The main themes for the studio are high density and the inclusive city, with a central theme of collectiveness, set in the urban environment of Rotterdam. This is the context of our design, so this is the context that we have done our research on. We have explored ideas of high density through case studies of urban development and high density buildings and their parking solutions. These informed us for the urban design that will be presented early in part 3. Within this context we have also explored the ideas of Richard Sennett and his five open forms through a reading of his book *Building and Dwelling* (2019). Most extensive was our research on collectivity, that is presented in part 1. And fittingly for the theme this is a collection of individual case studies that have been done by smaller groups within the studio, from which we will draw a collective conclusion that can inform the way we handle the collective elements of our own design.

With that collective research we explore some of the general themes of the studio. Individually we each found a problem in society that warrants a design solution, always a problem tied to a specific group of people. In my case this problem is the lack of affordable housing and working space for artists, who are my primary residents. In part 2 I dive into the nature of this problem and explore some potential solutions. I will give an historical overview of a type of artist housing and present two case studies of these studio-homes, one in Paris and one in Amsterdam. Beyond that, part 2 will look at other effects that artist housing have and explore the way one solution: the inclusion of luxury apartments in the building, would affect the design.

Finally, part 3 will present the design of the building, and it will (hopefully) become clear how the preceding research has led to an effective design solution that addresses both the general studio themes, as well as the problems of the specific group of residents.

Part 1: Collective Research

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These are the three main current issues in Dutch housing:

1. There is a growing housing shortage in the Netherlands. Between 2019 and 2030 around one million new residences will need to be built. (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019) So a lot of housing has to be built in a short time span. Partly because of the housing shortage housing prices are rising quickly which can lead to the exclusion of less well-off groups of people.

2. Additionally, there is ample space to build upon. With the continuing urbanization of Dutch society, most residences will have to be built in and around existing cities. These cities are now densifying their existing urban fabric with new housing developments, but will still have great difficulty building enough on the available plots of land.

3. Then there is possibly the biggest issue of all: climate change. Building has had a huge impact on our environment and will continue to do so. Solutions have to be found to strongly reduce our emitting of greenhouse gases, our shrinking of biodiversity and our depletion of (natural) resources.

Enter communal housing.

By sharing certain facilities among a group of inhabitants, less space is needed for each of the inhabitants' needs. Say eight apartments each have their own washing machine, that means that eight square meters of the building houses washing machines. But not all these machines are used all the time. If per eight apartments two machines are available for all eight residents, only two square meters of the building needs to be reserved for everyone's needs. If enough floor space is 'saved' through sharing facilities, additional rooms or even additional apartments can be built for the same amount of money in the same amount of time.

And this can be part of the solution to the first problem; the housing shortage. Being able to build more apartments within the same time span is obviously beneficial to reaching the goals set for 2030. The sooner the housing shortage can be solved, the quicker housing prices will stabilize (or even drop). The less fortunate people in our society would stand a better chance finding suitable housing at an affordable price. They might not have to move to more peripheral areas of the city because they can no longer afford the rents in the city centre.

As stated, the second current issue in Dutch housing is the availability of space. Delft for instance has no big empty plots left to build upon apart from the currently planned developments. (Gemeente Delft, 2016) And even the planned developments may not even be sufficient. If major real estate developments have shared facilities in them, a lot of additional apartments can be built on the same plot.

Communal housing also addresses climate change and our impact on this world. "The building

and construction sector accounted for (...) 39% of energy and process-related carbon dioxide emissions in 2018 (...)" (United Nations Environment Programme, 2019, p. 9) The process of building itself as well as the production of building materials are the biggest contributors to these emissions. Now, this is a far greater issue than can be solved through the means of a type of housing, but it can again be partly be solved through it. Simply put less individual facilities leads to less real estate needed which leads to less materials needed per capita. Per capita, because the housing shortage demands us to fill up superfluous real estate with more dwellings. If less materials are needed per capita, less energy is consumed in making the necessary materials for an equal amount of dwellings. Less energy will have to be put into the transportation and placement of materials as well. Less materials needed per capita also means that each person has a smaller impact on the depletion of natural resources. Scarcity of virgin materials is growing, and all materials we extract from this planet are finite resources.

Communal housing comes in many different shapes, some more suited for a specific situation than others. As the Dutch saying goes "zoveel mensen, zoveel wensen". Although it can prove itself valuable for solving the previously mentioned problems, it is by no means the single solution to the issues at hand. The desired degree of collectivity always depends on the specificities of the project. Through the analyses of case studies we can learn what types of living and which types of communities are suitable for what situations, and draw lessons from them for our own design practices.

Methodology

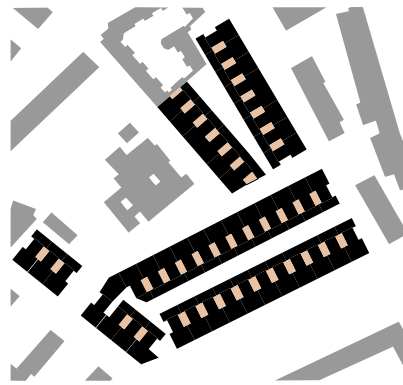
In this research a number of 15 residential buildings have been analysed, elaborating on a wide variety of housing typologies. Main issues as the type of housing, functions in the building, accessibility, the relation between public and private and movement in the building have been studied. The latter has resulted in a representative route of a resident through the building with possible collective encounters. Spatial aspects which influence these encounters have been pointed out to emphasize the relation between architecture and collectivity. A brief overview of all research is included in this report and will discuss the earlier mentioned topics in the coming section. Finally a conclusion will be drawn on the topic of collectivity.

Sources:

- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2019, July). Achtergronddocument Opgaven in de fysieke leefomgeving: huidige situatie en ontwikkelingen. Retrieved from <https://ontwerpnovi.nl/download+pdf+ontwerp-novi/HandlerDownloadFiles.ashx?idnv=1407076>
- Gemeente Delft. (2016). Woonvisie Delft 2016-2023. Retrieved from <https://www.delft.nl/wonen/wonen-delft/woonvisie-2016-2023>
- United Nations Environment Programme. (2019, December). 2019 Global Status Report for Buildings and Construction. Retrieved from <https://www.unenvironment.org/resources/publication/2019-global-status-report-buildings-and-construction-sector>



Pullens Yard, From: <http://kenningtonrunoff.com/pullens-yards/>



Pullens Estate

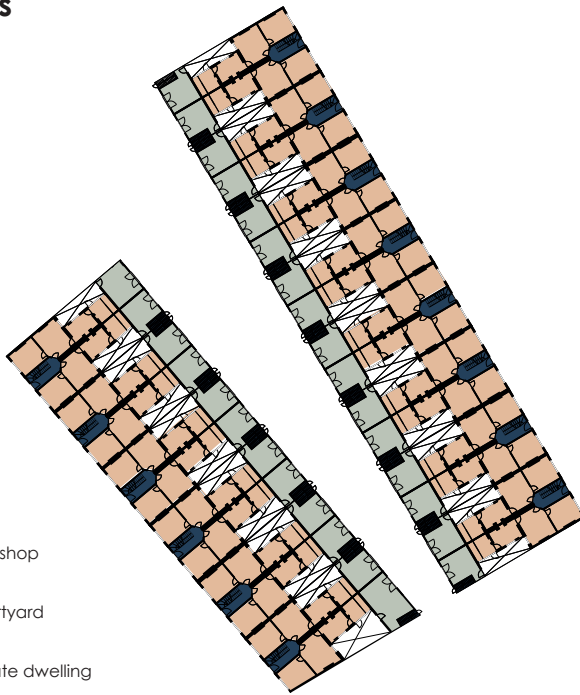
year: 1901
 architects: James Pullen
 city: London, England
 type: Porch Apartments
 amount: 351 units
 plot size: 9354 m²
 total floor area: 17.529 m²
 FSI = 1,87

The Pullen Estate is a building complex combining living and working in London, England. The dwelling units face the outer streets while the workshops are facing inwards.

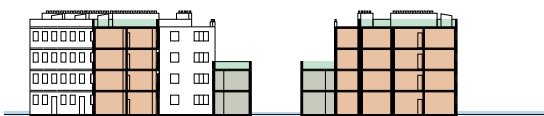
The apartments were built to provide relatively cheap but decent housing for poorer families. Each unit is 4 floors high and consists of 8 appartmets and 4 workshops.

Originally 684 apartments were built. However, today only 351 remain. The remaining complex is protected by conservation area status.

Functions



- workshop
- Courtyard
- private dwelling
- Roofterrace
- circulation



Functions

The Pullens buildings are more or less split in two when speaking about functions. Apartments are situated facing the street, while workshops on the first two levels are facing the smaller so called yards.

The apartments are accessed via porches accessing two appartments per floor. The workshops on the ground floor are accessed directly via the yard, while the workshops on the first floor are accessed via a private staircase.

The appartments on the ground- and first floor are directly connected to workshops. However in reality they were often sold separately.

private-public

within the building private spaces are dominant. Only the staircases are shared with 7 other households. Streets surrounding the buildings are all public. However, the inner yards have a more communal character, all transport is mixed and slow and the pavement can serve as extra space for the workshops to be used.

Most of the communal spaces are found on the rooftops. The third floor has a communal roofterrace stretching all across the building facing the inner yard. The fourth floor has communal roofterraces that are shared with eight households.

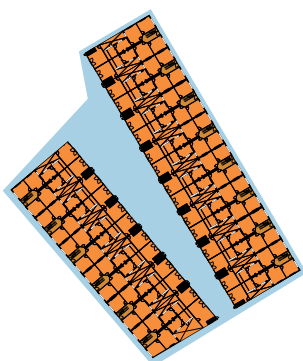
Even though the roof terraces on the third floor stretch across the building and could be used as a upper street connecting various appartments, the terrace was immediately divided into private terraces.

Pullens buildings as seen from the street



From: <http://kenningtonrunoff.com/pullens-yards/>

private-public



Groundfloor

Top view

- public
- communal (for group of residents)
- communal (for all residents)
- private

Collectivity



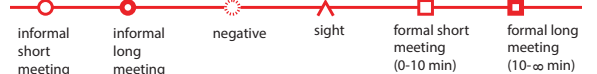
Encounters - ground floor

- 1
 - -greetings to someone on the street. Small passage of words. 3 meters distance.
 - -small chat in the porch with neighbour. 1-2 meters distance.
- 2
 - < -Visual contact while being in the small courtyard. 4 meters distance.
 - -Work related conversation or chat with neighbouring makers in own shop. 2 meters distance.
 - -Less professional conversation with neighbouring makers, supposingly more people at once. 1-4 meters distance.
- 3
 - -Work related conversation or chat with neighbouring makers in their shop. 2 meters distance.
- 4
 - -as the street gets smaller, encounters become more likely. The street works as a funnel.
 - -The gate can be a meeting point for all makers. 1-2 meters distance.



Encounters - third floor

- 1
 - ^ -Visual encounter with neighbour from ground floor or quick look at other apartments.
 - -small chat in the porch with neighbour. 1-2 meters distance.
- 2
 - ^ -Visual contact with courtyard while being on the roof of workshops. Possible brief chat.
 - ⊗ -Contact with people from different apartment that are simultaneously using the rooftop. Fence prevents sharing. 2-4 meters distance.
 - ^ -Visual contact with inner (worker)street. More than 5 meters.



Conclusion

Pullens Estate has some very interesting features considering collectivity. The inner yards welcome a lot of local activity. There is a lot of interaction between the facade and the inner yard. The roof terraces on the third floor seemed to have missed their purpose. Possibly the lack of clearly expressed function has misguided the inhabitants in their usage of the space.

Architecture and sociability

Peacock Yard



From: <http://www.urban75.org/blog/pullens-yards-winter-open-studios-elephant-and-castle-london-se17/>

Rooftop



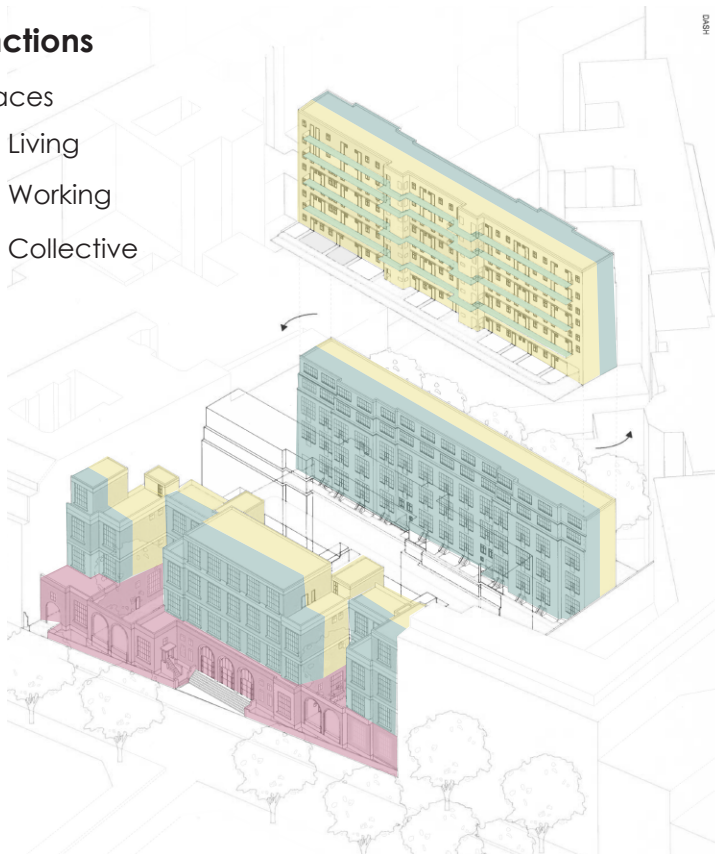
From: https://www.spareroom.co.uk/flatshare/london/elephant_and_castle/4722758

Cité Montmartre aux Artistes

Functions

Spaces

- Living
- Working
- Collective



Year 1930 -1932

Architects Henry Rézal & Adoiphe Thiers

Location Paris, 189, rue Ordener

Type work homes - Atelier housing for artists

Amount 165

Acces

The first block consists out of collective spaces on the ground floor level. The two entrances: the main entrance in the middle and the car entrance at the left side, are located here.

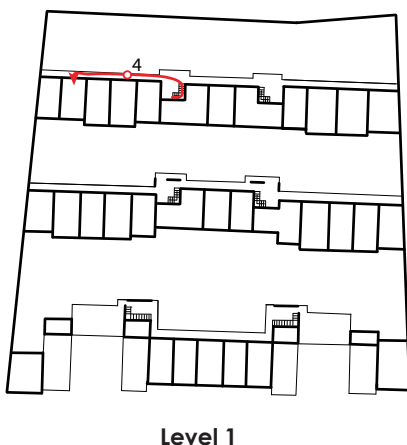
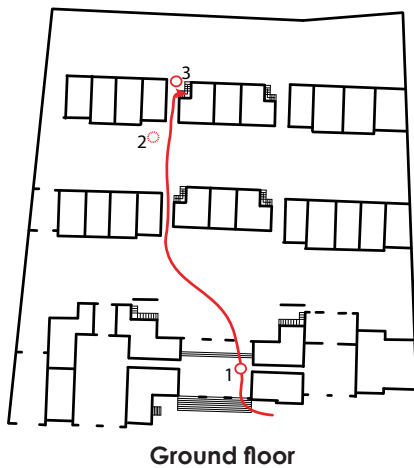
Cité Montmartre has three different acces typologies: the galerie, the ground bound and the porch typology (only in the first building).

Living & working

The blocks have two different sides. a side that could be interpreted as the living side: the side where the galleries and front doors are placed. And the side that could be interpreted as the working side: the side with the high ceiling windows for apartments, and where the ground bound dwellings have an extra door connected towards the collective area with stairs.

Routing in plan

scale 1:1500



Routes & moments of collectiity

The route that one takes starting from the public street to come home leads to a few points of possible collective moments. The route can be quite long which increases the chance of running into another neighbour.

The points are in most cases located on the routes from the private door through the collective area towards the public streets. Especially places where one is able to stay for a longer time. For example the private stairs facing the collective area, one is able to sit there and thus interact more with passing by neighbours.

Conclusion

Cité Montmartre facilitates different kinds of collectivity. The main entrance and the collective areas in between create a lot of different opportunities for small interactions between passing by neighbours through the area. This relates to the length of the route one takes through this area and the created opportunity of sitting outside.

Collective spaces



Main entrance



The atelier facade



The gallery

Narkomfin

Year: 1930

Architects: Moisei Ginzburg, Ignaty Milinis

City: Moscow, Russia

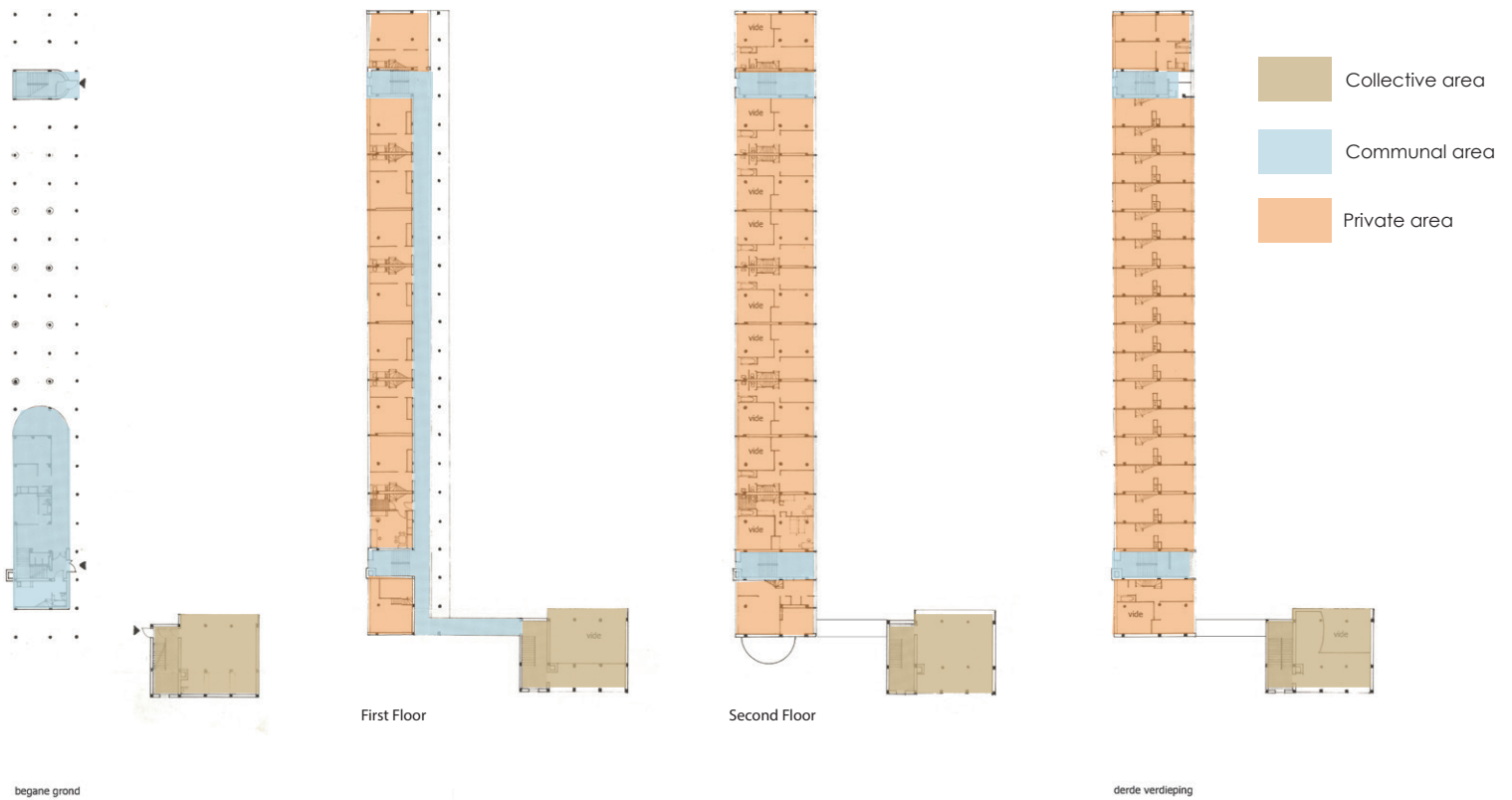
Type: transitional type of experimental house

Amount: 54 units

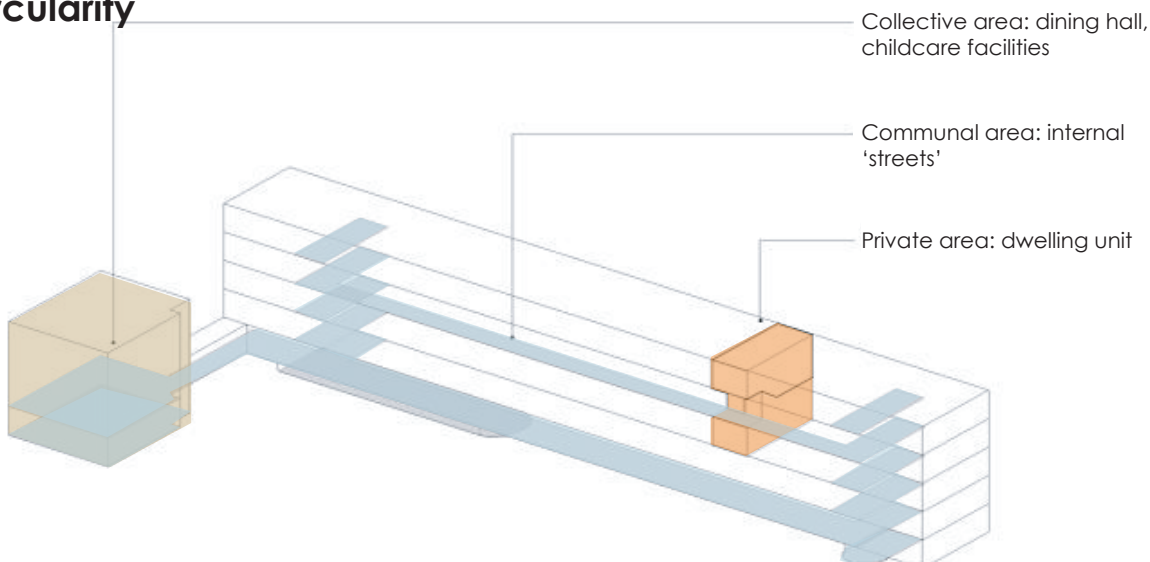


Ginzburg had a clear vision about how architecture could play an active role in embracing the communal life. Therefore the living unit in the Narkomfin building must be redirected outwards towards society at large. This was achieved by moving many daily functions into communal areas, such as lounging, exercising, eating, child-care.

Floorplans



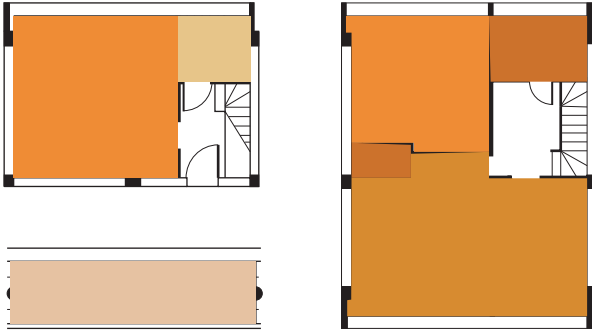
Circularity



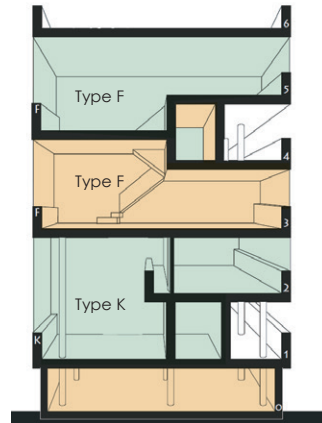
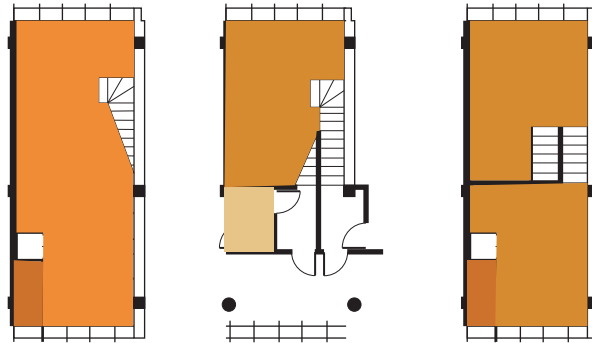
Narkomfin

Dwelling units

Type F



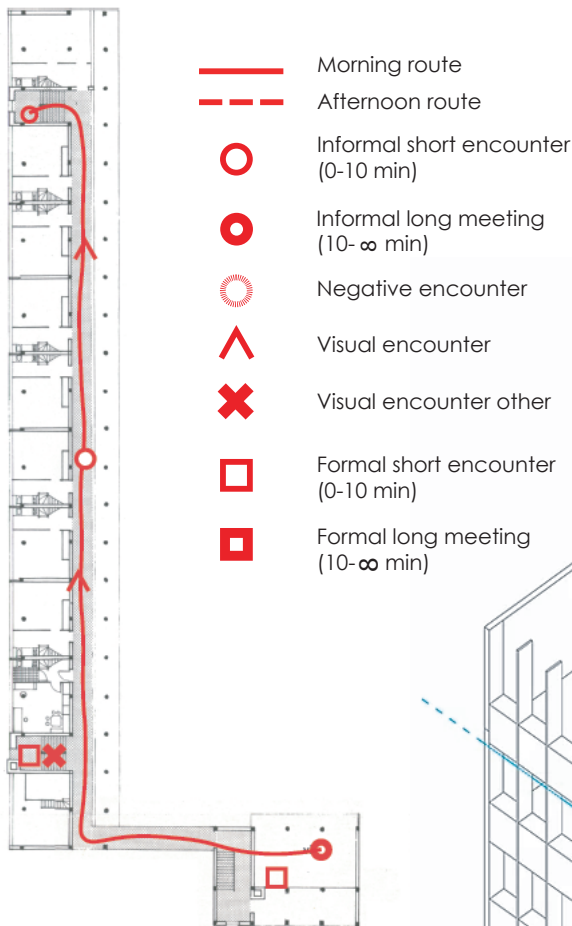
Type K



0 2 1:200

The interior features two level apartments, spacious entry halls and corridors, and a community terrace on the roof. The building stands on pilotis, and features ribbon windows, a plain facade and a roof that can be used for additional facilities. In communal apartment buildings, people would be free from individual household work and spend most of their leisure time in public. Narkomfin has five inhabited floor levels, but only two corridors, on the second and fourth level. The Narkomfin has two types of units: F-type and K-type, both having the innovation of a split level. In section, each apartment forms the shape of an L, and interlock so that the central void becomes the access corridor. The F type units are minimal dwelling units – containing only a single room divided into a living and sleeping area as well as a bathroom. In each unit a small and removable kitchenette is included. Most of the units belong to the K-type (with a double height living room) and F-type connecting to an outdoor gallery.

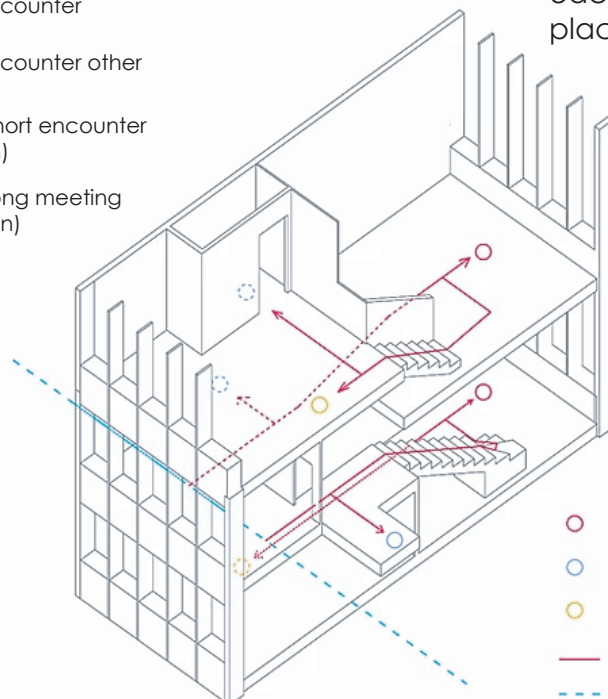
Collective encounters



First Floor

Conclusion

Collectivity was very important in this design. The building has separated private areas from public areas and therefore separating living from working. By placing the communal spaces in a collective annex-building, the habitants are forced to interact with each other. Collectivity also takes place in the corridors and gallery.



- semi-public areas
- individual areas
- private areas
- apartment routes
- - - corridor routes

Sources:
 archi.ru. (2018, 10 18). retrieved on 5 15, 2020, from archi.ru: <https://archi.ru/en/79374/15-fak-tov-o-dome-narkomfina>

architect jvr. (2015, 6 7). Retrieved on 6 5, 2020, from <https://architectjvr.wordpress.com/2015/06/07/welcome-to-moscow-welcome-to/>

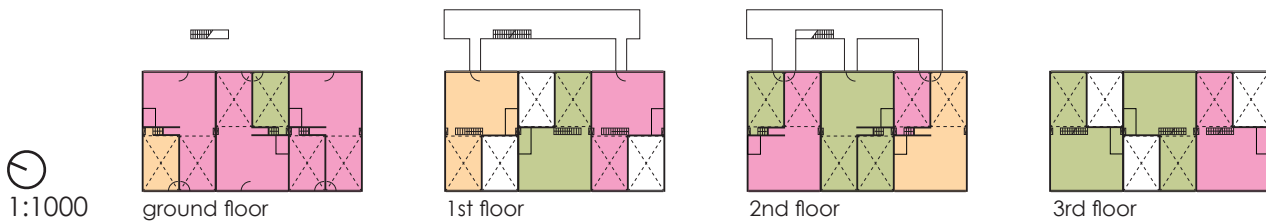
de Architect. (2019, 10 1). Retrieved on 5 16, 2020, from <https://www.dearchitect.nl/architectuur/blog/2019/10/blog-ge-meenschappelijk-wonen-narkomfin-gebouw-1928-in-moskou-door-moisej-ginzboerg-en-ignaty-milinis-101230824>

Kölner Brett

year: 2000
architect: b&k + brandlhuber&knies GbR
location: Cologne, Germany
type: live-work building
amount: 12 units

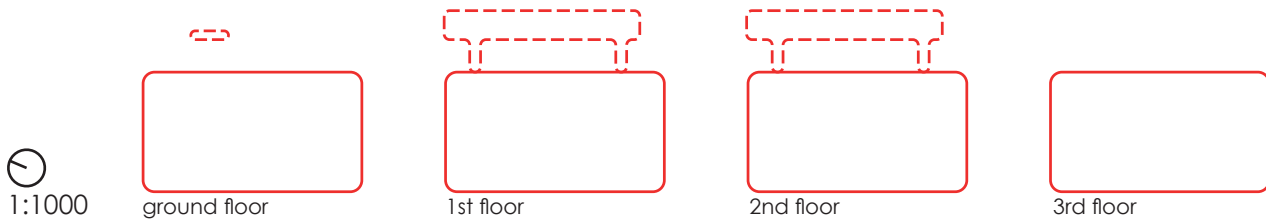


Kölner Brett is a response to the need to for live-work units in Köln by desginig possibility. The building is made up of 12 large units, each consisting of a horizontal and a vertical space. The units are entirely empty apart from pipes and electricity, so that the future inhabitant can completely design their own space. These units can then again be merged to create larger dwellings and offices. They are accessed through a large stair-case-gallery that sits extened from the block on the east side.



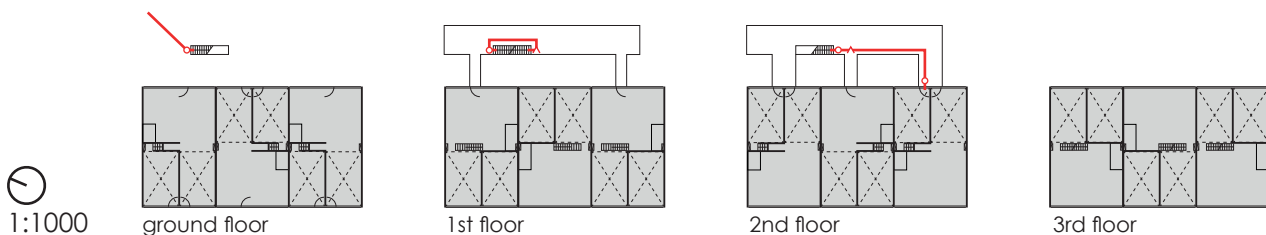
functions

The building is made up of 12 units that can either be entirely directed towards living, working or at a mix between the two functions. Nor of the sources, nor the architect, could give a clear indication of what the exact distribution was for living and working, so this is an estimation based on pictures. (Green: Live, Pink: Work, Yellow: Live-work)



public-private

Kölner Brett consists of private homes and an extended gallery at a distance from the homes, with the gallery being collective, but publicly accessible. It forms the transitional zone between the privacy of the live-work unit and the openness of the street.



route, moments of collectivity

The route that one takes from the dwelling to the exterior throughout the day sees a few potential moments of collectivity. These are mainly at points where the route intersects other routes, at doors and at stairs, and a greeting can be exchanged. There are no collective facilities that can provide for moments of collectivity.

in conclusion

Kölner Brett is not designed for collectivity, instead it puts a great focus on individuality. The owner can shape their unit or units to their own desire and make it completely unique. The only natural moments of collectivity consist of meeting one another on the gallery when exiting or entering the dwelling.



De Hoge Heren

Wiel Arets Architects

year: 2001
architect: Wiel Arets Architects
location: Rotterdam, the Netherlands
type: Housing
amount: 285 apartment divided over two towers

Two residential high-rise towers are situated on a 6-story plinth. This plinth contains public and resident parking, a public gym and the main entry hall. A void in the centre of the building enables natural light to spill into the interior. The towers stand within a green terrace on the roof of the plinth, onto which the lobbies open, so that ample outdoor space is offered to residents, in addition to that of their private terraces. On the same floor, a collective fitness- and sauna room, a swimming pool, guest rooms and work spaces are situated.

Functions

- entrance

The ground floor contains the entrance of the building, the first part of the parking garage, bike parking, privately owned storage rooms, garbage rooms, technical services and a public gym.

- parking

Parking space is situated on the four floors between the ground floor and the lobby on the sixth floor. The car-parking garage is accessible through an entrance on the ground floor at the north side of the building. The bike sheds are located on the south side of the ground floor.

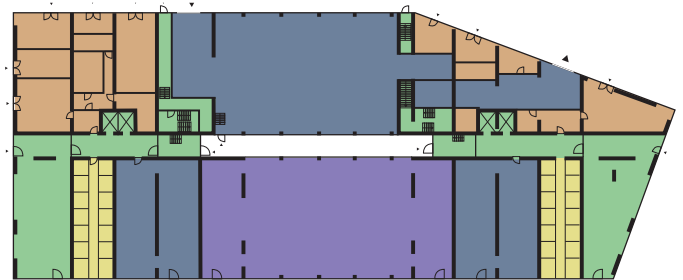
- housing

Royal sized appartments are housed in the two towers. Each floor contains 10 apartments, sizes vary from 122-143 square meters. The Hoge Heren houses a total of 285 apartments (160 rental, 50 furnished rental and 75 free-market). No other functions are housed in these towers.

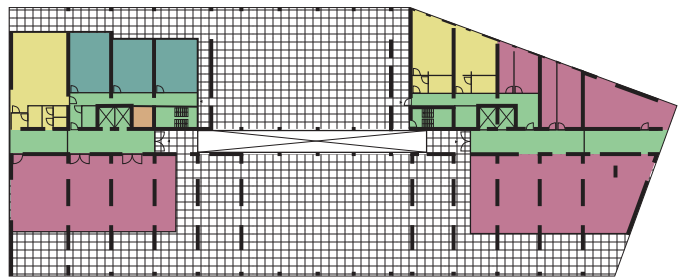
Public - Semi-public - Private

The lobby and roof terrace on the sixth floor contains various semi-private functions such as a swimming pool and sauna, a fitness room, workspaces, and guest apartments. This floor creates the border between partly public ground floor and parking garage and the privately owned apartments in the tower.

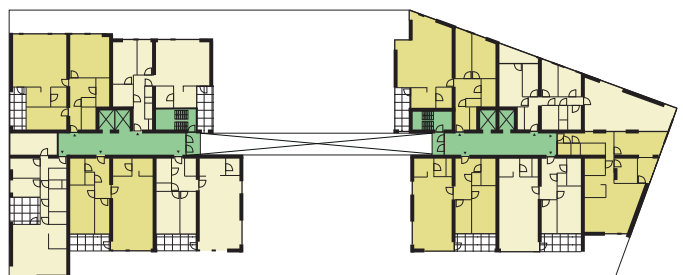
ground floor .
 entrance
 public gym



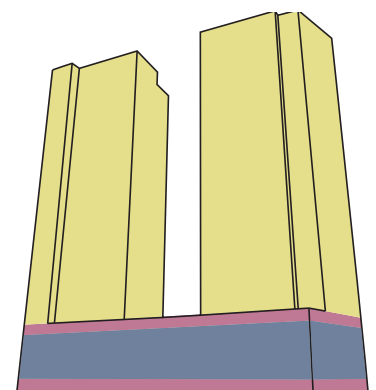
6th floor .
 lobby
 roof terrace



7th - 34th floor .
 apartments

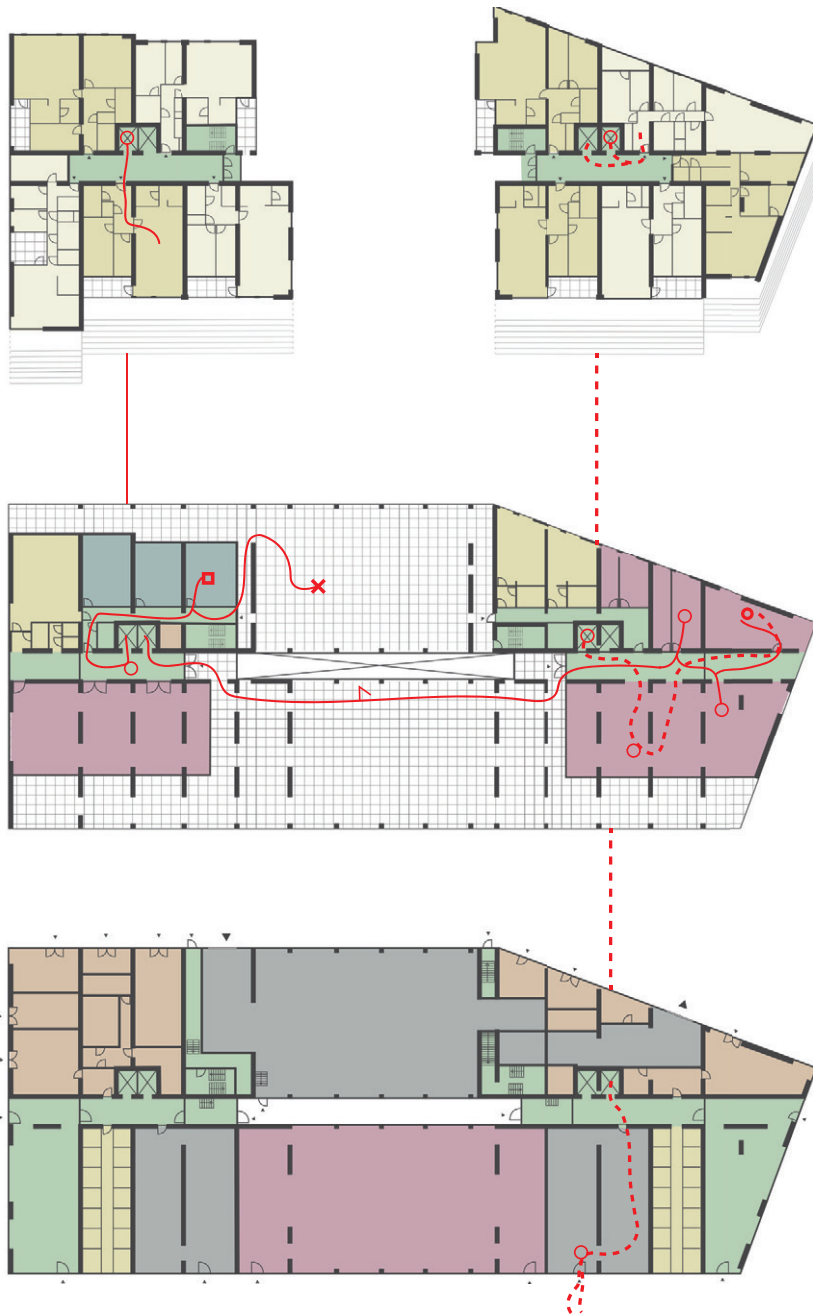


- Private
- Collective
- Work
- Circulation
- Public
- Parking
- Services



Collective Encounters

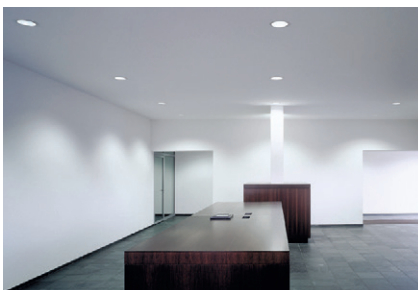
De Hoge Heren Wiel Arets Architects



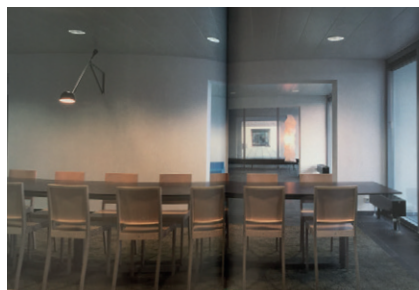
- Route resident A
- - - Route resident B
- Informal short encounter (0-10 min)
- Informal long meeting (10-∞ min)
- Negative encounter
- ▲ Visual encounter
- ✕ Visual encounter other
- Formal short encounter (0-10 min)
- Formal long meeting (10-∞ min)

Conclusion

The programme of the Hoge Heren building has a strong distribution between public, semi-private and private area's. A public fitness facility is placed on the ground floor, separated from the rather functional semi-private spaces like the service rooms and storage sheds. The parking garage on the 2nd to 5th floors separates the ground floor from the semi-private 6th floor where all collective spaces are situated. This is the only floor where residents would meet each other besides the informal encounters in places such as the elevator or the bike sheds. The rest of the floors, in the towers, are completely private oriented. The residents can move through the building in a relatively anonymous way. They can choose to meet other residents themselves by making use of the facilities on the 6th floor.



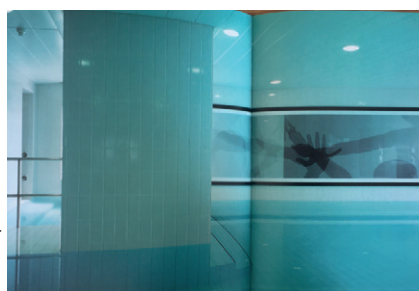
< The interior of the lobby on the sixth floor is open and clean. The palet of materials like natural stonde and wood results in luxurious character.



< The interiors of the semi-private of-ice spaces on the sixth floor are open and flexible.



< The outside area down the central void has a futuristic character through the use of aluminium finishes and green-coloured lighting, and dark tiles.



< The interior of the semi-private swimming pool is open and light. The luxurious atmoshpere, light spots and art make it feel like a pool of an hotel.

Svartlamoen housing



year: 2005
architect: Brendeland & Kristoffersen arkitekter
location: Trondheim, Norway
type: Student dormitory & studios
amount: 22 dormitory units and 6 studios

Svartlamoen is a residential complex for young people. When it was realized it was the largest building in the world made of solid wood. It made a statement about Norwegian housing policy, which did not pay enough attention to people of all ages with a low income.

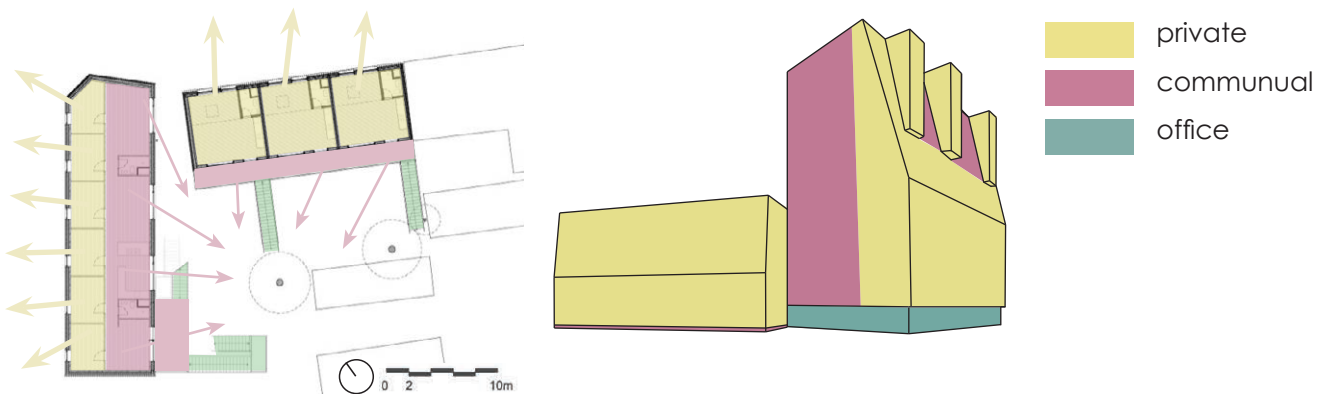
Functions

The whole complex contains 28 living units, whereby the main building consists of a half sunken plinth with office spaces and four group homes of 110 to 128 m² for 5 to 6 people. Half of the dwellings are communal spaces: the kitchen, living room, bathrooms and balconies. The average floor area per person is 22 m², which is considerably lower than the 50 m² which is the Norwegian standard.

The low two-storey block contains two sets of three studio apartments of 28 m². This building also has a laundry room and storage space in the basement.



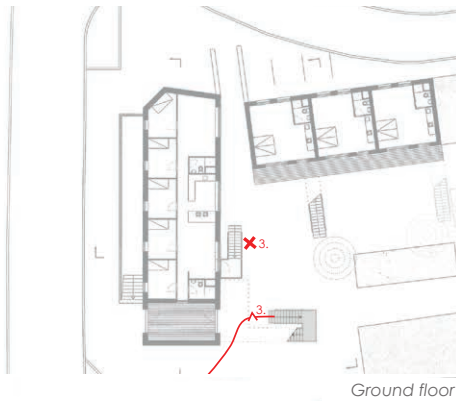
Private-public



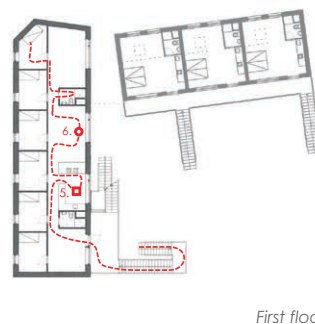
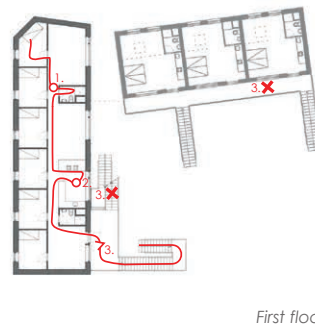
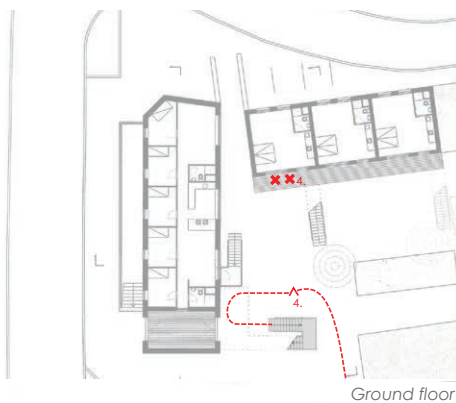
The housing complex is built around a courtyard, which is the collective centre of the site. The two housing buildings facing the court are closely connected to the court, which is therefore easy accessible from out of the dwellings. All the private spaces in the higher building are oriented to the outside of the complex, while all the communal spaces are oriented towards the central courtyard. Both buildings also have their own collective outdoor spaces alongside the courtyard. The high building with the group houses has a large steel stairs which serves as access to the houses and as balcony at the same time. The lower building with the individual houses has a collective porch at both floors.

Collective encounters

Morning:



Afternoon:



Svartlamoen housing

- Morning route
- - - Afternoon route
- Informal short encounter (0-10 min)
- Informal long meeting (10-∞ min)
- ⊙ Negative encounter
- ^ Visual encounter
- ✕ Visual encounter other
- Formal short encounter (0-10 min)
- ◻ Formal long meeting (10-∞ min)

Spatial characteristics



1. The communal living room is an open space which deliberately was left unfinished by the architects, so that the residents could make it their own by decorating the walls and placing furniture.



3. The central courtyard is an open space, flexible in use. It is used as a place to store bikes, to sit and to relax. A hammock in the middle is one of the items which can be used by all residents.



4. The galleries in front of the buildings function also as the collective balconies. Because of the large dimensions it is possible to relax here in the sun on your own or with your roommates.



6. The communal kitchen is in the same space as the communal living room. From here large windows give a sight into the courtyard, so the inhabitants can always see what is going on there.

Conclusion

Collectiveness was very important in this design. The courtyard is literally central to the collectiveness of the complex. It is the space where the inhabitants of the entire complex can meet one another, when they store their bike, sit and relax or when they engage in any other activity they planned. The next layer of collectiveness consists of the outdoor spaces of the buildings adjacent to the courtyard. The shared 'balconies' evoke encounters between people who live on the same floor. The last layer consists out of the communal living rooms. To make sure that the people would actually make use of these spaces, the designers actively involved them during the design phase and afterwards by delivering an unfinished product, so the inhabitants could make it their own.

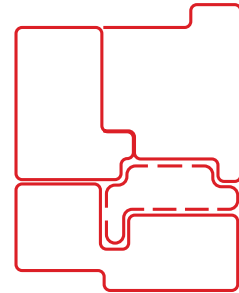
Images from:
 Architecture Norway (2005) Svartlamoen housing, Trondheim, retrieved from: <http://architecturenorway.no/projects/dwelling/svartlamoen-2005/>
 Fourth door (2010) Svartlamoen, Trondheim – Harbinger to Norway's massive wood phase-change, retrieved from: http://www.fourthdoor.org/annular/?page_id=1269

The Olieberg is a building in which people with a certain disability can live in a 'companion' home. They live mixed with "normal" people through the building. There is a meeting point where supervisors can provide support 24 hours a day. You can also eat, wash or drink a cup of coffee there. So this is also the place where you could meet someone from the same building.

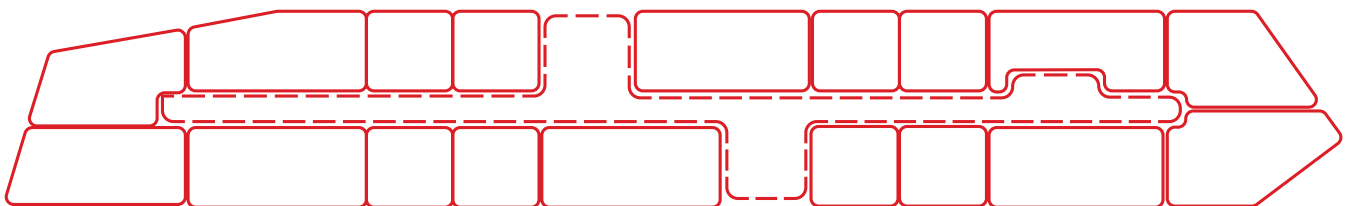
Various interventions have been made in the corridors. Firstly, there are voids so you can look on other floors and there is more light in the corridors. There are also recesses on each floor to both sides so that you have a view of the beach on one side and the city on the other.

The 'dune-garden' (the courtyard) is a collective for local residents and only accessible from the buildings. This is also the playground of the nursery. There is a fence around this.

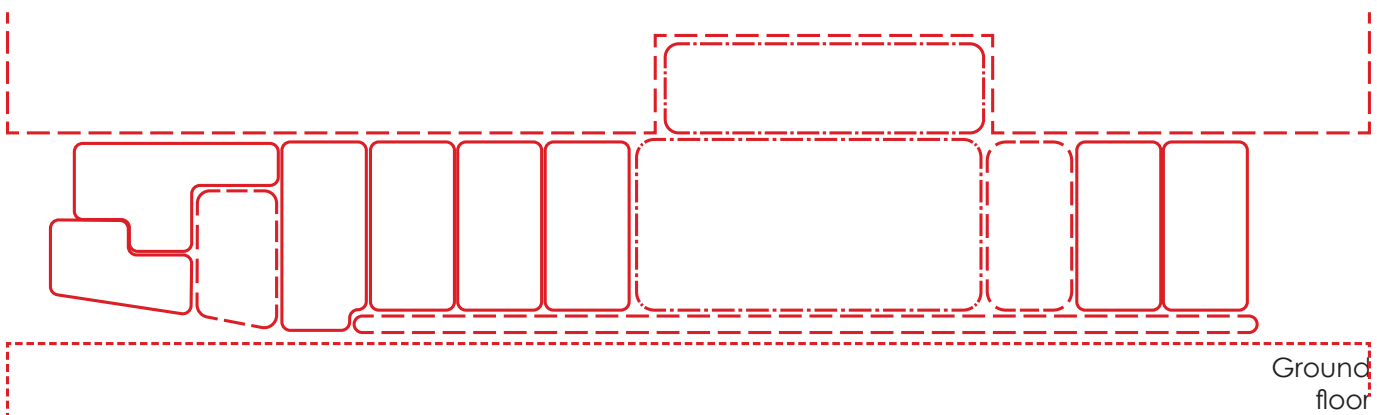
- Private
- - - - - Collective
- · - · - For specific public
- · - · - Public



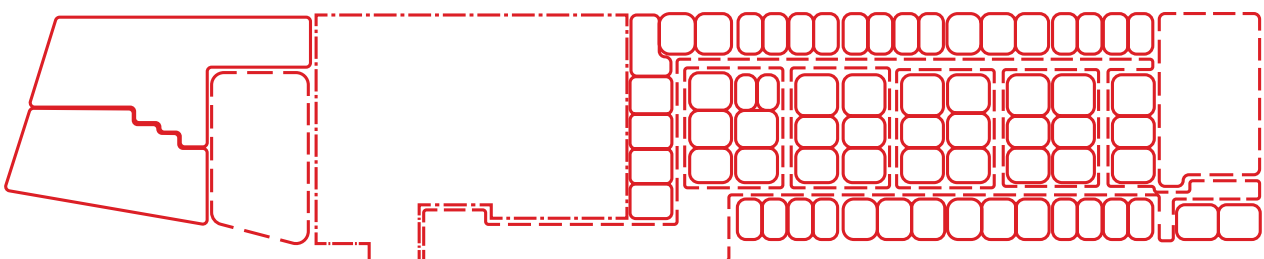
Seventh floor



First floor



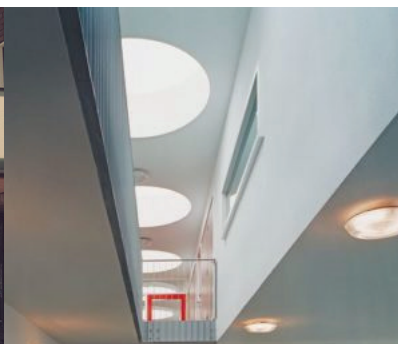
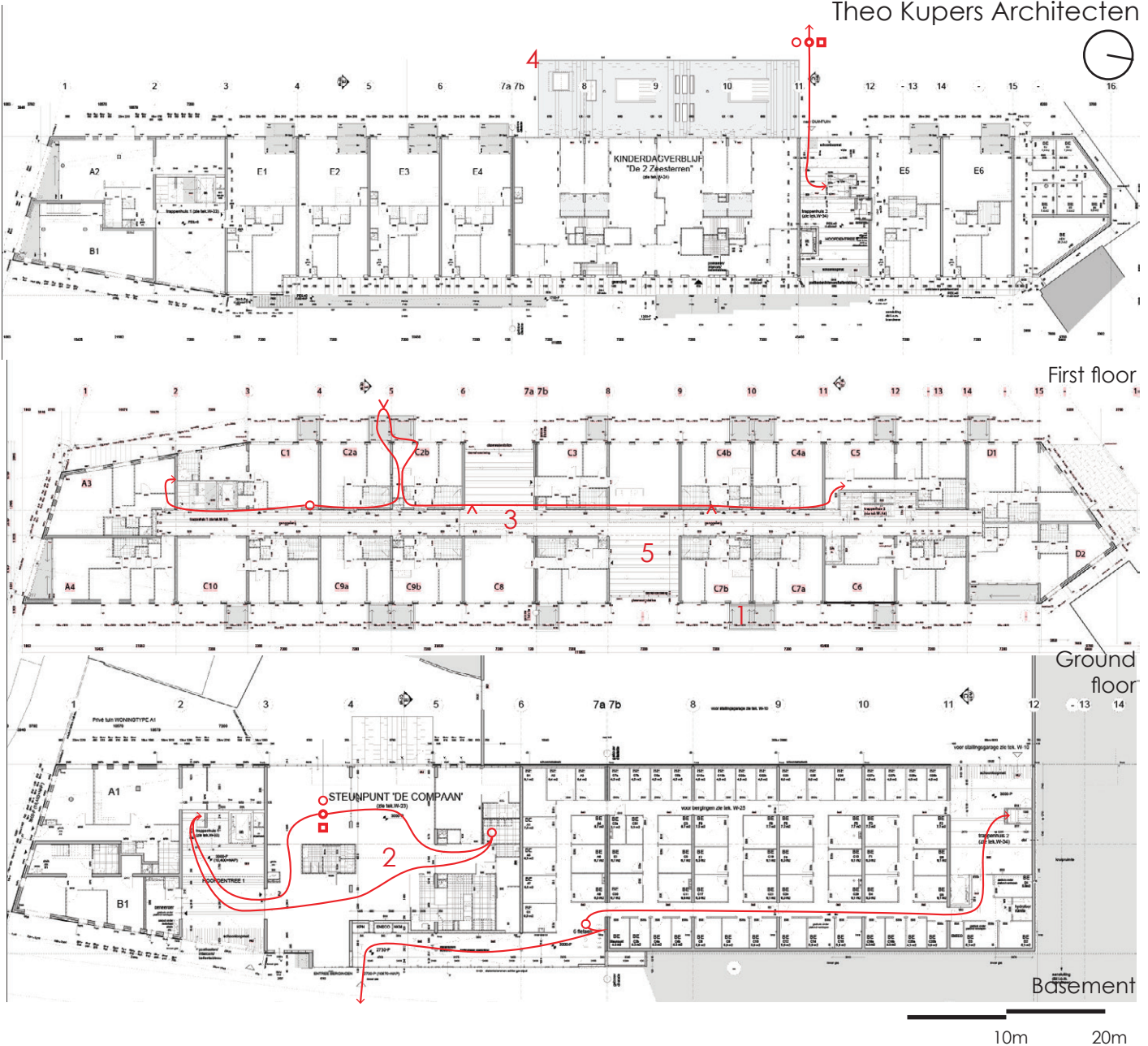
Ground floor



Basement

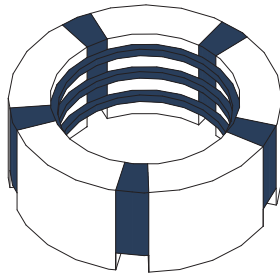
De Olieberg

Theo Kupers Architecten





Exterior Tietgen Dormitory (Lindhe, J. M., 2014a)



Tietgen Dormitory

year: 2006
 architects: Lundgaard & Tranberg Arkitekter
 city: Copenhagen, Denmark
 type: student dormitory
 amount: 360 units
 plot size: 6.082 m²
 total floor area: 26.781 m²
 FSI = 4,4

The Tietgen Dormitory (Tietgenkollegiet in Danish) is a circle-shaped dormitory in Copenhagen, Denmark. The circular shape is meant to address all its surroundings equally, and makes private dwellings look outward and shared rooms look inward. The circle surrounds a public courtyard. On the ground floor, the building has many facilities that can be used by all residents such as study rooms, music rooms and a big multifunctional assembly hall where sometimes events take place. The upper six floors are student housing. Every group of twelve dwelling units shares common rooms such as a kitchen and a utility room. These rooms face the courtyard, possibly making the shared experience a communal experience.

functions

The ground floor of Tietgen houses many shared facilities that are accessible for all residents of the block. There are different kinds of study rooms, a shared washing room, workshops and even a gym.

The floor plan of the second floor is exemplary for all other floors. The hallway which gives access to the individual dwellings outlines the center courtyard. Shared spaces such as kitchens, utility rooms and multifunctional rooms are placed on the other side of the hallway, opposite the individual dwellings. One has to pass through the hallway to go to their kitchen.

private-public

The center courtyard is publicly accessible, but can be closed off by fencing off the five access routes. It is not clear in whether this happens on a regular basis or only in particular cases such as during an event.

The ground floor building parts can be used by any of the residents of Tietgen. The staircases can only be accessed by residents as well. It is unclear whether the elevators can be used by outsiders, but that does seem to be the case.

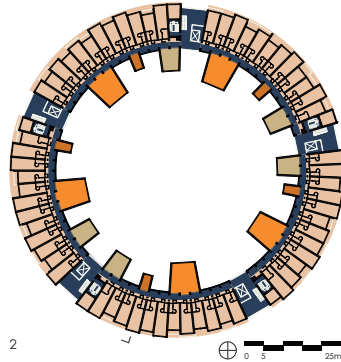
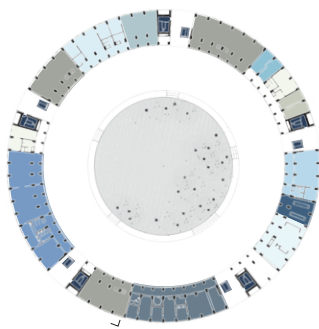
The first through sixth floor are only accessible to residents and their guests. Every hallway section, from one elevator to the next, is closed off with locked doors. Twelve residents per section form a group that shares a kitchen/living room and a utility room for hanging laundry.

The third shared space in a section can have various functions; cinema room, billiard room, study room. They can be used by all residents, although they do need to ring the group's bell.

Courtyard Tietgen Dormitory (Lindhe, J. M., 2014a)



functions



circulation

letterboxes

offices

assembly hall

washing room

room for groupwork

reading room

computerroom

gym

bike storage

workshop

music room

entertainment/study room

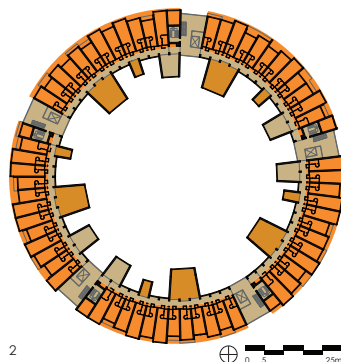
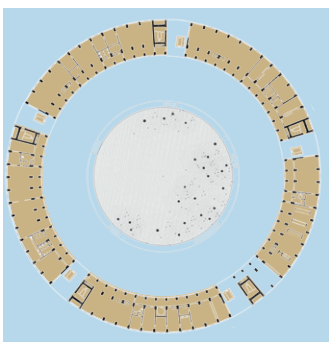
private dwelling

kitchen/living room

utility room

garage

private-public



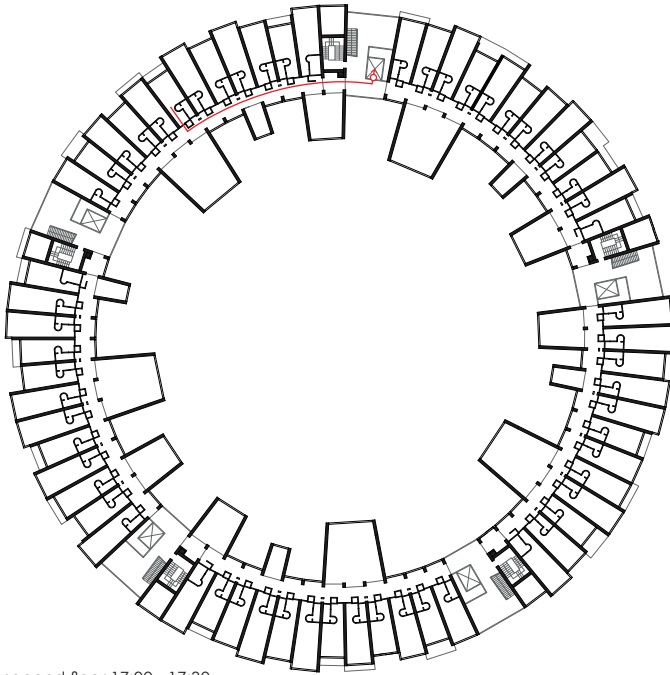
public

communal (for all residents)

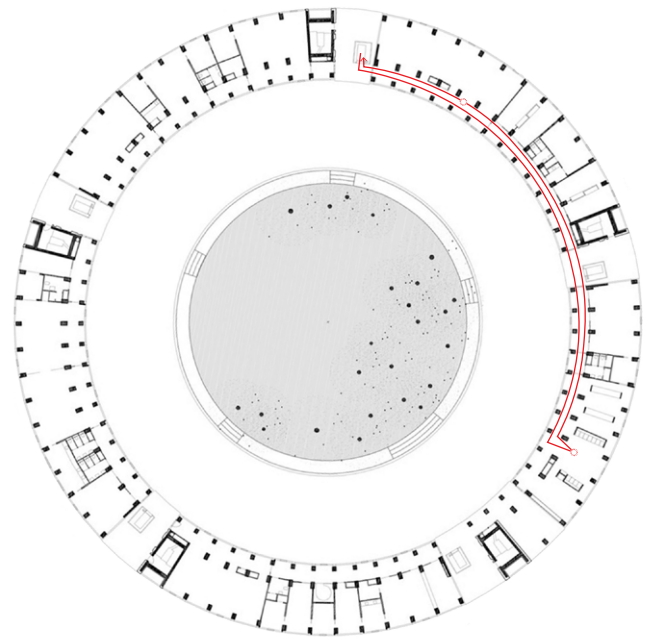
communal (for group of residents)

private

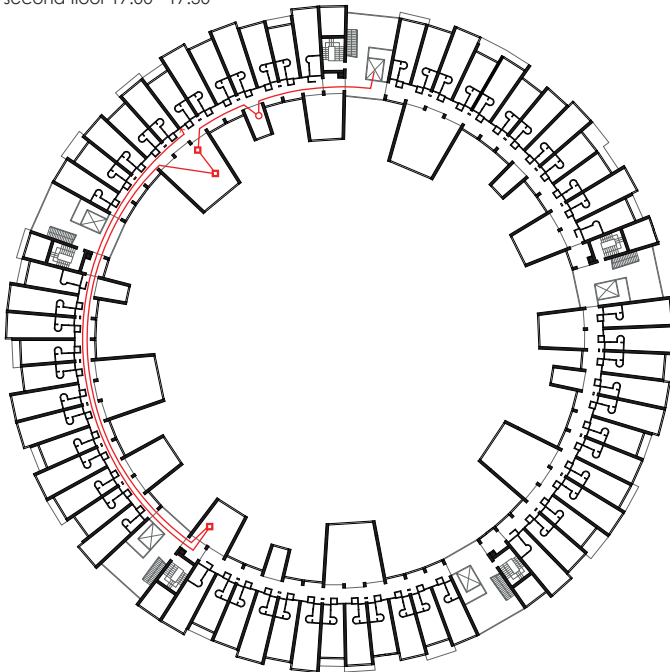
Tietgen Dormitory



second floor 17:00 - 17:30



ground floor 17:30 - 18:00



second floor 18:00 - 20:00

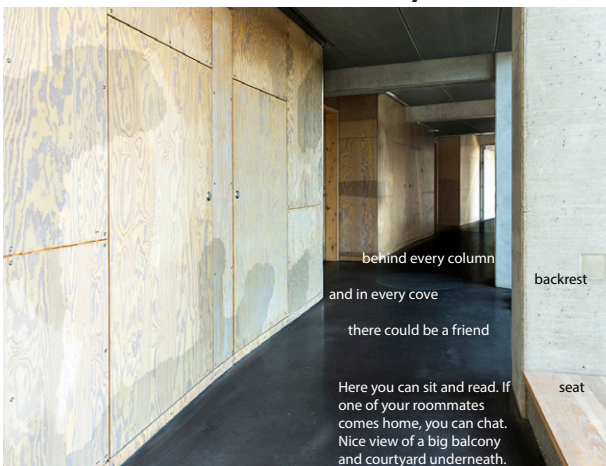


- 17:00 - 17:30
(picking up laundry from room)
- greet at elevator
- 17:30 - 18:00
- greet at laundry room
- greet in ground floor hallway
- 18:00 - 20:00
- chatting in utility room
- cooking with roommates
- dining with roommates
- hanging out in cinemeroom with fellow students and roommates
(back to private room)

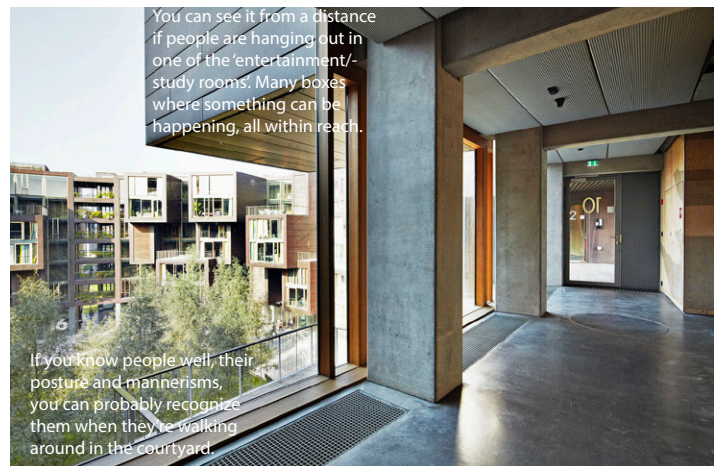
Conclusion

There are three 'rings', from outer to inner they are; private rooms, communal hallways, and communal facilities. Having privacy directed outward and communal practices directed inward (to a courtyard) can be beneficial to a sense of community.

architecture and sociability



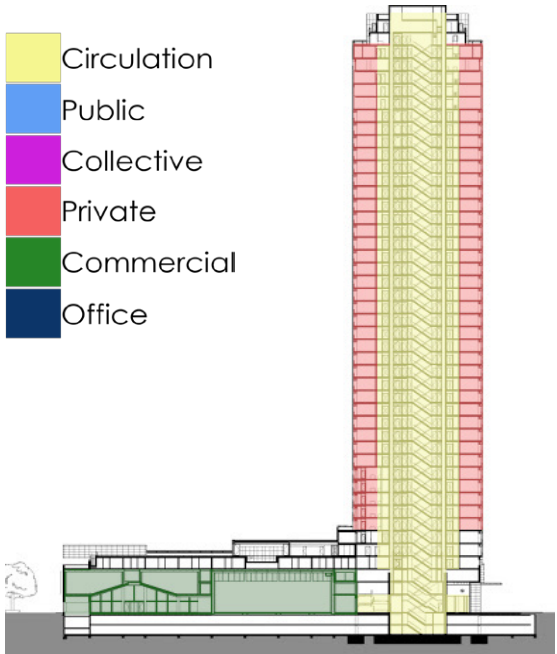
Tietgen Hallway 1 (Lundgaard & Tranberg Arkitekter, n.d.)



Tietgen Hallway 2 (Vahle A/S, n.d.)



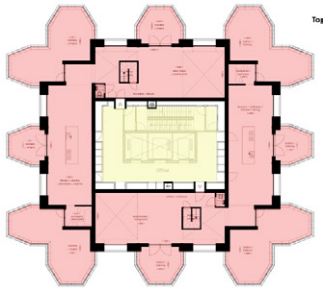
- Circulation
- Public
- Collective
- Private
- Commercial
- Office



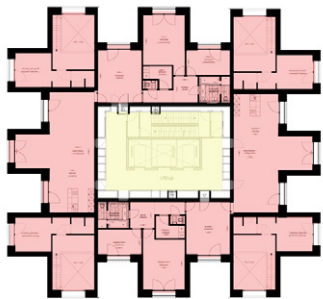
Architect: Alavaro Siza
Built: 2007
Adres: Van der Hoevenplein 9-243
 Wilhelminapier (postcode 3072)
Client: Vesteda
Contractor: Besix Branch Nederland
Typology: 234 appartementen

Functions

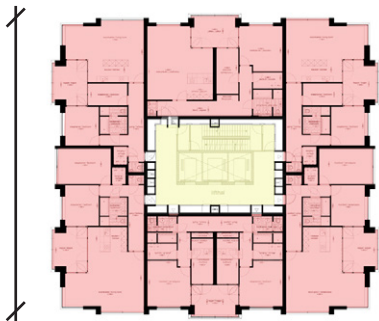
The building has very formal collective spaces in the form of collective functions such as a swimming pool and a commercial-collective function in the form of a cinema.



Floor 45

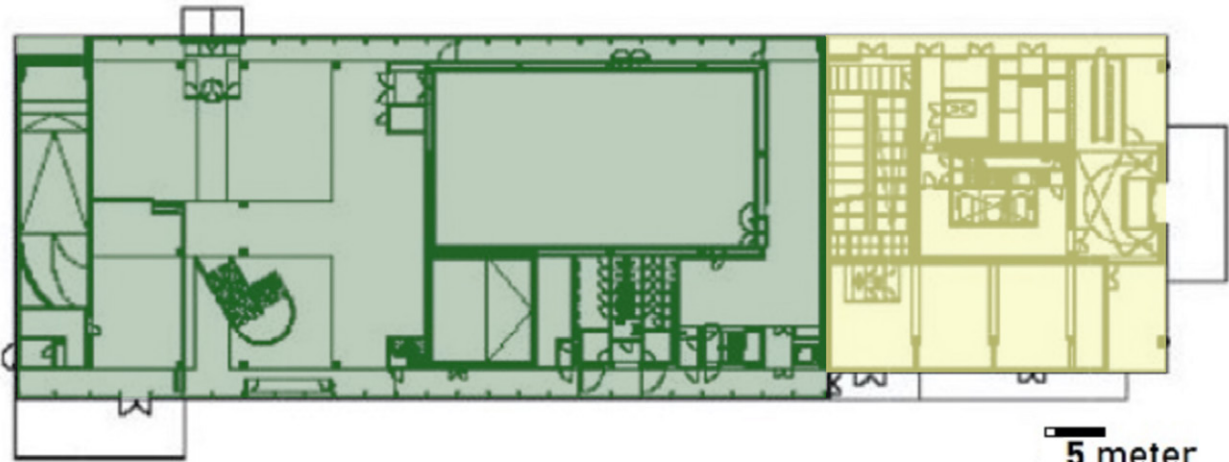


Floor 41



Floor 22

30m




5 meter

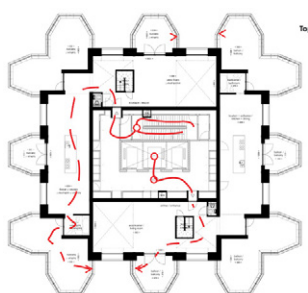
Groud Floor



Meeting

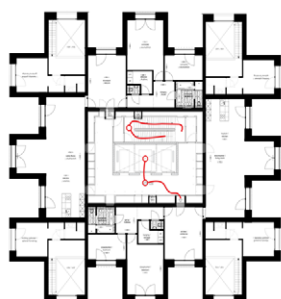
The building does not have much in the form of short term formal meeting spaces. Formal meetings can take place in the formal places of activity such as the swimming pool and cinema as mentioned earlier. Informal meetings can take place in the garage and stairwell, or in the elevators and spaces before the entrance of the homes on each level.

- 
Informal Short Meeting
- 
Informal Long Meeting
- 
Negative Meeting
- 
Visual Meeting
- 
Formal Short meeting
- 
Formal Long meeting

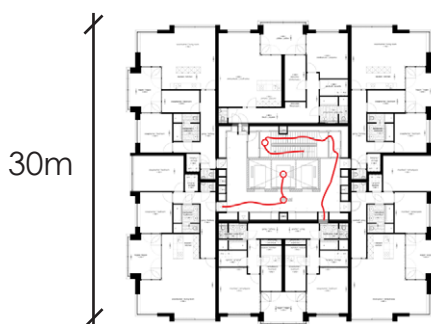


Floor 45

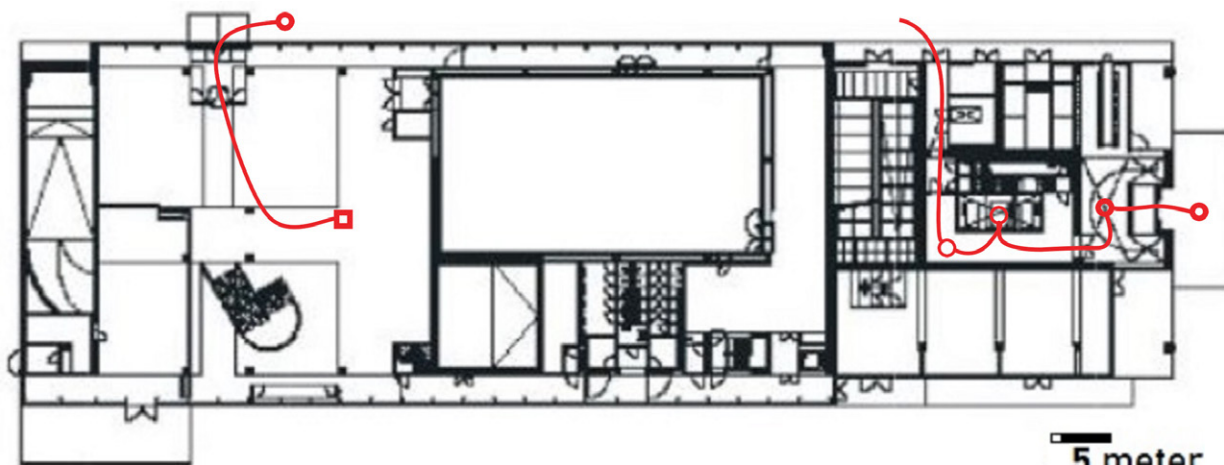
Overall, this building is geared towards spacious and more luxurious homes. On the 45th floor there are a few large homes with many balconies from some of which it is possible to see your neighbor on their balcony, of course given that they are on the exact right balcony of the 4 balconies that these homes have.



Floor 41



Floor 22

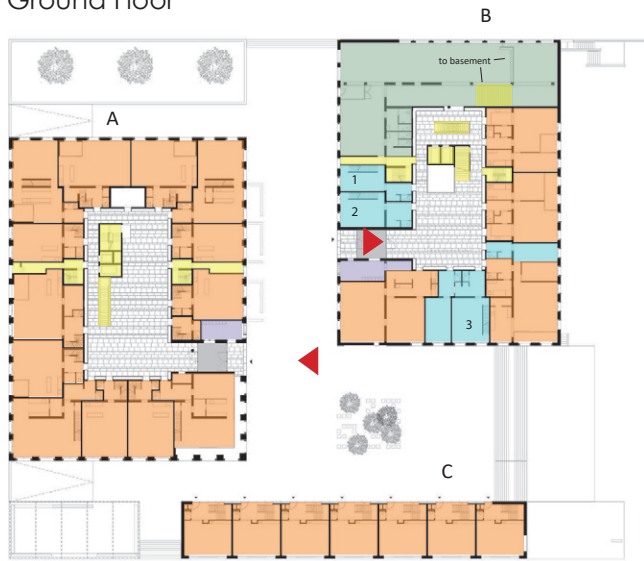


5 meter

Groud Floor

Piazza Céramique

Ground Floor



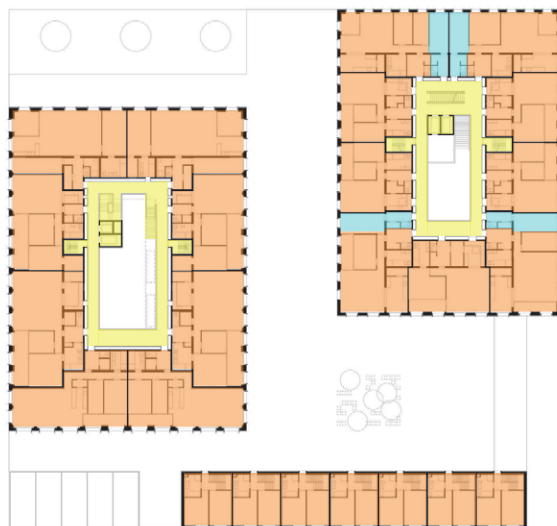
year: 2001 - 2007 tender first price
 architects: Jo Janssen & Wim van den Bergh
 city: Maastricht, The Netherlands
 type: dwelling & working
 amount: 92 dwellings and workspaces
 plot size: 60.000 m²
 total floor area: 18.970 m²
 FSI = 3,16

Block A Dwelling
 Block B Dwelling + Working
 Block C 7 workhomes designed by Luijten/Verheij architecten

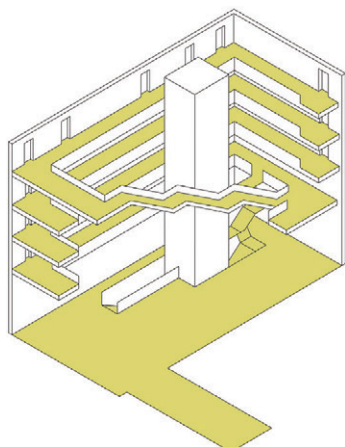
Both blocks have a collective entrance lobby in an atrium. Surrounded around the atrium the dwellings and workplaces are situated. The parking is under an elevated deck in the basement, which is beneath the whole plot, so under the three blocks.

the lifts and stairs are in the middle of the atrium, the piazza's. The circulation of both blocks A and B comes down to the basement. In Block A on the groundfloor are maisonnettes so they don't have an acces on the second floor. The stairs and galleries circulate around the atrium so you have always an overview of what is happening on the other side or on the groundfloor.

Level 2



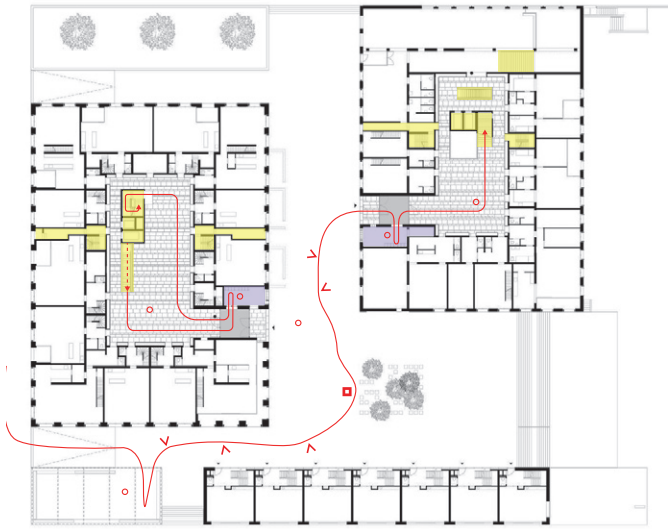
- Living
- Working
- Circulation
- Mailboxes
- Commercial



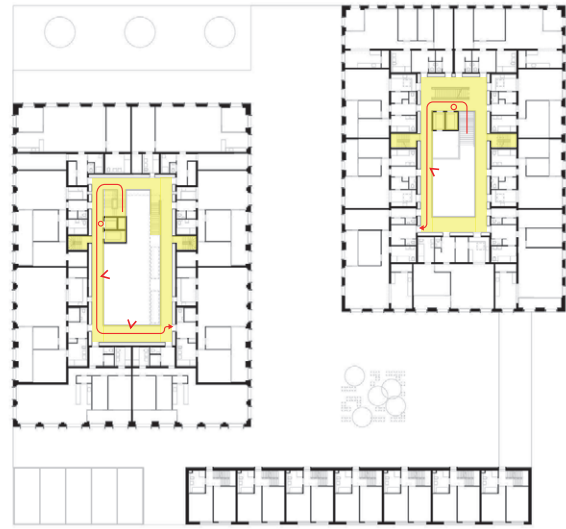
2. Circulation



Atrium and deck outside. Jo Janssen Architecten. (2007). Piazza Céramique. Retrieved from, <https://jojanssenarchitecten.nl/project/92pc>



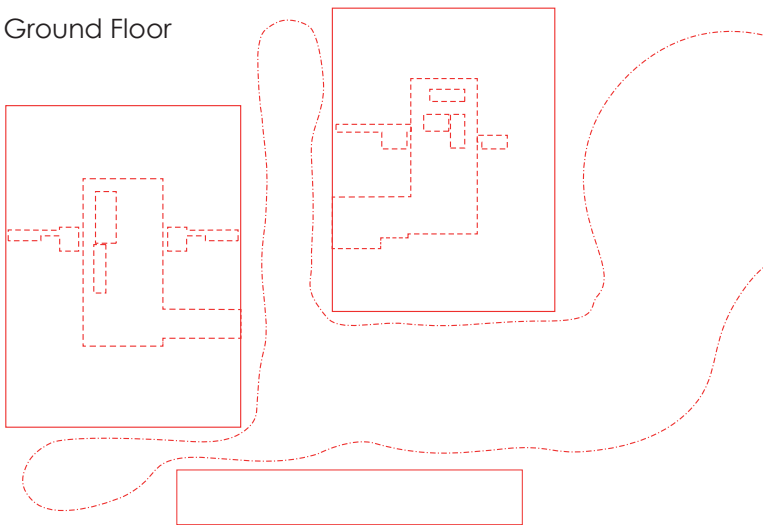
Ground Floor



Level 2



Ground Floor



Conclusion

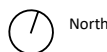
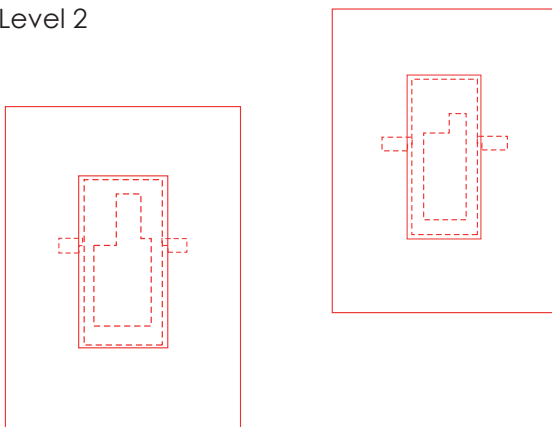
The building has a collective atrium with gallery access to the dwellings. The buildings are situated on a public deck and a public garden.

Due to the separate entrances of the buildings which are outside on the lifted deck in the inner area between the three buildings people are more forced to meet each other. Instead of on street level at the the street side. On the deck there is a place to sit and meet.

However, thanks to closed walls and doors on the galleries in the atrium, people only accidentally meet each other when someone's steps out of their house or is waiting in front of the lift.

People who come from the parking garage below groundlevel can go up to their floor level invisible with the lift. When taking the stairs and walking to their mailboxes they can meet some people in the lobby in the atrium. Going up the stairs to the higher levels people walk up in the atrium and have a view over the atrium the whole time. So people can see each other even when you are not on the same floorlevel.

Level 2



General

St. Jobsveem



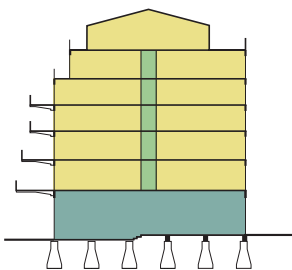
Year of construction: 1913
Year of transformation: 2007
Architects: Mei architects, Wessel de Jonge
Location: Rotterdam, The Netherlands
Type: Luxury lofts and penthouses
Plot size: 3.250 m²
Total floor area: 21.000 m²
FSI: 6.46

The St. Jobsveem is a listed monument and a former warehouse along the St. Jobshaven in Rotterdam. In 2007 it has been transformed to dwellings. The largest intervention has been the opening of the brick facade, on three locations in the long building. Behind these openings are now the stairs located.

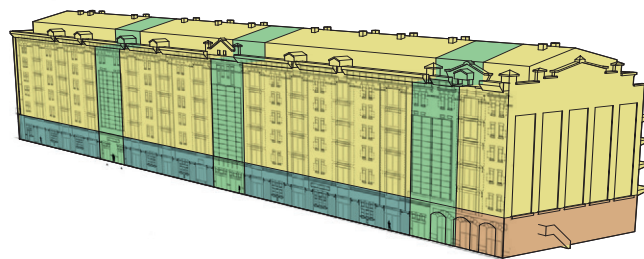
St. Jobsveem exterior (Mei Architects, n.d.)

Functions

The largest part of the building has a residential function in which 99 loft apartments and 10 penthouses are located. All dwellings have an open floor plan. All dwellings, except from the penthouses which are a new addition, have a large depth. This has to do with the size of the original warehouse. The only communal space for the residents in the building are the storage boxes on the ground floor. In the plinth of the building are office spaces located, for external companies. They barely have a connection with the rest of the building as both working and living have a separate entrance.



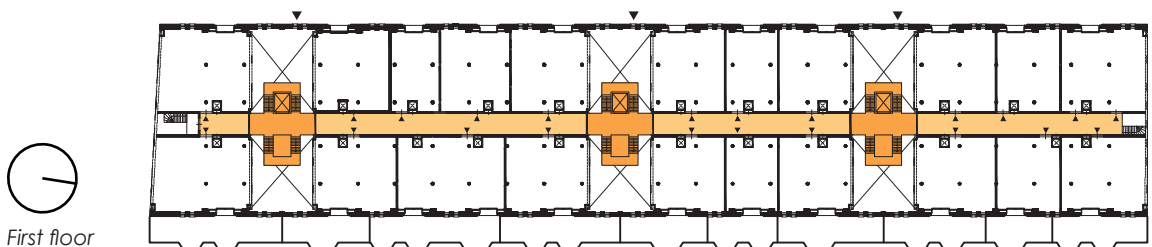
Section
1:1000



- Living
- Working
- Mobility
- Storage

Accessibility

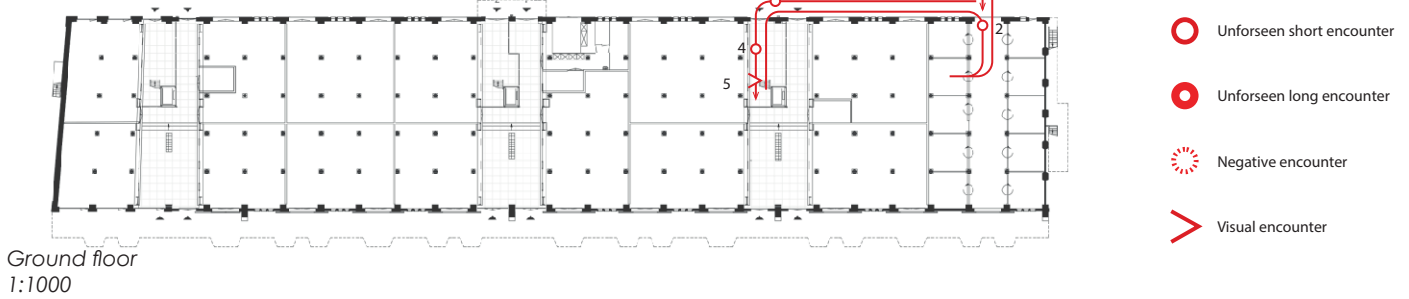
The building is cut by three atriums. These atriums are the entrance points of the building. To make the atriums in the old monumental warehouse, some major adaptations have been made during the transformation in 2007. In the light atriums a staircase and elevator provide access to the floors above. Here a corridor leads to the front door of the dwellings.



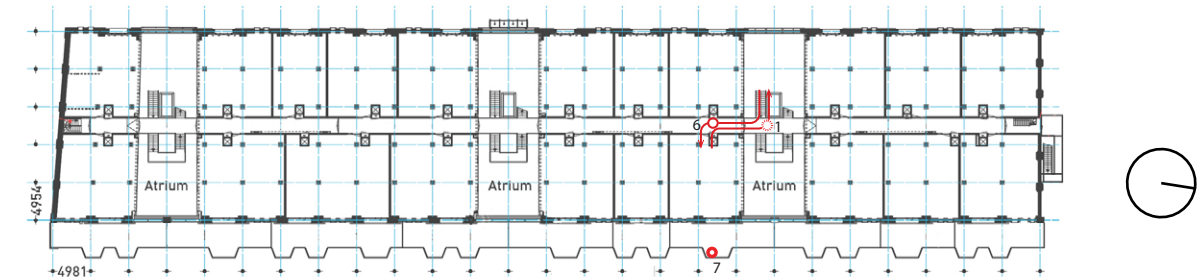
First floor
1:1000

Collectivity

Collective encounters



Ground floor
1:1000



First floor
1:1000

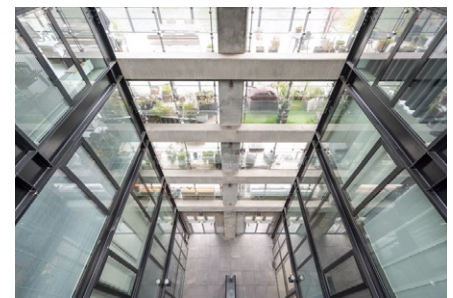
Spatial characteristics



1. The stairs are the meeting place in the building. Residents from all floors come together here. The skylight and the big glass facade make it the lightest space in the building, which make it a comfortable space.



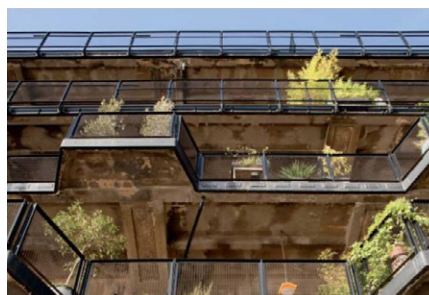
3. The entrances of the residential part and the office part are situated right next to each other. This provides some kind of encounter in front of the building.



4. Mailboxes are located on the ground floor in the atrium. This increases the chances of residents meeting each other in the atrium. It becomes a place where longer conversations could take place between residents.



5. The dwellings adjacent to the atriums have a glass facade facing the atrium. This is done for extra daylight in the dwellings, but also provides a visual connection with people on the stairs. It can strengthen the sense of community, but also decreases the privacy in the dwelling.



7. Although located inside the dwelling itself, the balconies provide a space where collectivity can take place. The cantilevered balconies with an decreasing depth on the higher levels make it possible to have interaction with the neighbours above or below.

Conclusion

Collective encounters take place in the mobility spaces of the building. The light atriums are the cores of the collective cores for in which residents meet. It might be stated that glass is in multiple ways used to bring in some form of collectivity within this massive, closed monument. The shape of the building, the long corridors and the closed structure of the building do not stimulate collectivity. However, this is not so strange bearing in mind that it was not build as a residential building.

The Building

Year: 2012

Architects: 51N4E

Location: Nevele, Belgium

Type: Elderly Homes

Amount: 54 Apartments

Plot size: 7.460 m² **Programme:** 4.400 m²

OCMW Nevele

51N4E



1:500



© Filip Dujardin



© Filip Dujardin



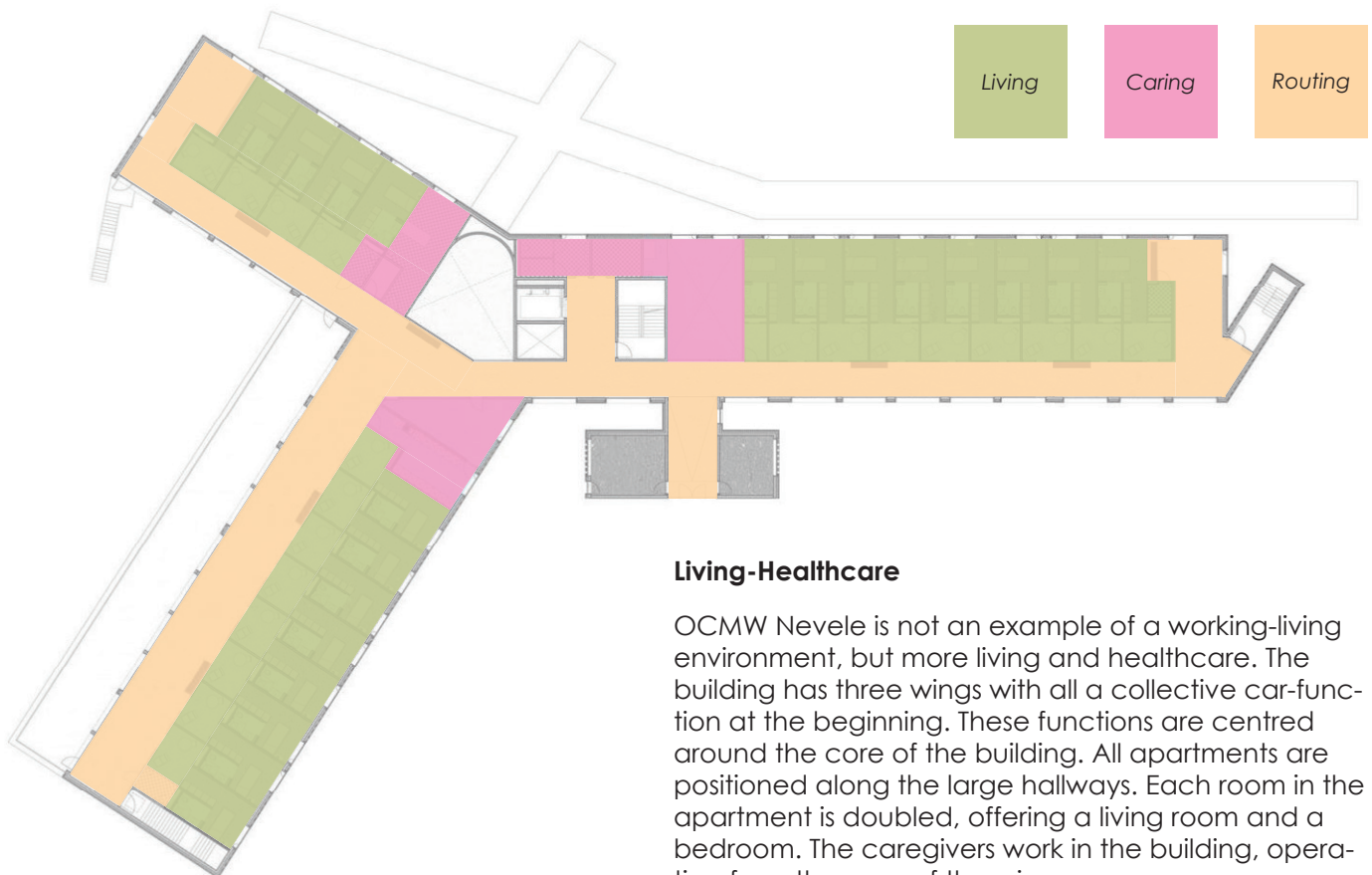
© Filip Dujardin



© Filip Dujardin

General

OCMW Nevele is an elderly home project in Nevele, Belgium. It houses 54 apartments over 3 levels, with a total programme of 4.400 m². Characterizing is that the building exists of three wings with large hallways. Because of the large windows, a lot of light is infiltrating in the hallways. On the other site, the bedrooms contain smaller windows, creating more intimacy.



Living-Healthcare

OCMW Nevele is not an example of a working-living environment, but more living and healthcare. The building has three wings with all a collective car-function at the beginning. These functions are centred around the core of the building. All apartments are positioned along the large hallways. Each room in the apartment is doubled, offering a living room and a bedroom. The caregivers work in the building, operating from the core of the wings.

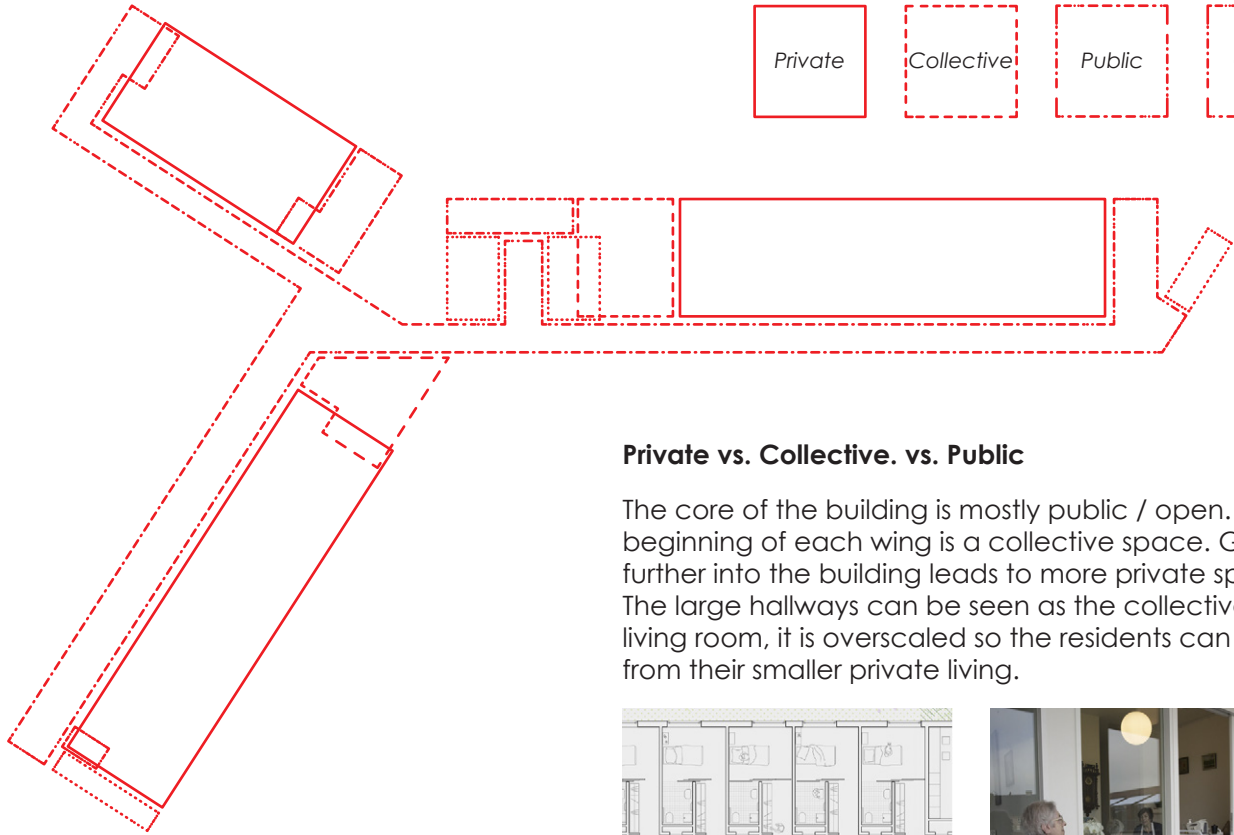
The Collective

OCMW Nevele

51N4E

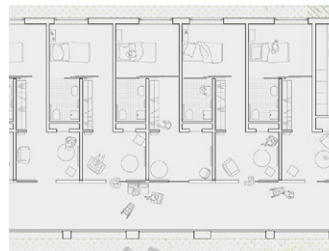


1:500



Private vs. Collective. vs. Public

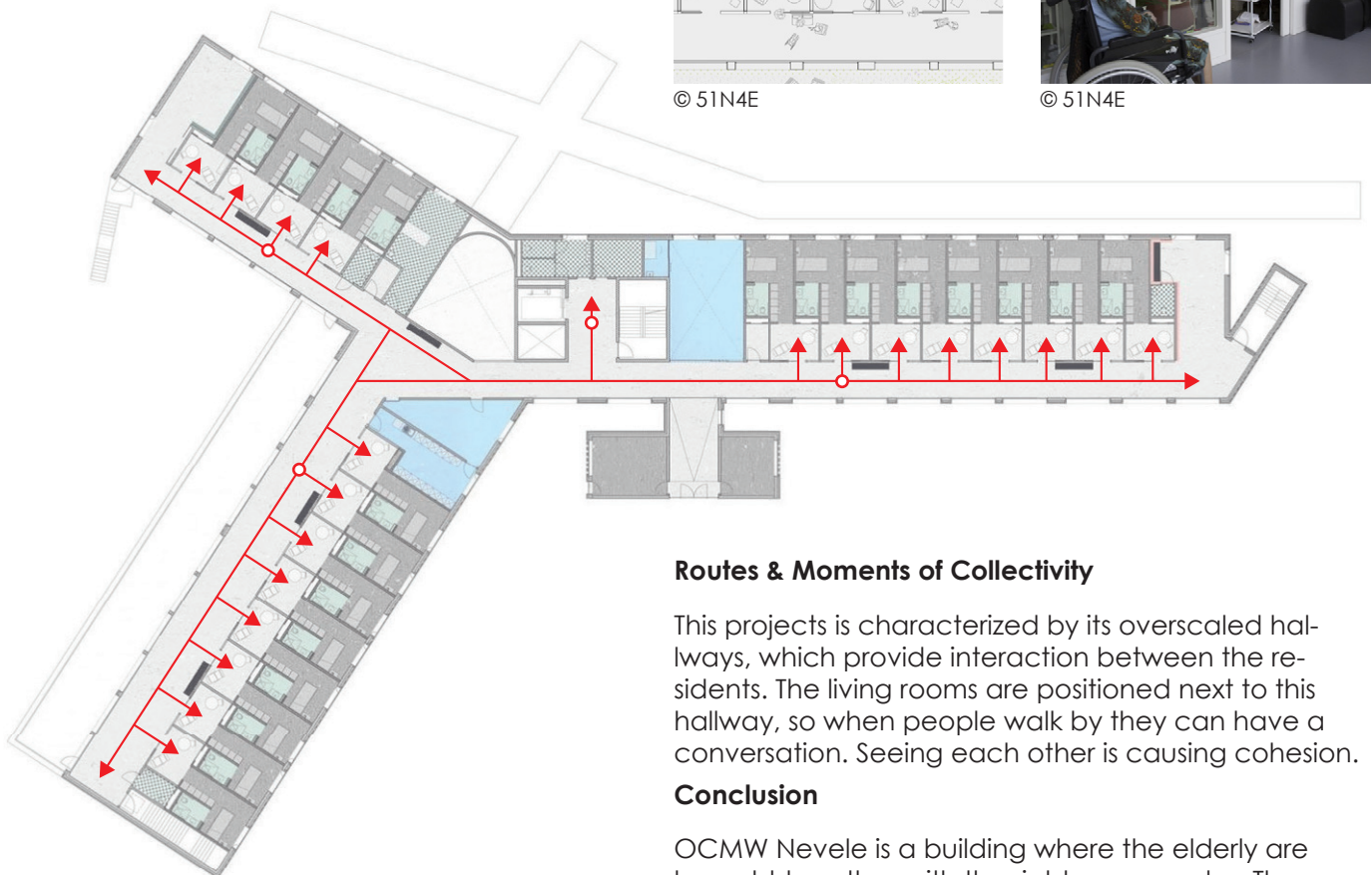
The core of the building is mostly public / open. At the beginning of each wing is a collective space. Getting further into the building leads to more private spaces. The large hallways can be seen as the collective living room, it is overscaled so the residents can join from their smaller private living.



© 51N4E



© 51N4E



Routes & Moments of Collectivity

This project is characterized by its overscaled hallways, which provide interaction between the residents. The living rooms are positioned next to this hallway, so when people walk by they can have a conversation. Seeing each other is causing cohesion.

Conclusion

OCMW Nevele is a building where the elderly are brought together with the right care nearby. The hallway forms the essential element in the connection between the private and the public.

Hybrid House

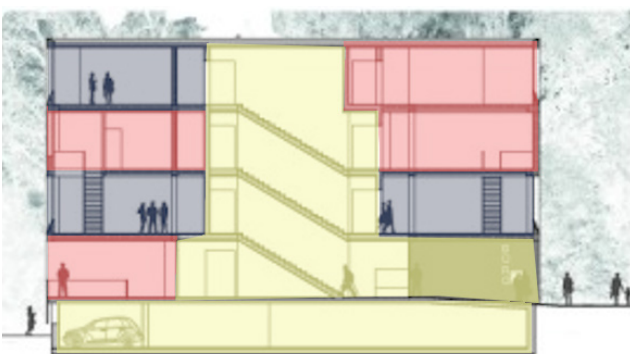
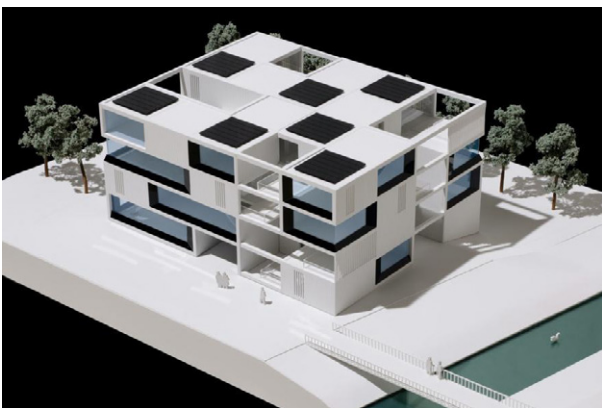


Architects: Bieling Architekten
Built: 2011 - 2013
Address: Hamburg
Client: IBA Hamburg
Typology: 16 dwelling and working spaces
12 maisonnettes and 4 apartments
Area: 2.040 m²
GFA: 2.500 m²



Functions

The Hybrid House is a hybrid, as the name suggests, of living and working. The homes in the building have office areas that can be accessed separately from the circulation. This results in a somewhat checkered pattern of living and working. The circulation is unique as the staircase functions as a helix. However it is important to note that from one floor you still only have one stairwell option as the two are separated from each other. It is still possible to access another stairwell via walking through the home to the other side or to the floor above/below where you will have access to the other stairs. Or ofcourse through the elevator however this is not safe.

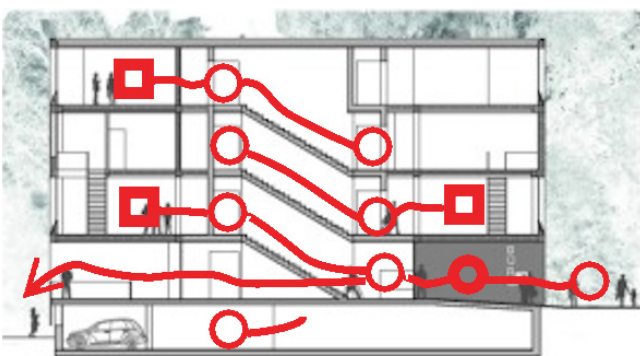
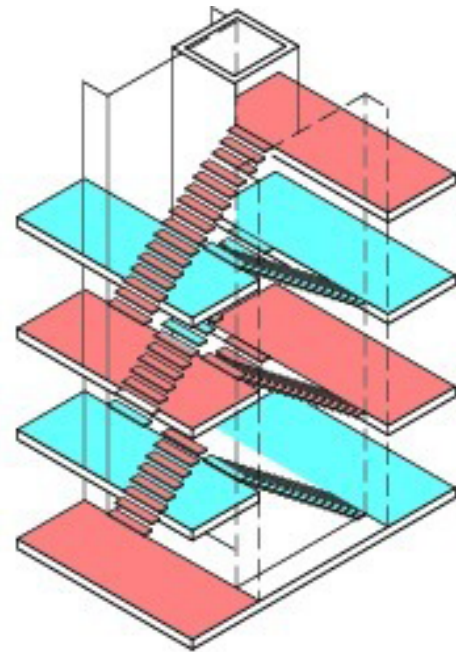




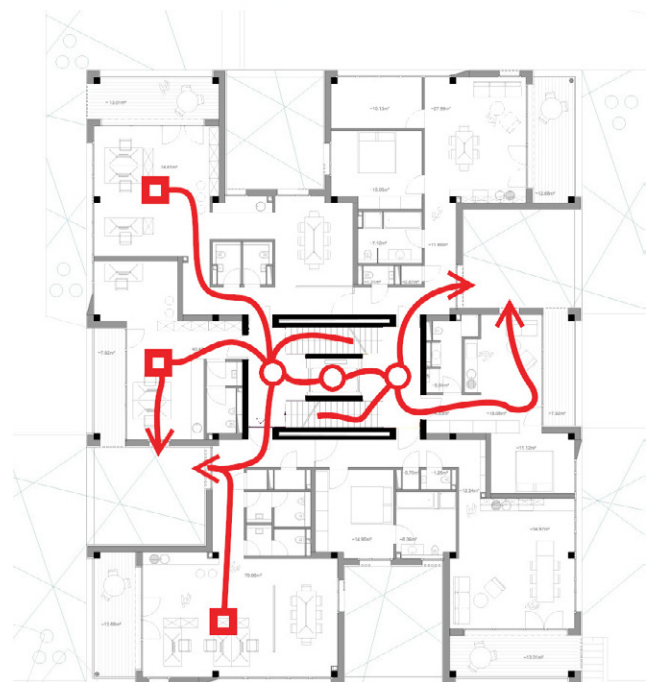
Meeting

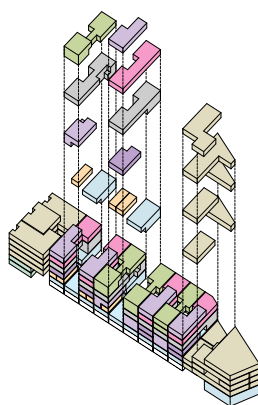


Informal and short meetings can take place in the parking area, in the stairwell or elevator and at the entrance of the building. Formal meetings take place inside the work area of the houses. There are no short term formal meeting spaces.



- Informal Short Meeting
- Informal Long Meeting
- Negative Meeting
- Visual Meeting
- Formal Short meeting
- Formal Long meeting

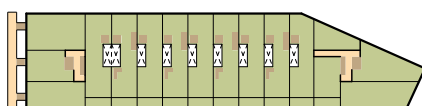
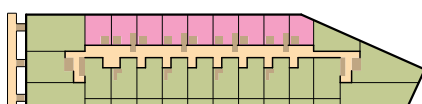
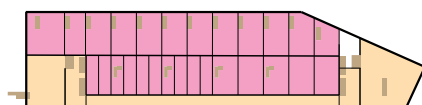
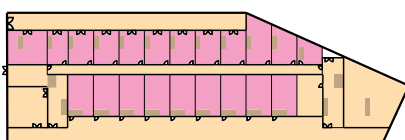
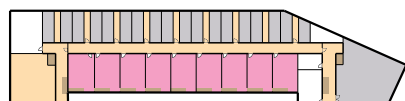




year: 2018
 architects: HEIDE & VON BECKERATH
 city: Berlin
 type: home-work building
 amount: 87 live-work dwellings
 plot size: 2798 m²
 total floor area: 8.945 m²
 FSI = 3,2

The IBeB is a home-work building in Berlin, completed in 2018. IBeB stands for Integratives Bauprojekt am ehemaligen Blumengroßmarkt. The home-work building is set up to link living and working, which is why there are no separate workspaces. The building is five storeys high and has 87 live-work homes. It is mainly characterized by the special access from the center. At 3 levels, the digestion is formed by "Access roads". The construction process is also special. During the design process, the architects continuously consulted with the future residents.

Functions and typologies



Functions

The building has different typologies that are connected through interweaving between living and working. This makes it difficult to define each typology separately but roughly there are four to differentiate: workshop, apartment small (+studio), maisonette, apartment large.

- 57% owner-occupied homes
- 25% Cooperative living / studio use
- 10% Social rent
- 8% Commercial spaces.

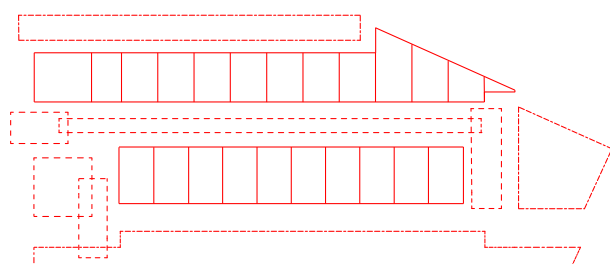
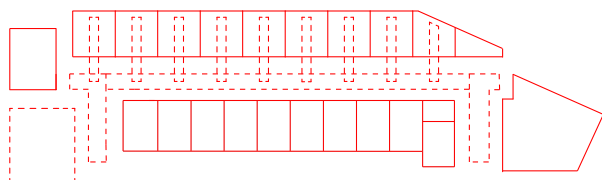
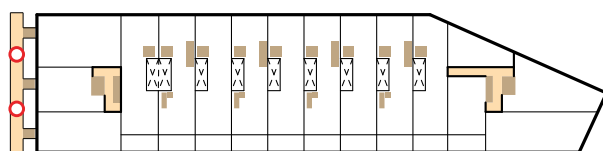
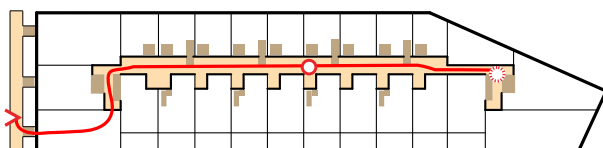
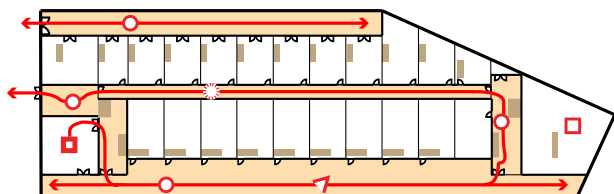
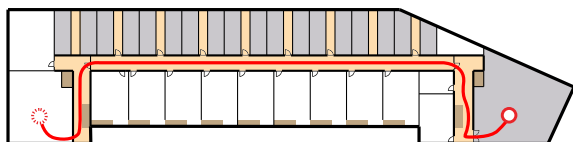
Living and working is distributed throughout the building. Every home also has its own workspace, which is what makes this building so special. Living and working is usually divided over 2 layers per combination. This means that there is still a separation between living and working, but the spaces are directly connected through an internal as well as an external staircase.

Private-public

The baseboard is higher than the other layers and is together with the split level almost completely raised from glass. A roof garden is located on top of the building, which is not visible from street level.

The craftsmanship with which this building was designed lies in the intelligent access structure. The architects created four horizontal 'access streets'.





Private-public

Werkstraat and Atelierstraat

On the mezzanine level ("split level"), the wide gallery on the south side also provides access to work and living spaces that are internally linked with work-spaces on the ground floor and on the first floor.

Central Corridor

On level 1 (that is, above the mezzanine level) they designed a central corridor to which five atriums (lichthoven) are linked that lead daylight deep into the building. This rue intérieure also opens up levels 1 and 2 via stairs and entrances that are connected to this corridor.

Roofstreet

Finally, on level 4 there is a 'roof-street' giving access to the living-working units on levels 3 and 4, separate studios, a collective space and a hortus conclusus on the roof.

Within this access structure the typologies vary of living and working spaces. 20 workshops for business and home-work use are situated in the plinth. All workshops that are directly accessible from the ground floor have direct access to a publicly accessible street for pedestrians and cyclists and can be set up as a workshop, office, gallery or shop. The transition from the double-height Souterrain Ateliers on the south side to the public space is formed by a cleverly situated, deepened patio, over which a bridge is stretched from the street to the entrance of the studio.

Conclusion

Both heads of the building have an urban sculptural quality. In the elongated south facade, the brick facade is interrupted by cantilevered balconies, which emphasize the horizontality of the facade. The plinth is strikingly transparent with space for public-oriented functions. By putting these functions in the plinth, the building acquires a collective character that is directly visible from the ground level.

In addition, part of the basement under the commercial area could possibly be used for a collective function. The open playground on the north side also contributes to the collective character of the building.

Furthermore the three horizontal streets on ground level stimulate the most collective encounters. These streets connect all the other communal spaces (i.e. gym, gemeinschaftsraum etc.). The large dimensions of the street on the south façade makes this more than just an access route. People will actually use this space for longer informal meetings. The light characteristics of the street emphasize this long stay use.

Dwelling Type

Babel

Laurens Boodt Architecten
Rotterdam, The Netherlands
Maisonettes, Vertical Street

The Tower of Babel is a design for a new residential tower with 24 family homes on the Kratonkade on Lloydpier in Rotterdam. A special feature of this residential tower is the street that goes up around the building and which connects the various private terraces.

Spread over 12 floors, the family homes varying in size from approx. 90 to 145 m². The ground floor apartments have an entrance at street level, the other houses are accessible by elevator. The size of every floor is different, which accommodates the stair and terraces around the building.



Laurens Boodt Architecten
1:500



Floor -1 Ground Floor First Floor Second Floor Third Floor



Fourth Floor Fifth Floor Sixth Floor Seventh Floor Eighth Floor Ninth Floor

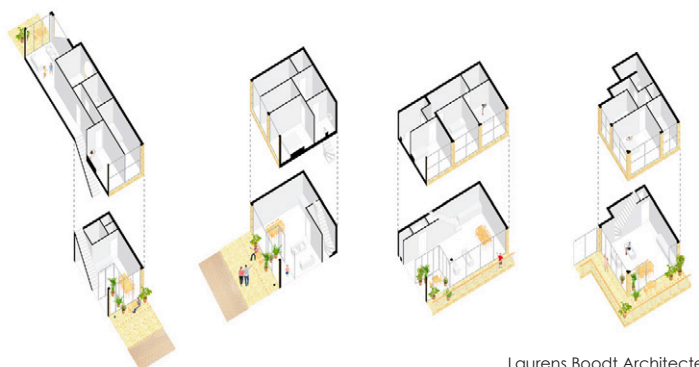
1:1000

- Private
- Communal
- Work
- Acces
- Parking
- Storage
- Green

Houses

All the houses in this building are maisonettes and consists of two floors. The ground floor of every house is connects to the street space. Here are the living roos and the kitchen.

On the second floor of every individual house you can find the bedrooms, bathrooms and storage.



Laurens Boodt Architecten

Communal

Street space

At the street level there is a gate with a staircase that forms the entrance to the street space around the building. The street space is widened on the first floor to a square, for a vegetable garden, picnic area, etc.

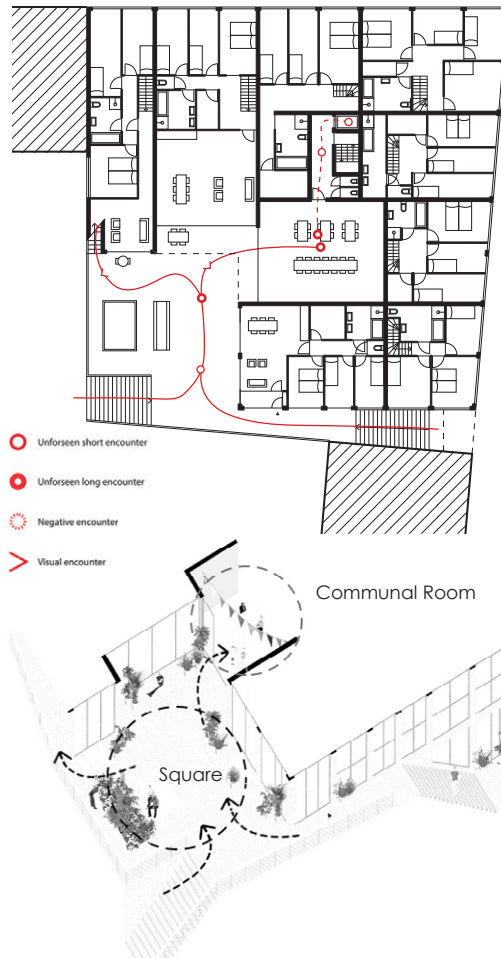
The street space continues upwards along the houses, with the stairs connecting the different platforms. The stairs are a reason for play, seating and viewing point.

On the square there is a common room for children's parties, (flex) workplace, meetings, etc.

Private Outdoor Space

The houses have loggias that can be fully opened, making these private outdoor spaces. These also function as an entrance on the ground floor.

In addition, homes have a private outdoor space on the street space, which is indicated by a number of thumbtacks.



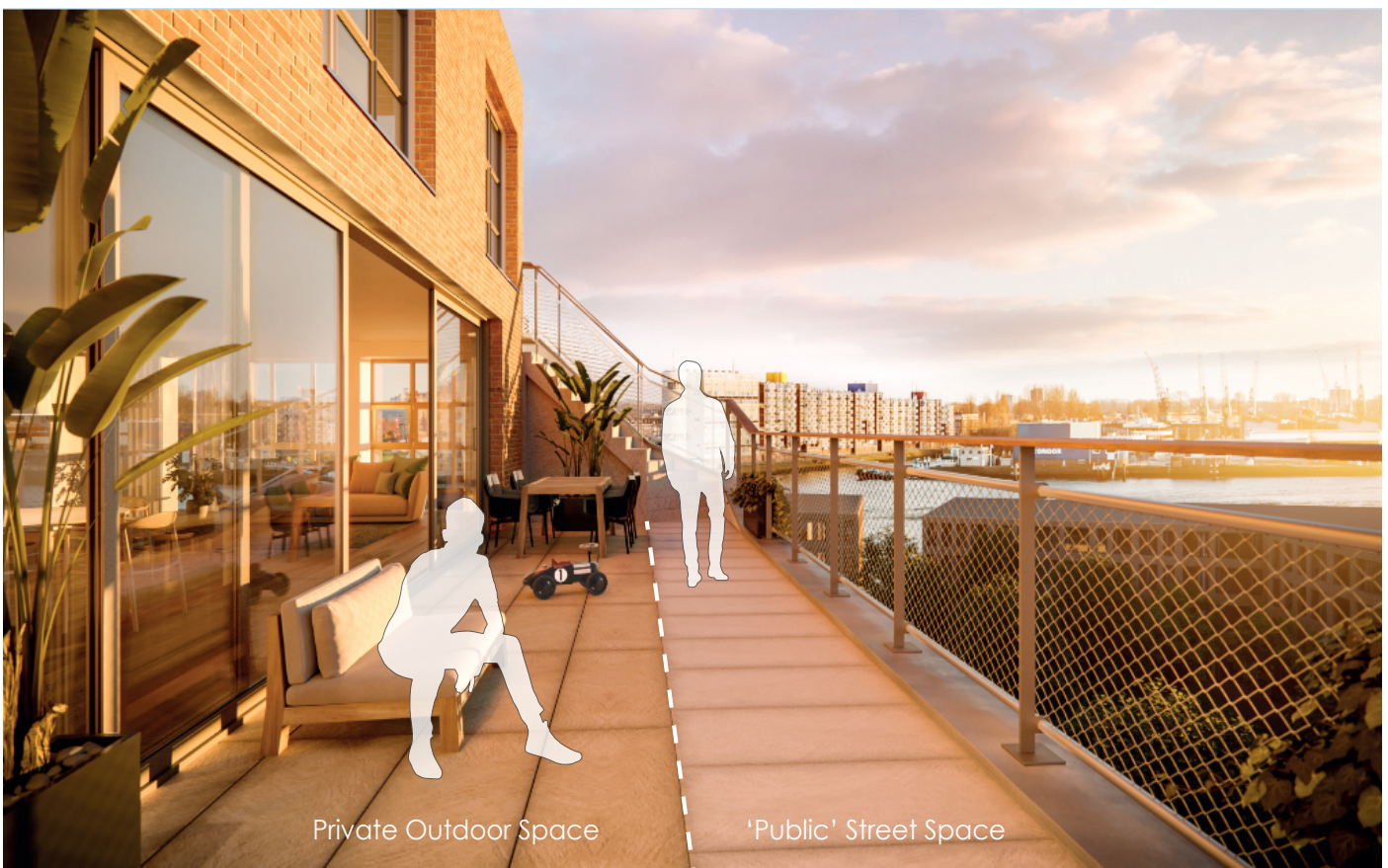
Conclusion

In the design for this building there are a lot of opportunities for communal space use. The vertical 'street' is leading you along at this communal spaces, like a large square, a communal room and the roof terrace.

But because of the fact that this residential building isn't built yet, it is hard to say if this vertical street will work that good in real life.

The residents living on the higher levels probably will park their car and take the elevator situated in the core of the building, and will never use the street to go up.

If the communal spaces will work the way they are designed will totally depend on the residents living in this building.



Conclusion

As the preceding case studies show, there are many different ways to respond to the inclusion of collectiveness in a building. While all preceding buildings are complexes with multiple residences and sometimes workplaces, they don't all directly include a collective element. Some buildings are collective in the sole aspect that they share a common staircase or hallway. Buildings like Kölner Brett, St. Jobsveem, Piazza Céramique and Hybrid House make these moments of collectivity incidental, with no specific space designed for meetings, but them occurring where paths cross on their ways through the building.

A different approach to this common staircase or hallway is to specifically design it so that it becomes a space where people meet and spend time. Examples are places like the hallway of de Olieberg, with its small squares where people can place benches, and the wrapping vertical street of the Babel building, where there will be space for picnics and children's parties.

Another way designers create moments of collectivity is by adding facilities to the building that draw the residents and create the collective interactions that can occur within such an environment. These facilities can include fitness areas or swimming pools, like in Hoge Heren or New Orleans. But they can also consist of more general communal areas like in Narkomfin, actively serviced collective facilities like in OCMW Nevele, or the independently organised variety of special room functions in the Tietgen dormitory. In that last building, as well as in de Olieberg, another potentially shared facility appears: The garden.

A fourth approach is one step more intimate. This step can be seen in Tietgen Dormitory and Svartlamoen housing. This approach revolves around communal living, where some of the living spaces are shared. This can include a kitchen, living room and laundry room. This step reduces the size of the private space, which means that the costs are shared. This can lead to more affordable housing.

More implicit ways of approaching collectivity are achieved through the visual senses. Many projects connect different spaces visually. This can enhance one's experience of safety as well as to actually improve safety. Visual connections can also stimulate actual meetings. However there are situations (like on the roof terraces of the Pullens building) where visual connections have been mitigated by inhabitants to increase privacy.

These five approaches to collectiveness and the shaping of moments of collectivity thus revolve around the design decisions for two aspects of the building: The collective access (ontsluiting) and collective facilities. How these are shaped and shared can be the determining factor in how the collective aspect of the building take shape.

Intention and result can also fail to meet each other through design when (but also in general) designing for collective use. This is the case especially with more ambitious designs considering collectivity. Demanding a lot from your users as a designer can cause them to resist the design. This does not mean that the ambitious is impossible. It rather points out that the ambitious design should be critically reviewed.

Part 2: Individual Research

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Artists, The vulnerability of culture

Artists have historically been a weaker group in society, with an income that lies below the average. During times before photography their works were they only lens we could capture the world in. However since the advent of that new technology their role has become more and more one of culture and entertainment. However they have always been reliant on the patronage of those interested in art. Historically that could have been wealthy merchants, kings or popes. The church was a great patron of the arts, especially during the renaissance. Nowadays artist often rely on government subsidies to be able to practice their craft. Only very successful artists are able to fully stand on their own feet.

In cities like Rotterdam and Amsterdam the prices of real estate have been rising incredibly fast (Taha, 2018). Paired with a shortage of suitable space the municipality has been selling property that previously functioned as artist studios or working space. This group does not have the high income to compete against other groups that are looking for space within the city and are therefore forced to leave the city centre. The space simply isn't affordable for them (Slotboom, 2017).

This isn't just the case in the larger cities, in smaller towns, like Schagen in the north of Holland, there is also a shortage of affordable studio and exposition space for artists. (Jasper, 2019) On top of that, the province of Brabant is going to be reducing subsidies for art and culture by 30 percent by 2023. Director of the North Brabant Museum Charles de Mooij claims this might be the killing blow to the sector, especially paired with the Corona-crisis. (Merckx, 2020) On the other hand, the municipality of Utrecht decided in 2019 to reserve extra money out of their budget to subsidise at least 6 art organisations and give them more opportunities (DUIC, 2019).

In response to this vulnerability historically there have been people like Alfred Boucher who funded an artist community in La Ruche in Paris that gave them a very cheap place to stay and work along with other artists. In the same vein the Rotterdam-based artist Joep van Lieshout has made similar plans to provide for artist work space in M4H when it is to be redeveloped. After his forage into the creation of a free-state in 2001, which was more art project than artist commune, he now aims to create what he calls the 'Woonknots'. This 60000m² tower is supposed to be a new landmark for Rotterdam and include 300 apartments, an art hotel with statue-garden, a restaurant, exposition space, museum, storage space and dozens of studiohomes that will be rented out cheaper than available on the market and through that create affordable working and living space for artists. (Gunneweg, 2018)

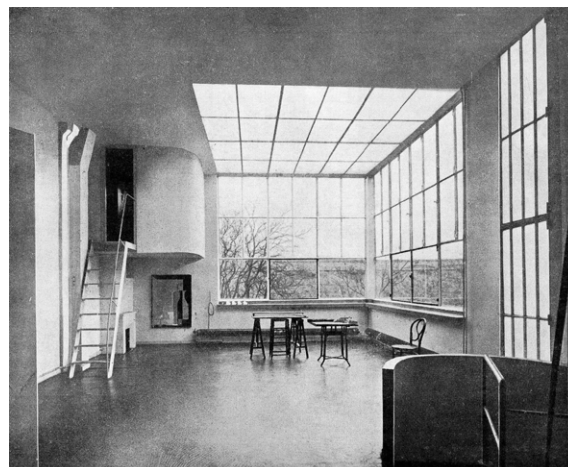
But the question still stands: How do we create affordable housing for artists? This has been done in the past, but what sort of planning and programs have been used and can be used in order to facilitate this element of culture within our cities? Those are the questions that this paper will explore.

The Studio-House, A Typology

The Studio-House, as described by Frances Holliss (2015), is a type of work-home that is specifically designed for artists. As the name suggests, the studio-house (not to be confused with the studio-apartment, that has nothing to do with a studio!) is the result of a combination of artist's studio and their residence. The key aspect of its design is how it combines the spacious, well-lit workroom that is needed for painting or sculpting, with the functionality of a house. In its essence it has a lot in common with the older weavers' homes, which had a work room with a large glazed opening, often on the upper floor, while the lower floors were meant for living and business. Historically artists would gain this large window by working on attics, which were cheap and had access to that light, but while being cheap they were also mouldy, wet and cold. But even while they need healthy circumstances too, artists are not weavers and they have their own desires for joining their living and working in one building, through something other than a cold and wet attic.

Holliss gives several examples of the studiohome, some for wealthier and some for less wealthy artists, from the late 19th and early 20th centuries. They occur both as individual homes, such as C.F.A Voysey's 1896 house and Le Corbusier's Atelier Ozenfant from 1924, as well as stacked into a single building, such as R. Start Wilkinson's 1882 design for 57 Bedford Gardens in London. The examples she gives vary some, but some common aspects are large (north-facing) windows and an arrangement to easily move art pieces out of the building. Some of the examples have living and work spaces directly connected, but others have them entirely separate but still within the same building. The cheaper variants seem to have the living and working space very closely connected, which makes sense as a smaller space is more affordable for artists with less income.

Holliss observes about Bedford Gardens: "The 24-hour occupation of these unconventional dwellings has generated an on-going loose community of like-minded people – artists, friends and collaborators. This is a common characteristic of clusters of workhomes, especially when they are designed around a particular occupation, as with this building or the Coventry cottage factories. Common space is an important ingredient. Here the occupants all share a staircase designed to allow large pieces of work to be removed from the building. It easy to see how struggling with unwieldy pieces of art could encourage neighbourly relationships." It is perhaps unsurprising that a group of people with similar life experiences, interests and current situations would easily become a closer knit community, it is also common to see people not

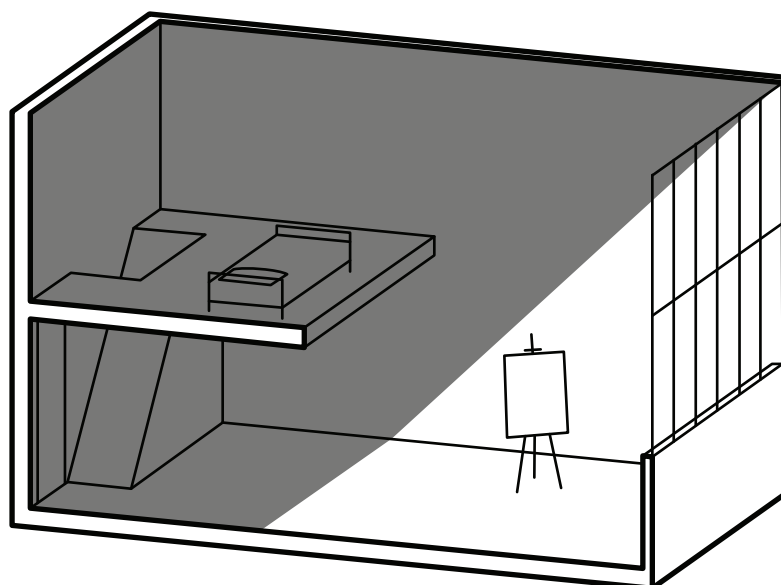


Le Corbusier's Atelier Ozenfant

knowing their neighbours in modern times, especially in urban environments. So sharing common space with people with similar frames of reference to you would help turning a building of individual workhomes into a community of artists.

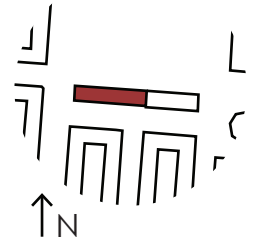
A large amount of studiohomes was built in Paris at the start of the last century. Banham (1967, p.217) explains that for early modern architecture during the start of the 20th century there was little wide appeal. The main interest in this architectural style was from the community of avant-garde architects and artists. And so in Paris the most common form of early modern architecture that appeared were buildings for that group. Banham dubs these workhomes the maison-type or studio-house (The name that Holliss would use later). This typology had existed in similar fashion since the previous century in buildings such as Bedford Gardens. They typically consisted of a two-storey height open-plan space. The (preferably north-facing) façade would have as much glass as possible to let in the light that would allow an artist to do their work. On the opposite wall there would be a mezzanine floor which would hold a sleeping space above and a kitchen and bathroom below.

While this type of home was most directly designed for artists, it also found its appeal among art related workers such as writers and some who weren't necessarily attracted by the space, but rather by those who lived there, looking for the creative climate.



Atelierwoningen Zomerdijkstraat

The Studio-homes (Atelierwoningen) Zomerdijkstraat by the architects Zandstra, Giesen and Sijmons are an excellent example of the studio-home type. This building from 1934 is specifically designed for artists and was directly marketed towards them. Each of its 32 north-south oriented housing units include an artist's studio and a living space. The 8 ground floor dwellings were specifically aimed at sculptors and the 24 upper-floor dwellings were meant for painters. The building has 4 stairwells connecting to two stacks of 4 units each. The stairwells are asymmetrically placed within the 8 units, creating a larger and a smaller unit on each level.



The building appears to be designed to optimally serve the function of studio first and that of home second. That is what the layout suggests. Each of the studios has large windows facing north, with the ground floor sculpture studios extending outwards and thereby also being able to receive light from above. These large windows are a child of artist studio tradition, and are meant to bring as much light as possible into a studio, while also avoiding any direct light shining in. The north is favoured because that light that comes only from the sky is the most consistent throughout the day, while sunlight changes throughout. This consistent light an essential factor for an artist to be able to make the same decisions with the same effects. The windows are made as large as possible with the thought is that if it is too bright outside, some light can easily be covered, but if they are too small no daylight can be added. Only on the west façade was the building given extra windows (round ones in this case).

Besides light the studios have also been provided with other additions to support their function: They were supplied with a tap and sink, storage space for art as well as rails hang works on. Additionally the sculpture studios have floors of wood ends so that dropped tools get damaged less easily and it's possible to put anchors into the floor for sculptures or pedestals. Furthermore, the upper floor dwellings have south-facing balconies that have been given a detachable front so that art pieces can easily leave the building this way. Each set of vertically stacked homes is also provided with hoist or 'hijsbalk' to allow for the movement of goods (and art pieces) in and out of the dwellings. Where the upper floor studios can move art out of the building from their balconies, the ground floor studios have large wooden doors that facilitate the same.

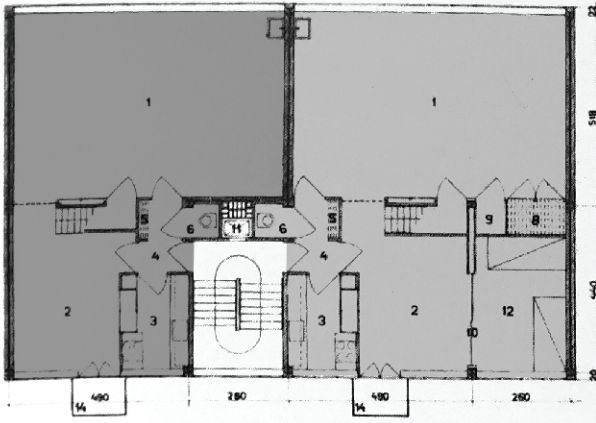
The increased height of the studio space is because at the time the consensus was that studios had to have a ceiling height of around 4 meters to be



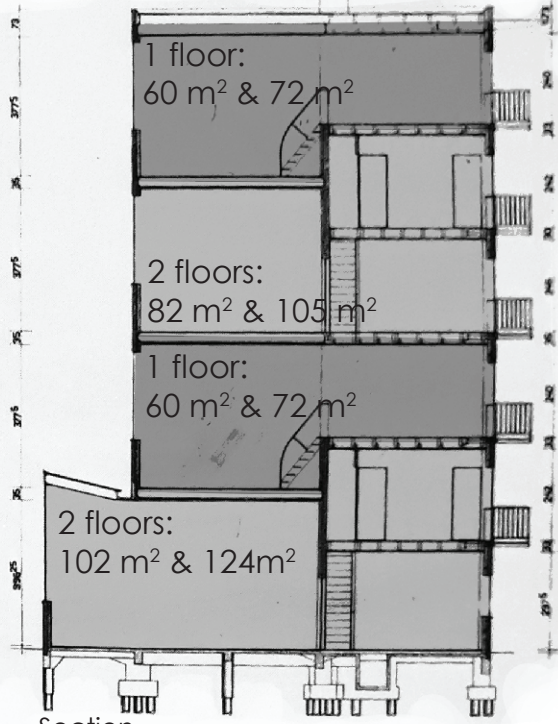
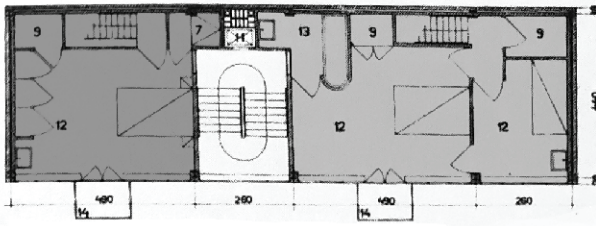
Zomerdijkstraat south façade



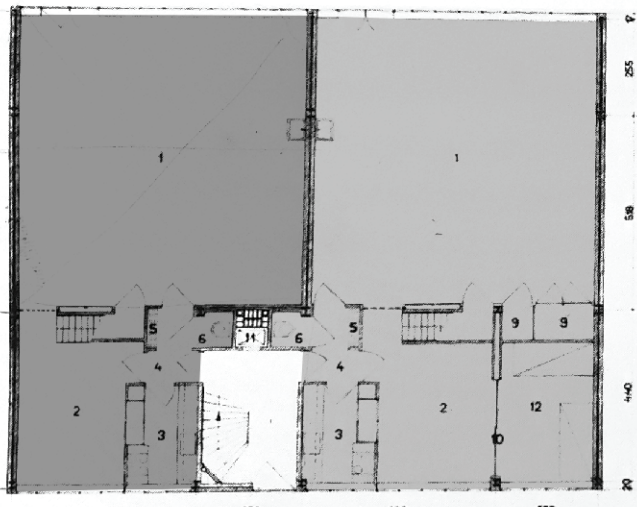
Zomerdijkstraat north façade



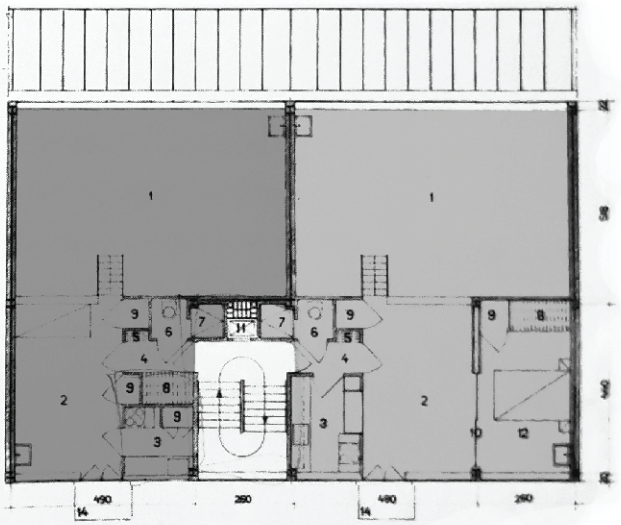
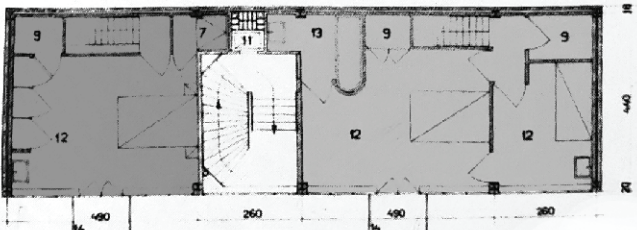
2nd floor studios and split level



Section



Ground floor studios and split level

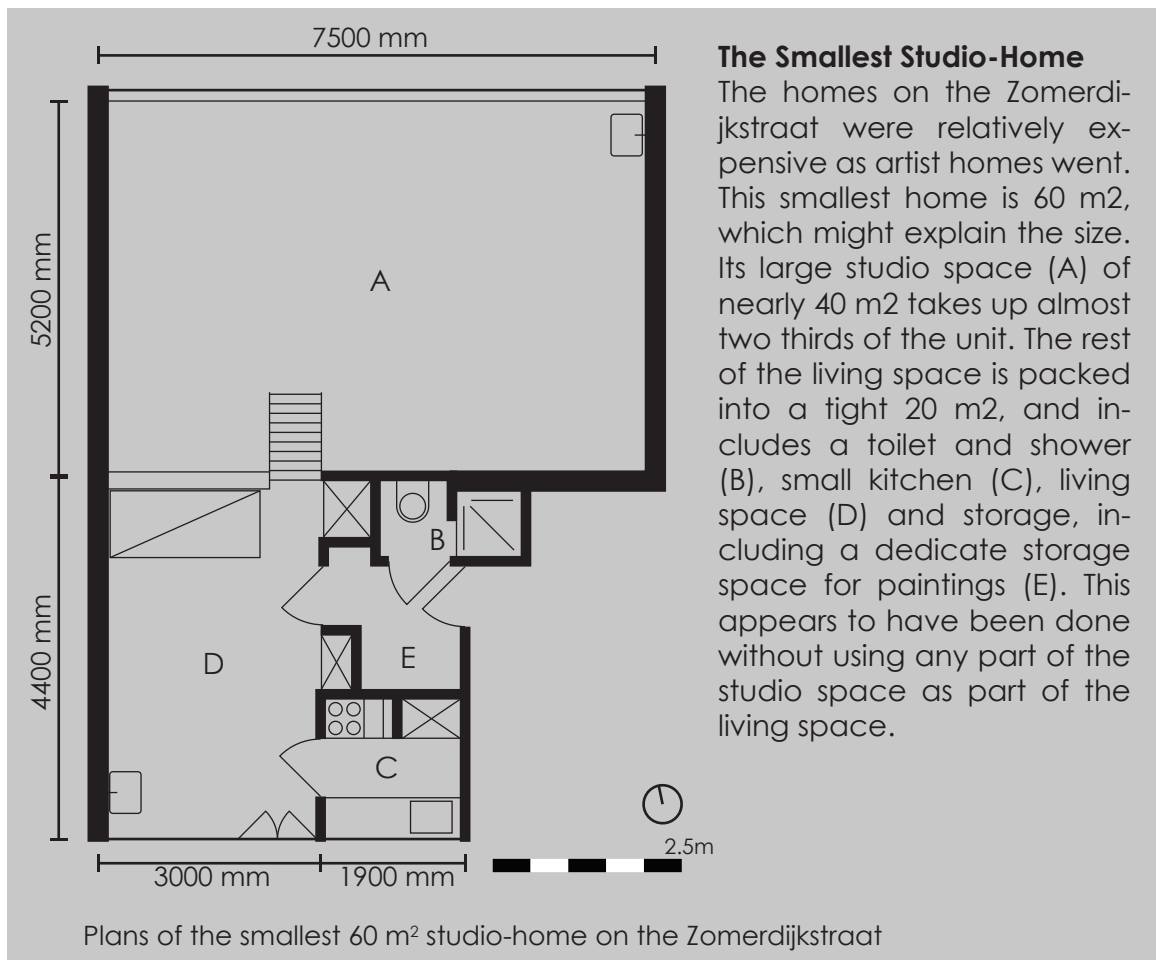


1st and 3rd floor studios

- | | |
|-----------|-----------------------|
| 1 ATELIER | 8 SCHILDERIJENBERGING |
| 2 EETHOEK | 9 KAST |
| 3 KEUKEN | 10 SCHUIFWAND |
| 4 GANG | 11 BOODSCHAPPENLIJFT |
| 5 KAPSTOK | 12 SLAAPKAMER |
| 6 W.C | 13 BAD |
| 7 DOUCHE | 14 BALCON |



Plans of different studio layouts, Scale 1:200, from Stralen (1989)



suitable, partially as a consequence of the desired light. However for dwellings a much reduced height is sufficient, so here a studio space corresponds to one and a half dwelling floor height. Consequently the northern (studio) side of the building counts 4 floors, while the southern (living) side of the building has 6. The result is 4 studio-homes stacked atop one another, 2 with 2 dwelling floors (on the ground and second floor) and 2 with a single dwelling floor (on the first and third floor). Unlike the double floor units, the single floor dwelling spaces don't lie on the same level as the studio spaces, creating a split level in those units. The larger version of this type has an extra space that can be closed off with a sliding wall. The double floor units are more akin to a normal house with an adjacent studio, with a normal kitchen, bathroom, living room and bedrooms. The larger version of this type also has an extra space downstairs with a sliding wall.

Working in the building

Not all the units were occupied by artists, mainly because they were not always affordable for their target group. Other residents included photographers and architects, but also dentists and businessmen. For a time one of the units was also used as a ballet school. On top of that situation there is the case of artists who did live there, but did not use it for work. Among them are Piet Esser and Paul Grégore that were professors at the Rijksacademie and had studios at the academy. Others simply did not find it comfortable to work in their homes and so had studios elsewhere.

Planning the project

Zomerdijk straat was inspired by similar homes in Paris. In the shape of units that were very small and bare-bones, which kept the units cheap and more

accessible to artists. However, nothing of such a type existed in Amsterdam at the time. To amend this, Zanstra, Giesen and Sijmons took their own initiative and designed the studios at the Zomerdijkstraat without yet having a developer or financier behind the plan. But this did fall in line with existing artists' plans to make artist residences in Amsterdam. And so, soon the first iteration of the design was presented and developers showed interest in executing their designs. This first version differed in a few ways. The two most interesting changes were that the living spaces and studio space in the largest units were in complete connection with one another, and that this version of the studios was merely a large empty room, without the facilities that would be added later to make it function properly as an artist's work space, such as the industrial sinks. The studio space was also promoted as a potential living room, to ensure to the financiers of the project that the units could be sold to non-artists as well in case there weren't enough artists to occupy all the units.

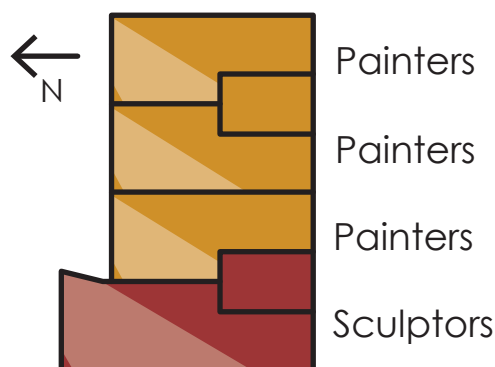
The project also saw municipal involvement. One way in which that played a major role was the request to the municipality to keep the plot to the north side of the building free to prevent 'vals licht', false light. There was no explanation of what this was, but it appears to be the (reflected) light of the sun that changes over time and can therefore not be trusted. The municipality granted their request and the plot to the north of the building became a local park.

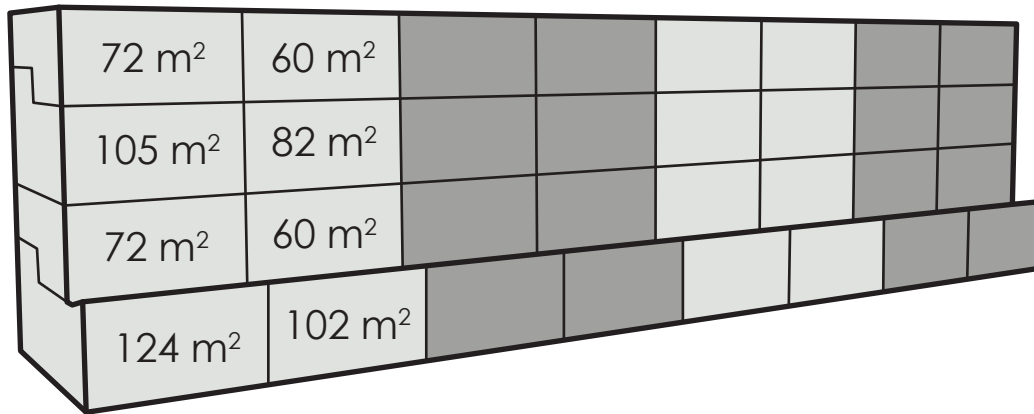
Complaints

As with any building there were plenty of complaints about the building: The floors aren't very water resistant. The windows in the west façade of the building cause 'vals licht'. On the ground level floors there are complaints from the artists about people peeking in through the window of the studio and bothering the artists. The lowest windows on that side end up getting covered. Personally it seems crazy behaviour from the 'youth' as they put it. I would not expect people to behave like that these days, but I could be wrong. These were also relatively expensive houses for the interbellum period when compared to houses for other low income groups, but they did become more affordable after the second world war. The reputation it had as a building for successful artists is probably partially as a result of the higher rental prices.

Collectivity

The communal activities among the artists in the building appear to have been less prominent than expected. The first year after the opening of the





The 8 groupings of homes around 4 common stairwells

building there was a large exposition of all the artists that came to live there. But after that there appears to have been less and less cooperation. At least over time, because in the early years there was a big artistic atmosphere and that cooperation was there. There is a lot of evidence of friendships between the residents, such as the portraits they made of one another. There also used to be a small figure drawing group among some of the residents. However during world war 2 some of them seems to have gone different ways. And after the war the connections between the artists seem to have lessened.

The division between artists does seem to spring from a difference in style. As different generations would each bring in their own style and would thereby create subgroups within the building. The artists appear to have been the most socially connected with those who worked within the same philosophy. A social mechanism was supposed to ensure that only artists of similar methods moved into the building, but that wasn't fool proof and some other artists did get in, fragmenting the unity of the collective.

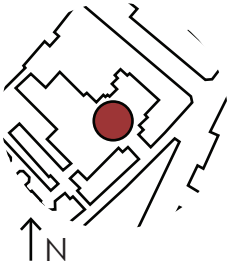
Instead of seeing the Zomerdijkstraat building as an art colony, it is better compared to a village. Everyone knew each other and there was a feeling of community and of there was plenty of course gossip. However, the building had never been designed to create community. It really been designed to create a good working space for artists, where the addition of living spaces and the arrangement of the studios into a block were merely for the municipality and for financial reasons. Because the municipality wanted homes and it was simply more economical to put more units into a simple block. Hollis (2015) criticises this approach for weakening the connection to the street and making the building much more self-contained. A courtyard structure would have been much more suited to the creation of a community in her view.

This same group of architects made designs for a similar building later, but that was never built. This might have to do with the additional luxuries that this design included, such as gardens a roof terrace and a garage. These are amenities that artists simply could not afford.

(Stralen, 1989)

Pictures from: <https://www.zuidelijkewandelweg.nl/archief/architectuur/atelierwoningenzomerdijkstraat.htm>

La Ruche



The la Ruche studiohomes form a curious contrast to the norm set by other studiohomes. This circular building has studios facing all sides, instead of only north like other studios. This is because the building wasn't originally designed as a building for artists. It was designed for the 1900 Great Exposition by Gustave Eiffel as the Gironde wine pavilion. After the Exposition it was sold on auction and bought by the sculptor Alfred Boucher. Boucher quite affluent for an artist. He'd made his fame primarily through gravestones for the wealthy and though the carving of busts for high profile officials such as the King of Greece and the Queen of Romania. (Ramirez, 2000)

He made the Gironde wine pavilion into a building for young artists with little to no money. It became known as La Ruche (Beehive). La Ruche included studios as well as a communal exposition space that was available for all who lived there. Aside from just a shared space, the artists (mainly immigrants from eastern Europe) and other poor people who visited and stayed in the building lived together a lot and there was a strong sense of community. It formed a true colony of poor artists of all aesthetic convictions and nationalities. The studio-homes were rented out for exceedingly little money and Boucher never evicted anyone for not paying rent, only ever for causing trouble, which happened rarely. (Ramirez, 2000)

The 'golden age' of la Ruche was ended in part by the second world war as the building fell into disrepair. It was restored in after gaining monumental status in 1972 and is in use again as artist studios nowadays. (Fondation La Ruche, 2015)

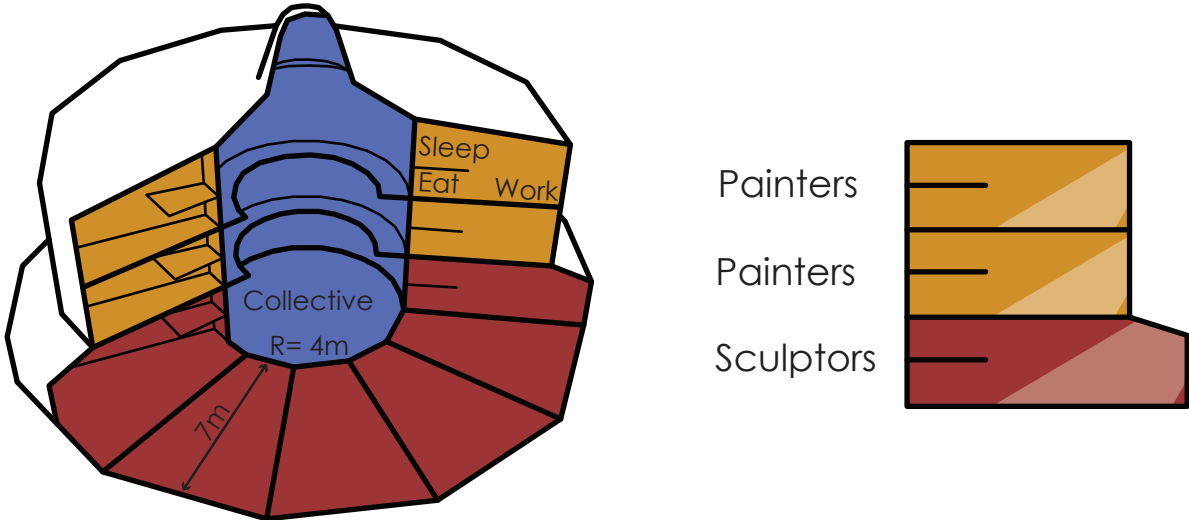
La Ruche consisted of studios situated in a radial pattern around a central space. Like on the Zomerdijkstraat is the first floor reserved for sculptors with the upper floors being aimed at painters. And they also follow the traditional setup of a large window on the working side with a kitchen on the other side and a mezzanine floor with a sleeping space above. These living areas were often separated from the working area on the side of the façade with a curtain. In total La Ruche had some 80 studios divided over its 3 floors (Ramirez, 2000). Due to the desirability of northern light in a studio, it seems likely that the some of the apartments were more wanted than others. But there is no mention of there being more prestigious places in the building.



La Ruche

The unique characteristics of La Ruche are a result of the cheaply available building after the 1900 Great Exposition and the presence a philanthropist that had the best of intentions for artists and knew their troubles. This incredibly rare set of circumstances allowed the community to thrive. While the combination of communal space that allowed artists to easily meet and share in one another's work would create the social circumstances, it was Boucher that allows the project to subsist. The economic situation and circular shape of the building created an atmosphere of sharing. However due to the coveted northern light there might have been some underlying hierarchy among the residents in La Ruche.

Photograph from: <https://laruche-artistes.fr/>



Organizational scheme of La Ruche

Collectivity within studio-homes

The contrast in the connectedness among residents of the Zomerdijkstraat and La Ruche is quite striking. Where one was initially more united in its creative vision, but saw cracks appearing in its social bonds as the artistic styles represented in the building fractured, the other welcomed all, no matter what style they followed or even regardless of whether they were an artist. While on the one hand this was a consequence of how, and for whom, the buildings were organised. On the other hand the spatial structure of either building plays a definite function.

The way Boucher had organised La Ruche made it a mix between a homeless shelter and an artist commune with some hints of communist free state. While at the Zomerdijkstraat dwellings the individuals lived completely separate. This group of people was not struggling in the same way as the residents of La Ruche were, and consequently did not need to support one another, even though some of them certainly did. This community spirit is reinforced by the way either of them shared communal space, where in La Ruche the communal space formed the connection between all the studiohomes, at the Zomerdijkstraat there was no communal space whatsoever, which meant that there was no natural meeting space between residents. Residents had to make more effort and social bonds became weakened.

Holliss (2015) explains this difference on both the building and urban level. She acknowledges that grouping together workhomes with similar occupations often contributes to the creation of community, but in order to strengthen that bond, there needs to be some communal space. Because "It is easy to see how struggling with unwieldy pieces of art could encourage neighbourly relationships." (Holliss, 2015, p.42). This communal space does not have to be inside the building. She also praises the Pullens estate for organising its buildings around 3 courtyards, creating 24-hour habitation in these live-work buildings and stimulating collectivity around the courtyards. "Each yard has a population small enough for its inhabitants to know each other, at least by sight. And architecturally the estate is distinct, giving its inhabitants a sense of identity. [...] the combination of dwelling and workspace in the Pullens Estate contributes to an extraordinarily positive sense of neighbourhood identity and to an ongoing development and enjoyment of local social capital." (Hollis, 2015, p.142) On the urban level she explains that buildings and especially separate dwellings need to interface with the neighbourhood and the city in order to share and mix in the urban social environment. This is not too dissimilar to Sennett's (2019) idea of porosity in the city, in which one creates spaces where different groups can meet through the use of membranes or borders that facilitate social interaction. This can be the space between the collective and the public, that can allow the building to also bring extra life to its environment beyond the social interactions it brings to its inhabitants.

Harnessing Gentrification

One of the ways that artists would often find affordable living and working space is by finding those in old run-down neighbourhoods. This would often kickstart a process of gentrification that can completely change the area. Sharon Zukin (1982) describes the development of the transformation of the lofts in SoHo New York. At first the mostly empty industrial buildings were only used by small manufacturers that lived in other neighbourhoods and commuted to Manhattan for work. Attracted by low rents, artists took these large spaces as studiohomes. This, the 1960s and 1970s, was at a time when the 'artist lifestyle' became fashionable and a large part of the middle class became interested in the arts. Gallery owners, curators, art critics started visiting the lofts of these new artists in Manhattan. These groups were soon followed by middle and upper class people that visited the lofts during cultural 'happenings'. At the same time the artists moving into the lofts improved the quality of the buildings and created cultural facilities. Some lofts were used for performance, dance, music and theatre all contributed to the cultural character of SoHo. Additionally, new galleries put the art of the local artists on a more prestigious pedestal. Over time the artists were followed by designers and then non-creatives that brought money. The lofts became an accepted living space for the middle and upper class and the rents of the lofts increased drastically. Soon artists weren't able to afford living there anymore and they disappeared en masse.

This presents the first wave of gentrification, the time of the production of art, and the second wave, the 'commodification' and private consumption of art. Especially this second wave has come under criticism as it is the moment where the gentrifying force of art loses its innocence and the art becomes commercialised. That wave of gentrification sees a neighbourhood lose the features that initially attracted artists to it, and not just in affordability. Neighbourhoods become more slick and polished and they lose their makeability. It is the third wave of gentrification that sees art become part of the public, with the addition of galleries, museums and theatres. This last step often occurs with the interference of public policy in the 'revitalizing' of neighbourhoods (Cameron & Coaffee, 2005).

In the town of Gateshead in the north of England, the council of the borough has taken the process of gentrification into their own hands and used it as a strategy to rebrand and reinvigorate their national image. Their program went in three steps. The first step was subtle. Starting in 1986, a series of large 'environmental sculptures' and 'decorative artwork' to enhance the aesthetics of the town and that would hopefully increase social cohesion. Additionally in this stage there were programs for artist housing and educational programs that would integrate them with the local community. A derelict industrial area was also reclaimed by turning it into an the Riverside Sculpture Park. The second phase saw the creation of the landmark artwork the "Angel of the North" in 1998. This icon of the town put it on the map in Britain and gave it a new public image. Finally the third stage revolved around the creation of two new cultural centres, the Baltic Art Gallery from 2002 and the Sage Centre for Music and Performing Arts from 2004. By the time these opened the image of the town had changed drastically and the cultural district around these two buildings experienced a surge in real estate value as it attracted many affluent young professionals (Cameron & Coaffee, 2005).

Not only municipal governments saw this process as an opportunity to reinvigorate certain areas. In the Dutch city of Utrecht housing corporations have sought to use artists as a way of 'regenerating' neighbourhoods. As

part of the redevelopment plan of the problem neighbourhood Kanaleneiland, housing corporations Portaal and Mitros worked together on a plan to use artists to improve the neighbourhood's image. They offered artists cheap apartments in buildings that were due to be demolished. In return the artists were expected to contribute to the local social and cultural environment by contributing a monthly fee for cultural events and by physically enhancing their environment. Furthermore they would also host art workshops for the locals. It's hoped that the artists will add new cultural qualities to the area that will attract middle-class households. In the future they don't expect the artists to stay in the neighbourhood, but they might want to move on to a different neighbourhood to repeat the steps if it proves successful in 'regenerating' or gentrifying the area (Zebracki & Smulders, 2012).

Art and culture are used as a way of increasing neighbourhood values. But by the end of the process the artists that brought them often end up discarded and pushed out. But there are also efforts to stop this effect. In the redevelopment of the Station North district in Baltimore there were several efforts to keep the local artist community in the area. While many artist live-work spaces closed, accompanied by performance spaces and museums, the developers did build new below market-rate housing for artists and ensured the appearance of new studio and performance spaces as well as a new theatre. In The Motor House non-profit organizations pay market-rate rent for their office space and so subsidise the artists' studios in the building. Other buildings in the same area work with similar initiatives, hoping to use corporate and retail tenants to subsidise artist tenants in the same buildings. While this is partially for philanthropic reasons, the developers of the projects also seek to retain the cultural value of the resident artists in the area, which is meant to be a culture themed development (Rich, 2019).

Artist housing and workspace, however, does not only need to be mixed with commercial functions. An alternative strategy could be the inclusion of luxury housing within the building, the income of which can support the cheaper apartments for the artists in the building. But first they need to keep control over the prices of their own homes.

Cooperative Development

So while artists can be a great contributor to the value of a neighbourhood, market forces will often push them out as they are unable to afford the prices of the real estate that their presence created. Initiatives such as those in Baltimore can solve part of that issue, with the caveat that if a less philanthropic developer decides that they would rather earn more money than provide space for artists and their work, they can easily change course and the artists would be out on the street. There needs to be some better mechanism to protect them against this sort of effect.

One solution would be a through the forming of a housing cooperative. This is a type of non-profit organisation that aims to protect the needs of its members, in this case in the shape of housing. It allows its members to band together to make things happen that they aren't able to individually. The important difference between a cooperative and a corporation is that a cooperative is democratically organised, with all its members having a say in the decision making process. It is a form of organisation that wasn't allowed after the second world war, but a change of law in 2015 saw them reintroduced as an option. But for now only as a through law recognised organization for social housing. (Woonbond, 2016)

The Dutch Ministry of Housing has determined three types of housing cooperatives: The owners cooperative, where everyone owns their own home but are still unified in management, the management cooperative, where the homes are owned by a third party but the management is done by the cooperative, and the collective ownership cooperative, where the cooperative owns the homes and rents it out to its members. (Woonbond, 2016) This last one is what we're most interested in, as we're trying to control the market forces that might potentially force out the artists from their apartments.

An example project from Zurich in Switzerland was also aimed at mixing different income groups. The Cooperative (or Genossenschaft) Kalkbreite made a proposal to the city in 2007 for a building that combined commercial and residential space, with 97 apartments for a diverse group of occupants. As a consequence of this diversity there was also great variation in the types of homes planned in the building, ranging from traditional family homes to studios with shared kitchens, bathrooms and common space. The city leased the land to the cooperative and gave a grant of 3.25 million Swiss francs to manage everything up to the architectural design. The rest was funded through collective funds and loans. In total the project ended up costing 63 million francs. The cooperative had set up several rules for the apartments to be rented out: A maximum of 20 percent was allowed to be rented out to high-income residents, with 11 units reserved for low-income residents, presumably at below market-rate prices. To rent an apartment in the complex one has to be a member of the cooperative. This is one of the advantages of the housing cooperative: They can set prices and rules for who can rent what for how much to avoid market forces making the supposedly affordable homes unaffordable. (Schindler, 2014)

Luxury Apartments

While there is a shortage of artist apartments in the Netherlands, there is little culture of high density luxury housing as well. The Netherlands is quite late in joining other places in the world in the contemporary idea of luxury apartments. Traditionally the main luxury that people sought in their home was space and, most importantly, gardens. Apartments were not seen as a luxurious way of living as they are often smaller and lack a garden. But a large house with a garden is not well suited to high density urban living.

That absence of luxury apartment culture does not mean that the Netherlands does not have expensive apartments. Dutch homes are relatively expensive per square meter. However this cost primarily comes from the price of the plot, especially in Amsterdam. In Berlin and many other large cities expensive apartments are expensive due to their quality. A luxury apartment in New York is smaller than in Amsterdam, but it will be finished with luxury materials and the building will often include extra services such as a doorman and sometimes a health-club with a swimming pool, sauna and fitness room. Other amenities can include a swimming pool, wine cellar, communal garden or a beautiful lobby. In all cases the place and the size of the apartments are important. (Kompier, 2009)

While the size and services of an apartment are very important to the apartment's status of luxury, location is a major factor as well. "Apartments on the Minervalaan in the southern part of Amsterdam are generally 60 m². The finishing is high-quality. What's more, the status of the neighbourhood prescribes luxury. The upkeep of greenery is better, the population density lower and the possibilities for parking greater – all very important conditions for a luxury district." (Kompier, 2009, p. 17)

A fourth factor is choice. For new luxury apartments it is sometimes worth it not to design an interior space, but to instead provide spacious plan with easy access for pipes and cables. This will allow the new inhabitant to hire their own interior architect to create a unique and personalised interior. As this space that is truly your own is a luxury in itself. This open floor approach was originally the plan for the Fountainhead building in Amsterdam and was the design approach for Winka Dubbeldam's Greenwich Street Project (2004) in New York. She herself designed 2 homes within the building, while other inhabitants hired different interior architects. (Klijn & Mooij, 2009)

In the case of a serviced apartment, the type of and access to these services need to be carefully considered. During the design process of the Fountainhead building, the designers discovered that "[...] most of the potential buyers wanted the luxury normally provided by a good hotel, but they also were very concerned about their privacy. [...] Most of the potential buyers, for instance, did not want to feel they had to share the fitness room with people from the neighbourhood or to meet them in the swimming pool." (Klijn & van der Putt, 2009, p. 12) This indicates the importance of privacy and the feeling of own-ness to residents of luxury apartment buildings.

Luxury apartments are starting to appear in the Netherlands as well, but are still not very prolific. Both in the rental and the purchasing sector.

Renting Luxury Apartments in Dutch Cities

The service apartments have still not become the norm for luxury apartments in the Netherlands. For example, Vesteda advertises the apartments in the Markthal building (2014) as luxury but it lacks the typical health club as well as other facilities, except for parking. They mainly rely on the apartments'

location in the heart of Rotterdam and overtop an icon of the city. Unsurprisingly the rent is also on the lower end of luxury, which Kompier (2009, p.21) describes as starting at 1200 €/month in 2009. A 109 m² apartment was being offered for 1305 €/month at the time this was written (with an additional 70 €/month service fee). The apartments do at have an A+ energy rating, which makes them again more desirable. (Vesteda, 2020 1)

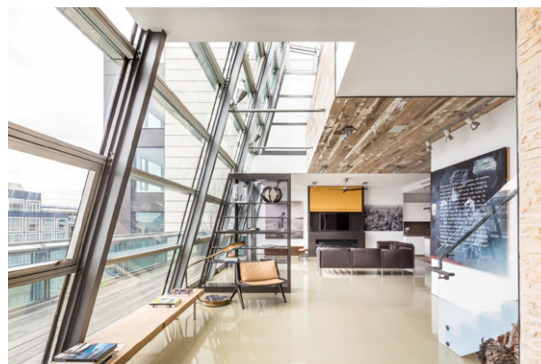
The same company offers apartments on the Wilhelminapier in the New Orleans building (2010). At the time of writing 2 apartments of 103 m² are on offer for 1625 and 1715 €/month, with the prior having a view of the harbour and the latter of the city. On top of this there is a €125 service fee and an optional €190 parking cost per month. While this is more expensive, this does offer the benefits of a health club with swimming pool, gym and sauna. Next door Montevideo (2005) offers the same services for a cheaper 1560 €/month plus €85 service fee. This time for a slightly larger residence of 113 m². (Vesteda, 2020 2)

The New Amsterdam building actively advertises its luxury status with its health club, extra security and parking. With a hefty price of 115 €/night (discounted from 135 at the time of checking) for a 50 m² apartment the building is aimed at true luxury despite the smaller size apartments. The website also directly advertises this as a place for business travellers to stay, not as an long-term home. (Corporate Housing Factory)

This is by no means a full representation of all 'luxury' apartments in the urban parts of the Netherlands, but it gives some impression of what sort of apartments are available and for whom. The fact that the site huursector.nl has no filter based on services in their rental apartments suggests that those are still not primarily on dutch people's minds when they look for apartments, however they do offer an undeniable layer of luxury to the building. A lot of luxury apartments are still advertised as being part of a regular home but with the added benefit of a garden and a central location within the city, especially along the canals in Amsterdam.

Buying Luxury Apartments in Dutch Cities

When looking to purchase luxury in the Netherlands there seems to be less on offer. Especially on the side of serviced luxury apartments. The Montevideo building that was mentioned before does also offer its services to owners of apartments in the building. One of which is on offer as this is written: 285 m² for a price of €1490000, or €8371 per m². And a monthly contribution of €420 to the owners association, which presumably partially covers the costs of the health club that the owners also get access to.



A luxury apartment in the Greenwich Street Project, New York

Aside from that, other luxury apartments in Rotterdam mainly earn their luxury title based on size, material use and location. Access to a private garden also contributes, as well as the view. Most expensive apartments that were on offer at the time of writing were large and had ceilings about 3 meter or more high. The apartments had a price of around 6000 €/m². In 2009 a luxurious apartment in Berlin would cost around 5000 €/m² "and up" (Kompier, 2009, p. 23). But that price suggests a higher luxury than these prices, when adjusted for the increase in housing prices since 2009 in Rotterdam. Perhaps this can be attributed to standards to which luxury was held in Berlin at the time, which are higher standards than Dutch people still hold their luxury apartments to.

In Amsterdam some dwellings in the New Amsterdam building are also available for purchase. Like in the Montevideo buildings these homes also have access to the building's health club and laundry service.

Luxury Apartments in the Keilekwartier

There is little luxurious in the Netherlands in the way of serviced apartments. Some of which is there is aimed towards expats who are used to a different standard of luxury. Among luxury homes some of the other factors, besides the services in the building, include the size of the apartments, personal choice in the outfitting, high quality outfitting, and the location of the building. A certain exclusivity is desired, and not only in access to the building's services, but also in what other people live in the same building. "The mixing of public rental and owner occupied dwellings proportionate with the scale of the building has been the adage for a very long time, but in true luxury residential complexes, there is no mixing with public housing rentals." (Kompier, 2009, p. 19) While a building with cheaper artist housing might not be 'true' luxury, the presence of artists can make the environment of the building more desirable, as explained in the previous chapter. This quality in the environment, in combination with the other factors, can still create a luxurious series of dwellings.

Affordable Artist Housing: Conclusion

Artists are losing studio and living space in the modern city. However there are some initiatives to provide housing and work space for these artists. And not without precedent. Out of a necessity for suitable and affordable artist accommodations came the typology of the studio-house, which combined the studio workspace of an artist with residential space for said artist. Many of these have been built for low prices to ensure affordability. The first building of its sort in Amsterdam, however, was not nearly so affordable. While creating excellent studio space for artist, the architects made the units relatively large and inaccessible to many due to the high rents. In contrast the studio-homes in La Ruche in Paris were much more bare bones and lower quality, but an incredibly cheap rent and the circular collective space of the building created a place for artists to meet and share in their troubles. Similar buildings have historically been made to provide this sort of cheap solution for artist homes.

While artists are a vulnerable group in society, they can also be an instrument of their own demise. The affect that artists have on gentrification have made them a harbinger of doom to the residents of the affordable (and often low quality) housing that they settle in, while also making them a tool for developers and governments in order to reinvigorate their neighbourhoods. Such are the processes that happened in places like SoHo, New York, Gateshead in England and Station North in Baltimore. In each case the artists' presence increased the prices of the surrounding real estate through the injection of cultural capital in the neighbourhood. In Baltimore they didn't just try to harness the gentrifying force of the artists for commercial gain however. They tried to find a business model that could allow the artists to remain within the neighbourhood by balancing out the below market-rate prices for artist rentals with market-rate commercial and office rentals.

While these initiatives provide cheaper artist housing, they leave the artists vulnerable to market forces still. If the artists form a cooperative housing group, they can keep rental prices under control and ensure that it is artists that remain within the block. This form of development also strengthens the social cohesion within the building, beyond any spatial design. In turn the artists can make use of their cultural capital to attract wealthy renters to the building, for which luxury housing can be created. This is a form of housing that is still uncommon within the Netherlands, especially of the serviced variant. Through a combination of high end finishing, providing luxury services and creating a desirable environment through the presence of artists, suitable luxury apartments could be created. These would in turn provide the funding for cheap, good quality, artist studio-homes so that this circle of value can be completed.

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Part 3: The Design

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KEILE- KWARTIER

M4H & Keilekwartier

The location of our assignment is the new urban expansion of Rotterdam in the former industrial harbour area of M4H. The goal is to transform it into a bustling live-work environment where the residential, the commercial and the industrial blend together. A term they use is the 'Makersdistrict', which refers to the light industrial activity that is set to be happening there.



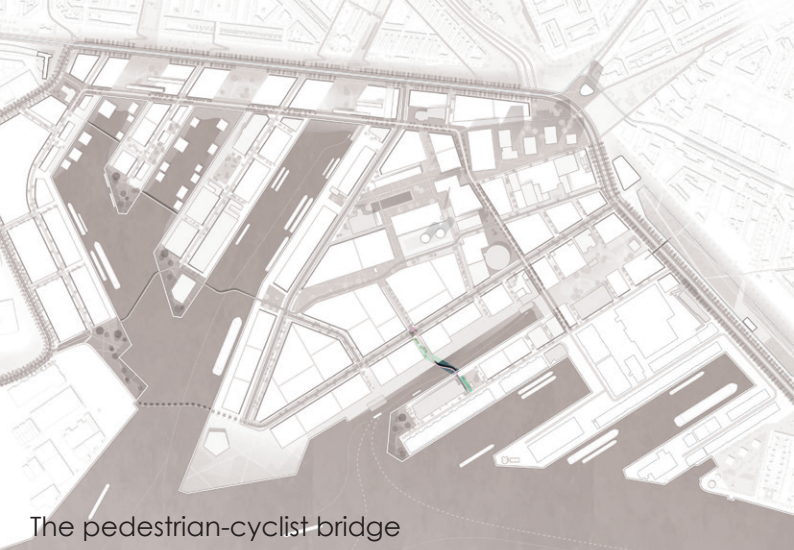
The makers' street and the cultural route

In particular, our location is within the Keilekwartier, an area that currently houses several companies. On the northeast side there is a green space, which is surrounded by small (and some large) creatives and makers. There are the two buildings of the Keilewerf as well as the Keilepand, which house small artisans, artists and designers. There is the Altelier Van Lieshout, who is an internationally acclaimed artist. And there is the Studio Roosengaarde and Soundport. Which all together contribute to the local creative industries. As such the municipality has assigned the Keilekwartier to small companies of artists and artisans.



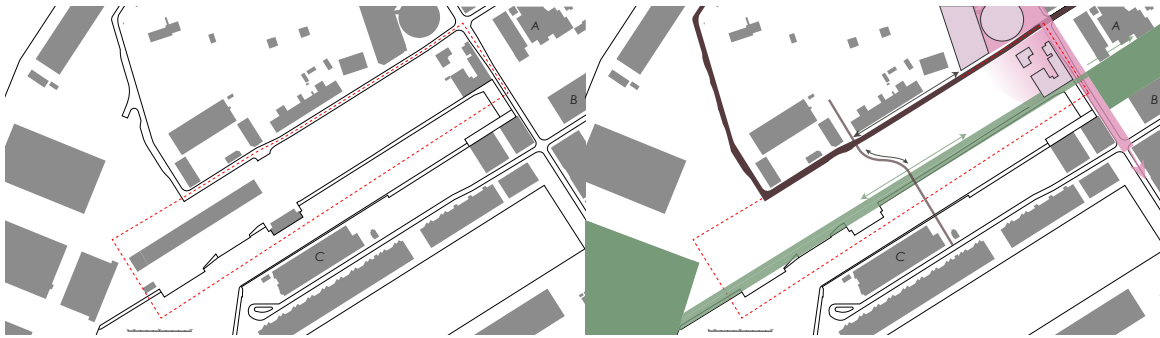
The blue-green axis and the cultural route

The Keilekwartier is marked by three main urban structures of the urban plan for M4H. First there is the makers' street and cultural axis that intersects it. These form the main routes for industrial and residential traffic (respectively) through M4H. The second structure is internal, it is the cross section of the blue-green axis of the harbour basin and garden with the culture route. Lastly there is a pedestrian and cycling route that crosses the harbour basin, which is part of an extended route that follows the Maas



The pedestrian-cyclist bridge

The Keilekwartier was split up into 4 quadrants that were distributed among different groups so that each group could make a more detailed urban plan for that part of Keilekwartier. The cultural route and the blue-green axis were used to divide it. The part developed by my group and me was quadrant D, the westernmost one.



The existing buildings in quadrant D

The 3 routes in quadrant D

Quadrant D

Quadrant D is a mostly empty area with empty plots of land, a large industrial warehouse, waste processing and distribution facilities and an smaller building in the north-east of the quadrant. We will clear all existing buildings, except for the building in the north-east which will remain. This building has a characteristic facade and an industrial look which fit the surroundings. The building is used by Foundation Kunst&Complex. This foundation was founded in 1981 and moved here in 1987. The building consists of 26 workshops for several artists.

Routes

As discussed before, municipality's plans for M4H indicate that the road on the east side will become a part of the cultural route in the area (marked in pink). Quadrant D will make a connection to that route by adapting the functions in the building around it. The existing building on the corner will enlarge this connection through its public accessibility and function.

The makers' street on the north side will remain an important street in the future, being the main industrial artery of M4H. Functions that suit the industrial area will be placed along this street. Here especially the buildings can be tall, to strengthen the industrial character and to avoid casting deep shadows on interior public space within the quadrant. The plinth is reserved for work functions, especially manufacturing. The characteristics of the buildings here should be industrial, formal and solid.

The municipality's plan for M4H includes the creation of a park at the end of this dock, to the west of Keilekwartier. The green space to the east, between quadrants A and B, also remains. Our quadrant forms the connection between those green spaces. The makers' street, which includes traffic from trucks loading and unloading at the manufacturing companies, may not be an attractive route for pedestrians to move between them. By creating a green route along the water the parks will be connected to each other. This also gives the residents of the area an place to recreate and adds extra quality to the residences.

These three routes define the borders of quadrant D. But there are other routes that are more centrally placed for this area.

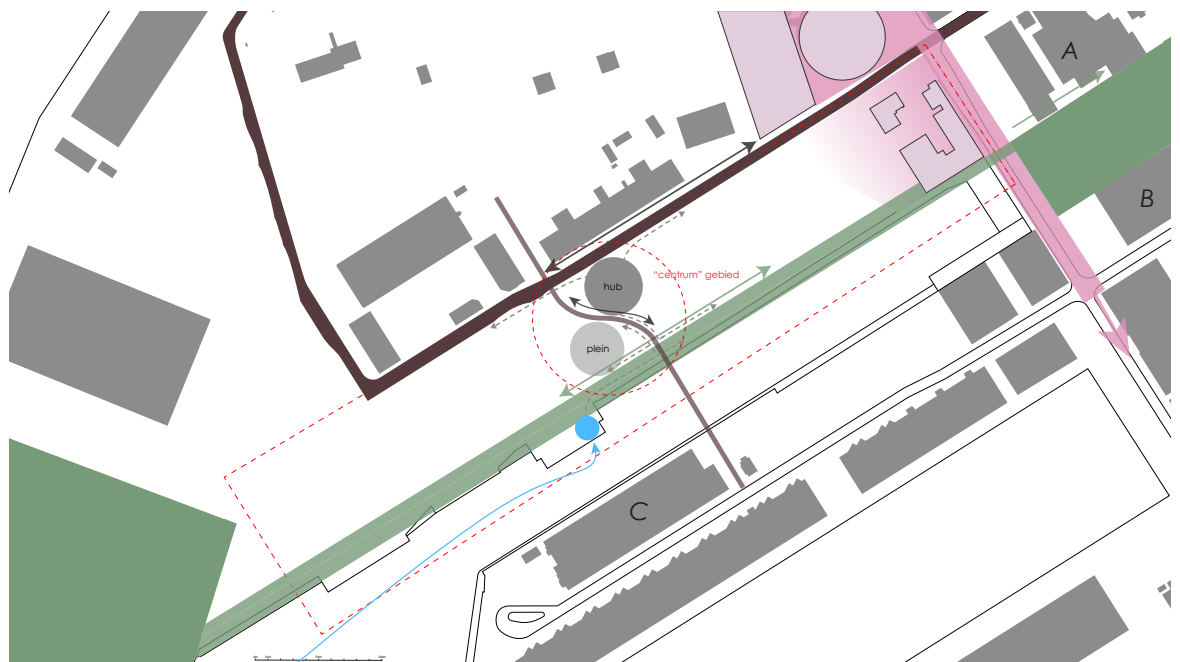
Mobility

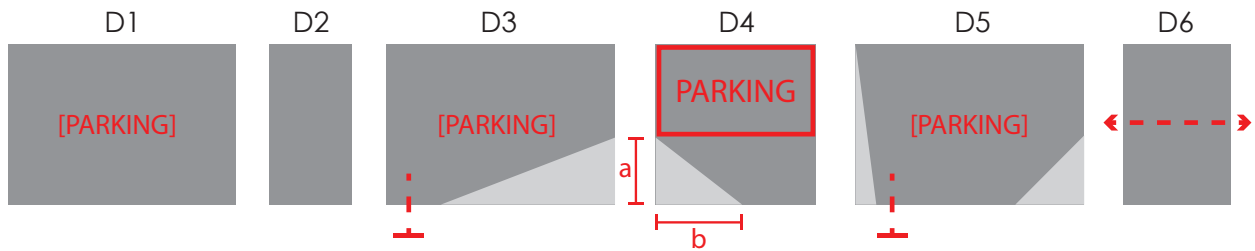
A new bridge for pedestrians and cyclists makes the area more accessible for residents of quadrant C, and connects to further cyclist and pedestrian routes between Schiedam and Rotterdam. The bridge and its extended infrastructure will create two intersections; one with the green route and one with the makers' street, and cut right through the heart of quadrant D.

A parking hub (the municipality's proposed parking solution) will be placed next to this route, at the intersection of the makers' street and the route over the water, placing it centrally in the area. This hub mixes car parking, bike storage and rental, bus stop and other potential mobility related functions. Its plinth can integrate more with the surrounding buildings, gaining a commercial function for example.

The quadrant is also easily accessible from the water. The mooring place for the water bus or taxi will also be placed centrally so that people are within walking distance of their work from there and have direct access to the mobility hub.

With the connection of these three transportation points, this area has the potential to become a small centre for the quadrant. By creating a square on the waterside for both residents and workers, it can become a point of social mixing between the different users of the area. The height of the surrounding buildings could be used here to accentuate this centre.





D1	D2	D3	D4	D5	D6
Dimensions: 108 m x 72 m Minimum GFA: 42000 m ²	Dimensions: 47 m x 72 m Minimum GFA: 16000 m ²	Dimensions: 115 m x 72 m Minimum GFA: 36000 m ²	Dimensions: 72 m x 72 m Minimum GFA: 25000 m ²	Dimensions: 115 m x 72 m Minimum GFA: 38000 m ²	Dimensions: 58 m x 72 m Minimum GFA: 14000 m ²
Parking: 6000 m ²	Parking: N/A	Parking: 5500 m ²	Parking: 18000 m ²	Parking: 5500 m ²	Parking: N/A

On the east side there is a section cut off the footprint of the plot. The depth a is 28 m. The minimum surface area removed from the footprint this way is 1000 m². The shape of this cut is up to the architect.

On the west side of the block is an element to visually divide the public space on the waterside into two areas.

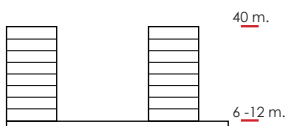
On the west side there is a section cut off the footprint of the plot. The depth a is 28 m. The width b is 36 m, so that the public space created connects to the bridge. The minimum surface area removed from the footprint this way is 600 m². The shape of this cut is up to the architect.

On the west side there is a section cut off the footprint of the plot over the depth of the plot. This is minimal at the side of the makersstraat and widens towards the water. The minimum surface area removed from the footprint this way is 250 m². The shape of this cut is up to the architect.

In the plinth there is a passage to connect the cultural axis into the the neighbourhood.

On the east side there is a section cut off the footprint of the plot. The minimum surface area removed from the footprint this way is 450 m². The shape of this cut is up to the architect.

On the west side of the block is an element to visually divide the public space on the waterside into two areas.



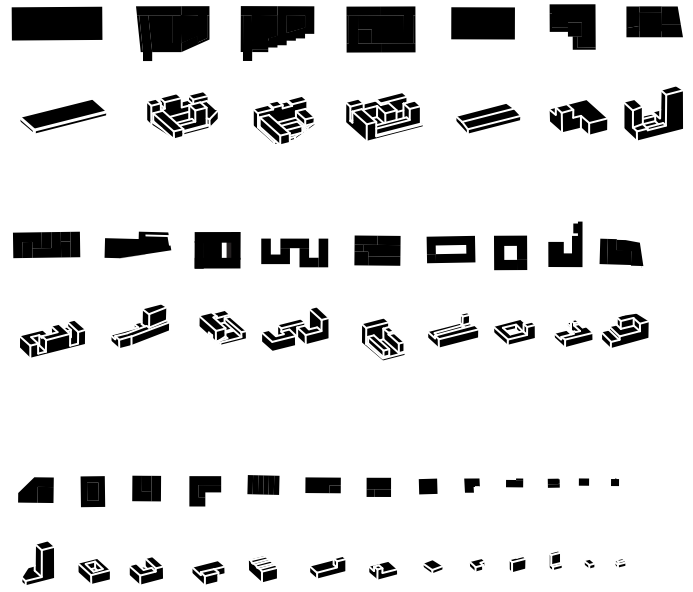
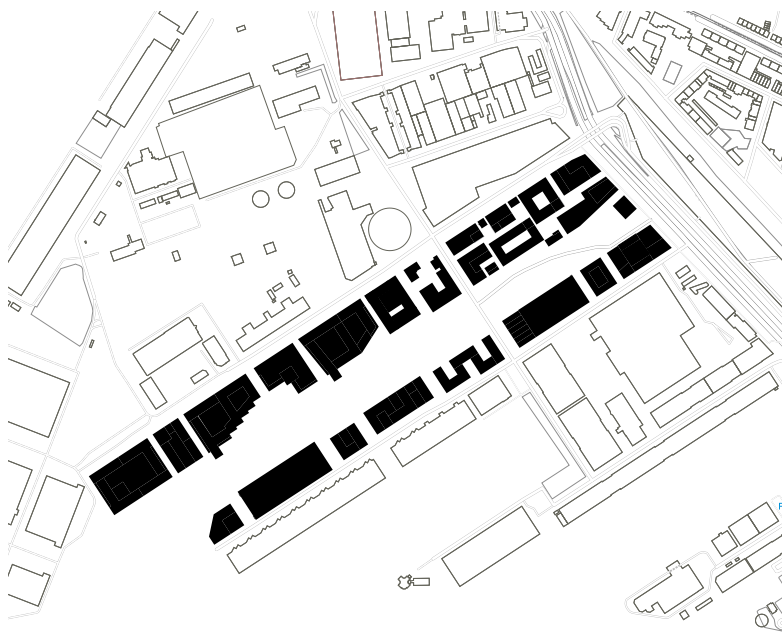
General Rules

- The ground floor has a minimum height of 6 meters with the possibility of a mezzanine floor.
- The plinth floors fill out the building line. Their total height is 6-12 meters.
- Above the plinth floors the maximum height is 40 meters. The building mass no longer has to follow the building line.

Rules to (not) be followed

We made this concrete in a plan that was made up of large industrial blocks that formed a plinth on top of which a more free architectural expression could be given. We determined where parking space and collective space and other building elements should be realised, all illustrated in the image above. However these constraints became too tight on the architects of the specific blocks for the execution of the graduation project, so most of them left these rules for what they were and only remembered when they needed to create public space on one side or ensure that there was plenty of parking in their building.

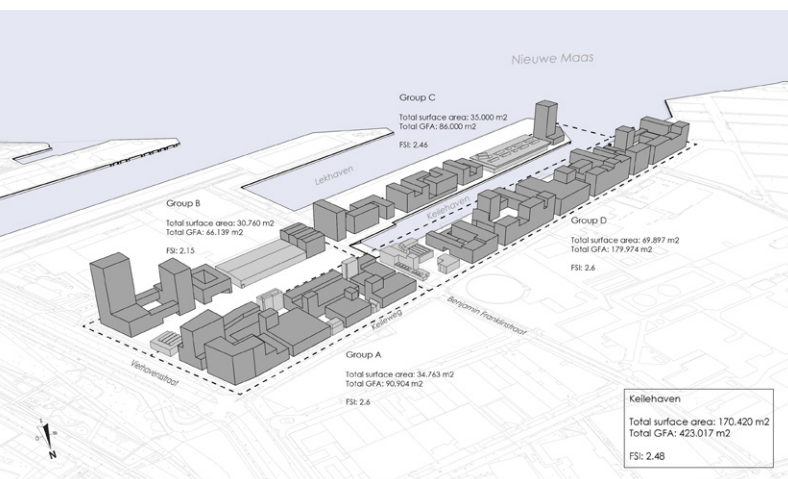




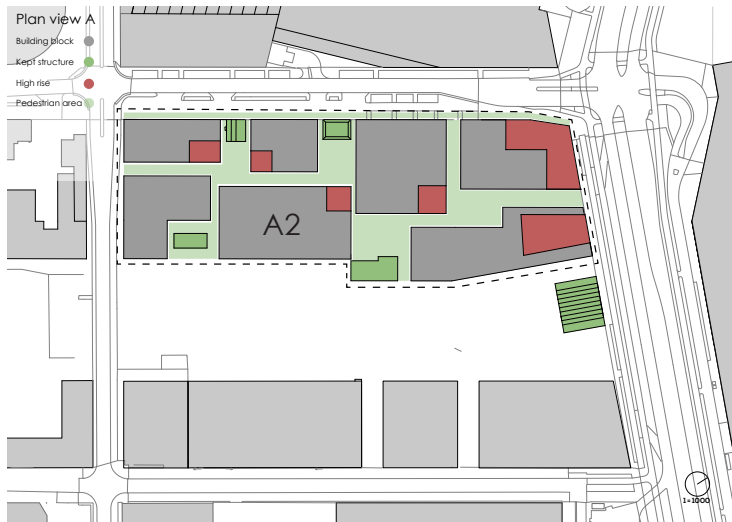
The urban morphology of the group's plan for the Keilekwartier

The Plan for the Keilekwartier

When we put all the four quadrants together we get an urban space that consists mostly of large industrial blocks along the harbourside, but a smaller, more finely woven space in quadrant A, where the existing buildings gave precedent for smaller buildings and narrower streets. Even the smallest buildings have become quite large however, as with a group we were aiming at a Floor Space Index for the entire urban plan of 2,5. This means tall, and high density building. Space for small industry was kept in the plinths in most plans, with upper stories forming potential live-work units or offices. Meanwhile in all plans the cars were kept out of the inner streets and several mobility hubs were made accommodate the need for parking and transit. This means that within the Keilekwartier there will be ample space for pedestrians and cyclists, with the predetermined cyclist route and bridge and the route along the park and waterfront forming two major zones of human movement and potential interaction.



The Building, An Urban Approach



Quadrant A

I picked block A2 as the location for my graduation project. As a part of the quadrant A it's surrounded by narrow streets and mid-rise buildings. Quadrant A's plan revolves around a network of small squares that are connected through a series of narrow streets. Tall towers mark ends of streets and locations of interest. These markers are both visible from inside the block and outside. From outside the quadrant they create the lure that's supposed to pull in curious pedestrians. With the exterior façades being relatively monotonous, but the taller elements within creating visual interest and inviting entry to discover what exactly those towers mark. These elements correspond with Sennett's (2019) open form of punctuation. The narrow streets with many turns and corners in quadrant A create a series of semi-colons, corners, which are meeting places and notable points in the route through the block. Meanwhile, the squares and especially the tall towers can create exclamation marks, that create places of recognition and emphasise the location. The last part of this open form, the quotation mark, is not evident at this scale, but can be created when we develop the buildings and their direct surroundings.



Impression quadrant A with monotonous facade and eye-catching towers

Block A2: For the craftsmen

The most work-dedicated part of my building is aimed at the collection of small artists and artisans that are currently housed in the buildings of the Keilewerf. With our urban plan their buildings will disappear, but we don't want them to disappear. Their expertise, initiative and creative skill make them the exact group of makers that we want to keep in the Keilekwartier. Block A2 gives me the opportunity to create a large hall similar to the one that currently exists in the Keilewerf, and create a similar working environment. Its placement is close as well, so that it can be built and take over the function from the keilewerf with minimal disruption to the community of craftsmen.



Routes of Approach

As part of our preliminary design exploration we plotted out three different routes from the Vierhavenstraat to our block using the rough urban mass. From these routes could deduce the experience of the approach to the building, and the major moments in this approach that may need to be considered for the architectural design.



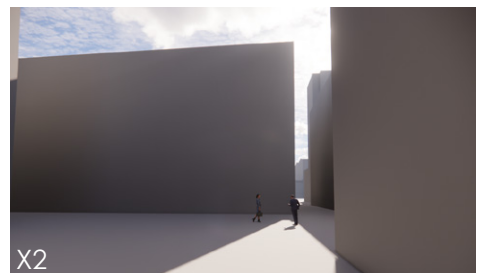
12:00 - 21 March

X1

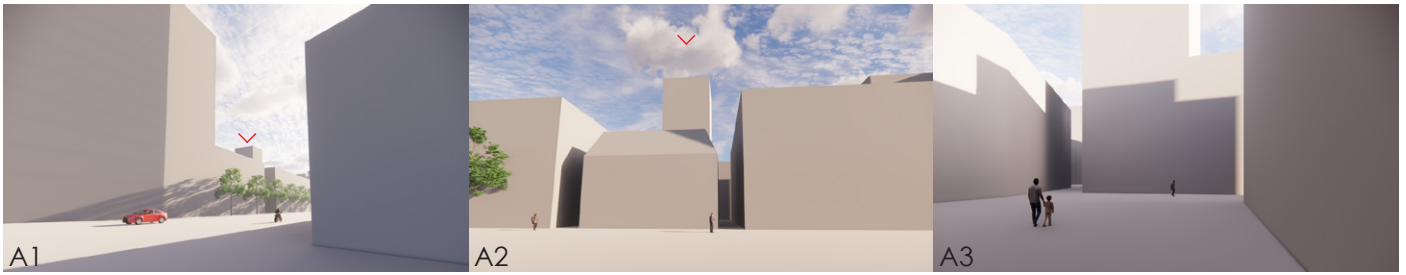
This view is at the square that we can see through the final street in B3. It shows the patio to the north-east of the building. This patio is in shadow for most of the day. The building makes up a prominent side of this square.

X2

This smaller patio to the north-west of the building shows how prominent a shadow it casts on the public space on that side for most of the day. Only in the evening does the sun shine into those public spaces.



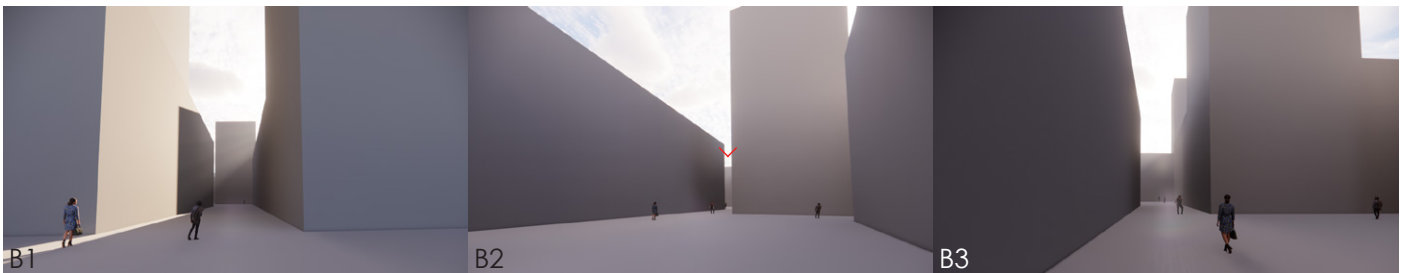
12:00 - 21 March



17:00 - 21 March

Route A

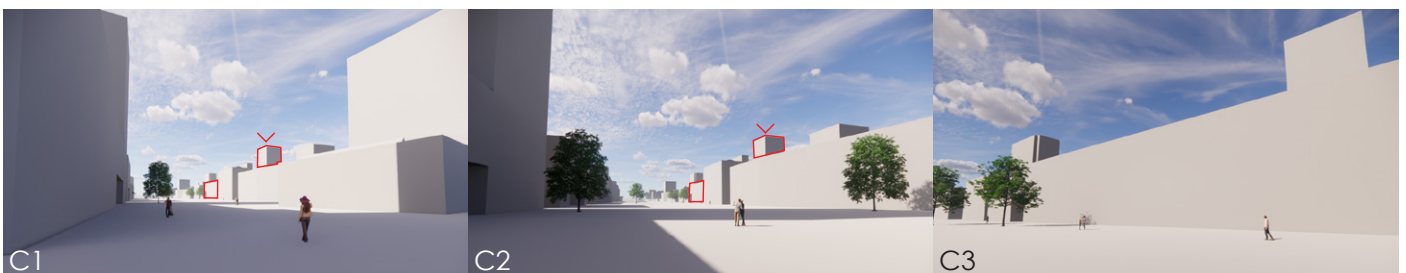
The northern route of approach takes us across the 'makersstraat'. From the makersstraat we initially can't see most of my building, however the tower is visible from outside, functioning as a marker of its location. This marker becomes more visible as we're about to cross the road (A2), towering over the existing building. As we arrive at the small square next to the tower (A3) we find ourselves in a courtyard that is in shadow for a large part of the day due to the high surrounding buildings.



17:00 - 21 March

Route B

This route takes us through a narrow street (B1), in which we can't see our destination, nor any sign of it. As we arrive at a patio (B2) we get our first glimpse of my building through the next street, which becomes a clearer view as we cross the patio and are able to look straight down that street, directly at the plinth of the building (B3). We also then get a glimpse of the building's tower. Most of this route is traversed in shadow.



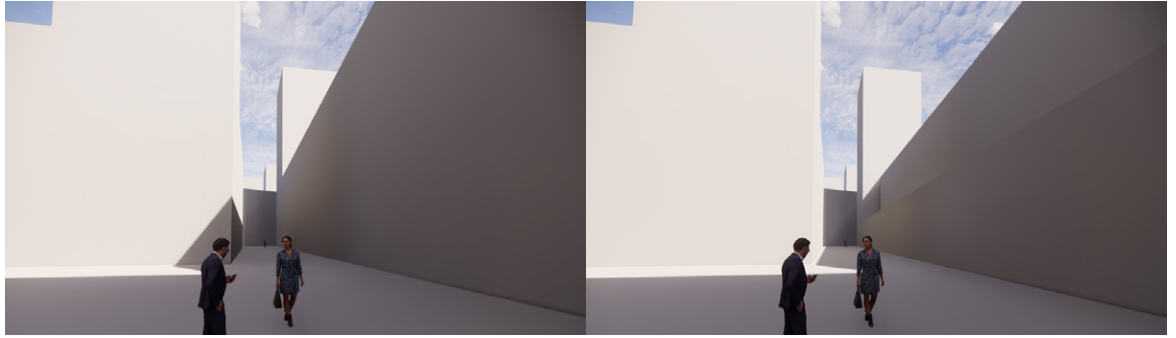
12:00 - 21 March

Route C

The third route takes us across the garden in the heart of the Merwekwartier. A glance between the buildings on the side of the Vierhavenstraat shows you a view across this open area within the plan, and already the building can be seen in the distance. It slowly becomes more prominent as we get closer until we are right in front of the building and can see its entire façade stretch out before us (C3). This façade is the facade that is in sun most of the day, except for later in the evening.

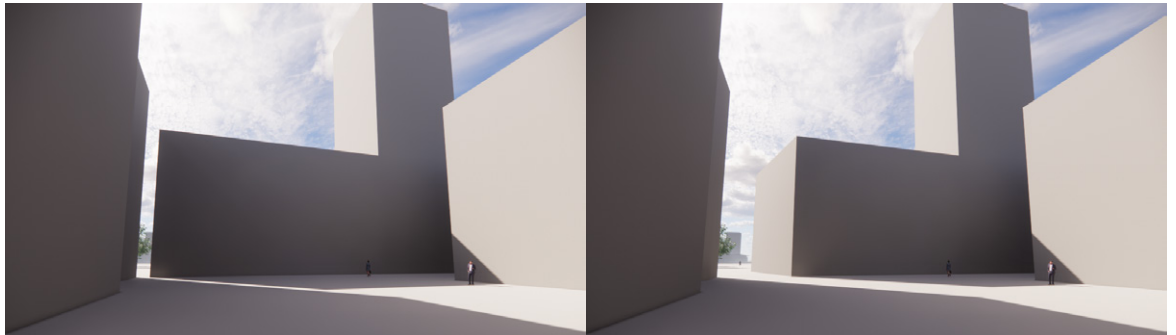
Results from the approaching routes

From these routes we can see that the tower element is the most primary visual marker of the building, as described in the plan for quadrant A. Only from the side of the park is the building directly visible from outside the quarter, where its façade forms one of the green space's sides. The surrounding streets and squares can however become quite dark due to their narrowness in combination with the height of the buildings. Two adjustments have been made to the building mass in order to bring in more light and connectivity, while retaining the plan's pattern of tight streets.



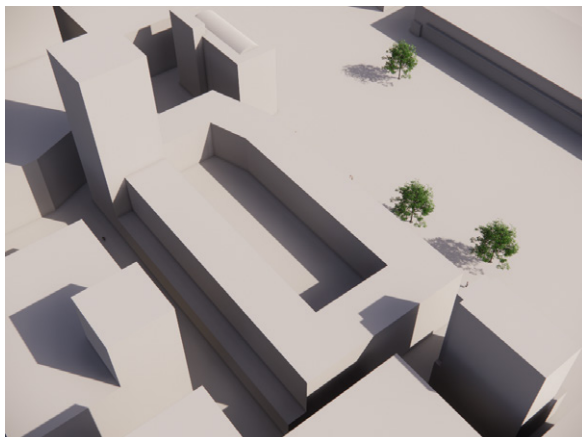
Push back at the north side

This street was very dark. To bring in more light, the building mass above the plinth has been pushed back, opening it up to more sky and sun.



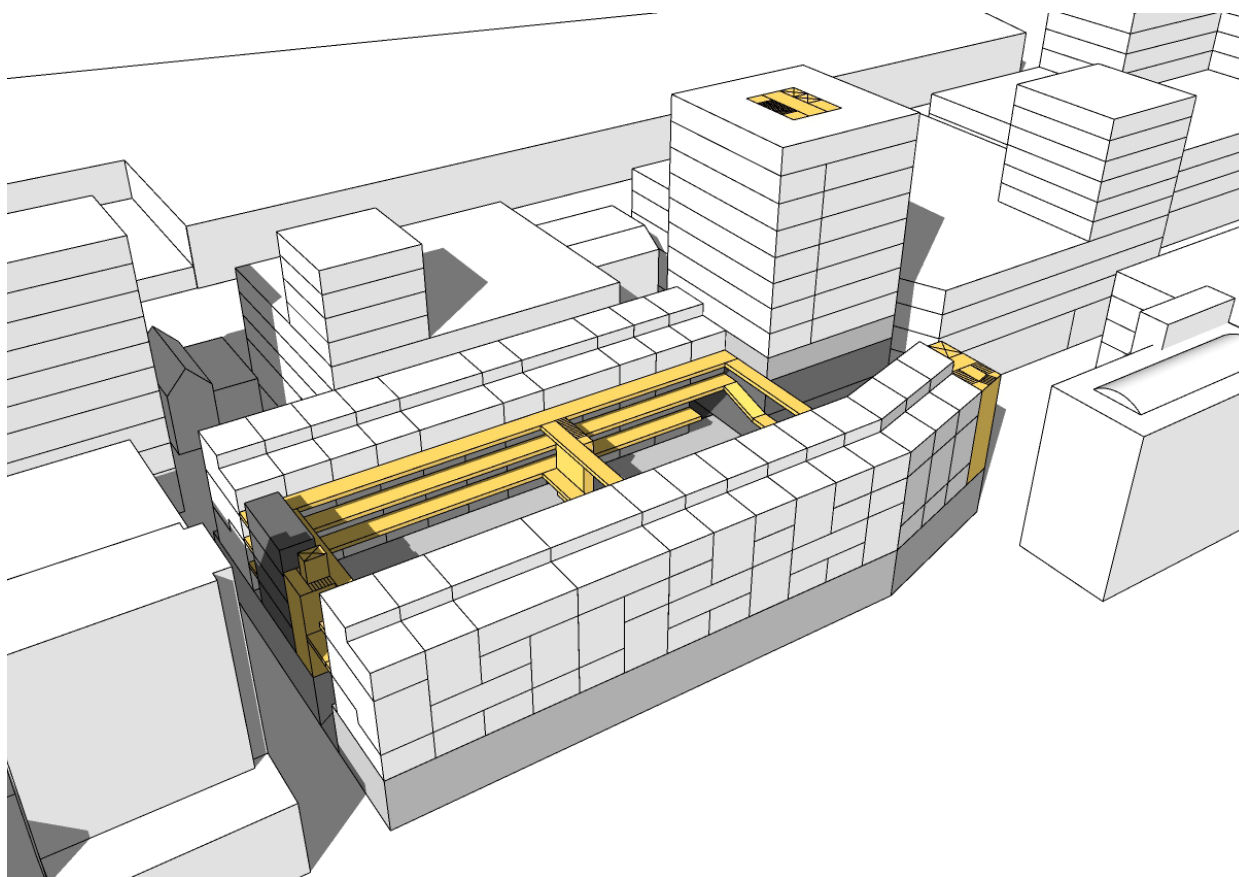
Cut a corner in the east

The corner between the existing building on the left side and my building had come very close to each other. This allowed only a sliver of sunlight to come through for a very short time of the day. By cutting that corner both the connection between the square and the garden is enhanced, and more light can fall into the square for a longer period of time.



The Resulting Volume

The Building, Research and Design

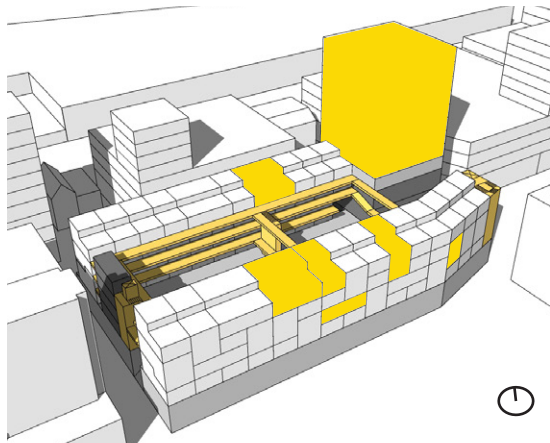


An overview of the groups in the building

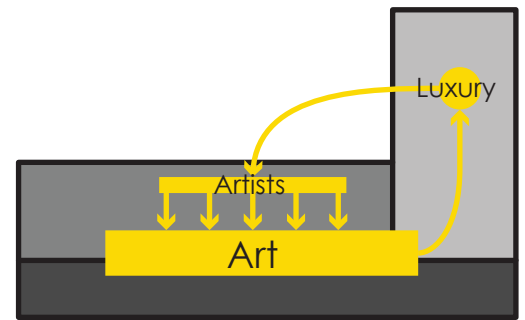
The building is a live-work building designed for artists. And by artists I mean cultural workers. While traditional visual artists (painters and sculptors) are the primary group, it should also invite others. Musicians, writers, film-makers, photographers, dancers, actors and further creators of artistic products should also be welcomed within the building and be given their space.

As part of the development strategy, however, the artists will share the building with higher income groups that will rent the luxury apartments in the tower. While they are high end apartments, the cultural capital in their environment will more likely attract successful artists, designers and gallery holders, more creatively and culturally minded individuals, rather than your standard businessman. Though it can't be ruled out that some of the apartments might be rented by successful lawyers.

The third group in the building is the makers that practise their craft in the plinth. This group may have some overlap with the artists that live above, however many of them will likely not live there and come from outside. They come to the building looking for a space where they can work in an environment with other craftsmen and different professions, where they can learn from one another and share jobs and gain social connections.



Luxury ('money making') apartments in the tower and mixed with the artist homes



The funding strategy for the building

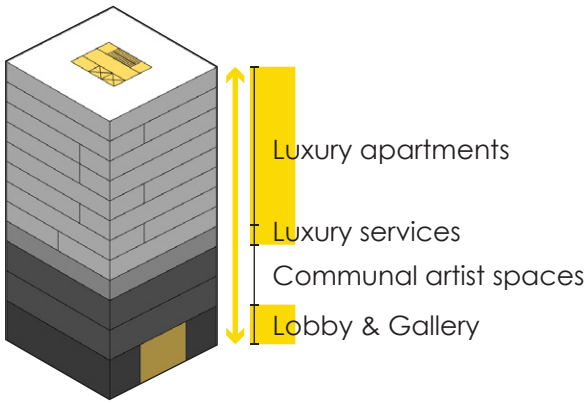
Organisation

The building might at first seem segregated, with the artists living in the lower blocks, where they have their studio-homes, and the luxury apartments completely separated off into the tower. However this cut is not quite so clean. Primarily on the side of the artist apartments some will be available to non-artists, with the eye on (upper-)middle class residents that that are attracted to such a creative environment. These include groups that have historically mixed with artists, often as a part of the gentrification process. Ley (1996, p. 15) says that the first people that follow the artists in their wave are the 'new cultural class'. These designers, media workers and workers in higher education are the closest in values to the artists in their evaluation of culture. And thus the logical step is to look at this group for supplicative inhabitants of the artists' block. This slightly higher income group can bring some of the capital that the building needs and diversify the inhabitants somewhat. Some other (larger) studio-homes can be rented out for higher rates as well and given access to the services of the luxury apartments.

The luxury apartments meanwhile will be closed off from the rest of the building, allowing only in only luxury residents and their guests. This is part of the apartments' status as luxury, the exclusivity and privacy of their building. While they may still exit and enjoy the creative environment around the tower, they can choose to separate themselves from it should they want to.

This arrangement is realised through a housing cooperation, where the co-operation owns all dwellings in the building and keeps its hand on the rental prices of the dwellings to ensure that rising real estate prices don't make the studio-homes unaffordable for the resident artists. It will also ensure that the studio-homes that are aimed at artists remain rented by artists.

The goal is to keep the studio-homes affordable for artists, through the income generated by the middle and high-end apartments in the building, which will be rented out for market-rates. Zukin (1982, p. 124) says about artists in SoHo "The property values enhanced by the artists' presence rose so high that they effectively barred entry to the loft market by people who tried to life off artwork or performance." So the presence of artists enhances the value of residences in a neighbourhood through the cultural capital that they bring. That is something that attracts the middle and upper classes to an area. The art will be a commodity for the luxury residents, while they in turn will pay the artists for their work and become their patrons of sorts.



Luxury

The heart of the luxury functions within the building is the tower. It will contain the majority of the luxury apartments as well as the services that support its luxury status. It has its own entrance with a high-end lobby and separate staircase and elevators. Additionally there will be an art gallery on the ground floor.

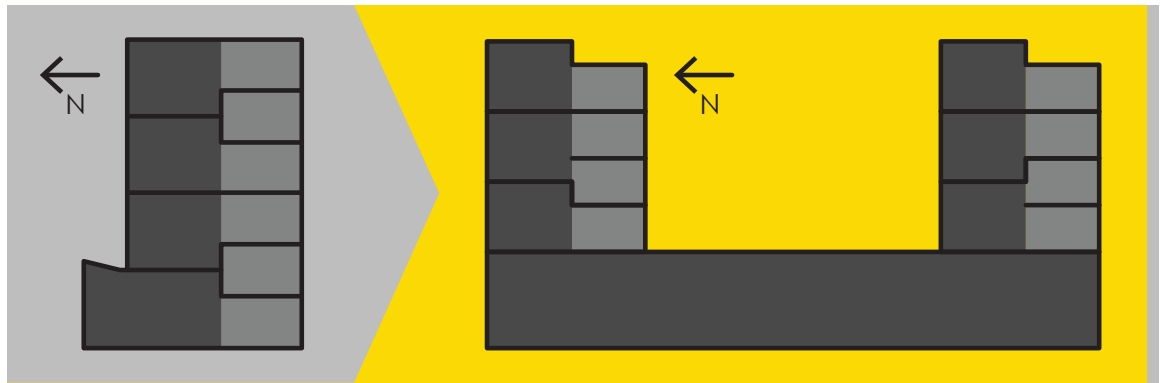
Tower Apartments

The apartments in the tower lie on the 4th to the 11th floor, which lifts them up above the roofline of the artist homes and gives them a view all around the neighbourhood, especially on the higher floors the apartments command views of the Keilehaven and M4H. The apartments will be provided with high quality finishing and be more spacious than the artists' studio-homes, with the smallest apartments being 75 m² and the penthouse being 300 m².

Services

The tower's 3rd floor is reserved for additional amenities available to the residents of the tower and other high-end residents in the building. This floor will have fitness rooms, a sauna and a screening room. At the ground floor there will be a high-end lobby and a doorman to oversee security and help residents when they need something. The first and second floor of the tower are taken up by shared art facilities for other residents and the ground floor will have an art gallery adjacent to the lobby. Those will be elaborated on later, as they aren't exclusive to the luxury apartments.

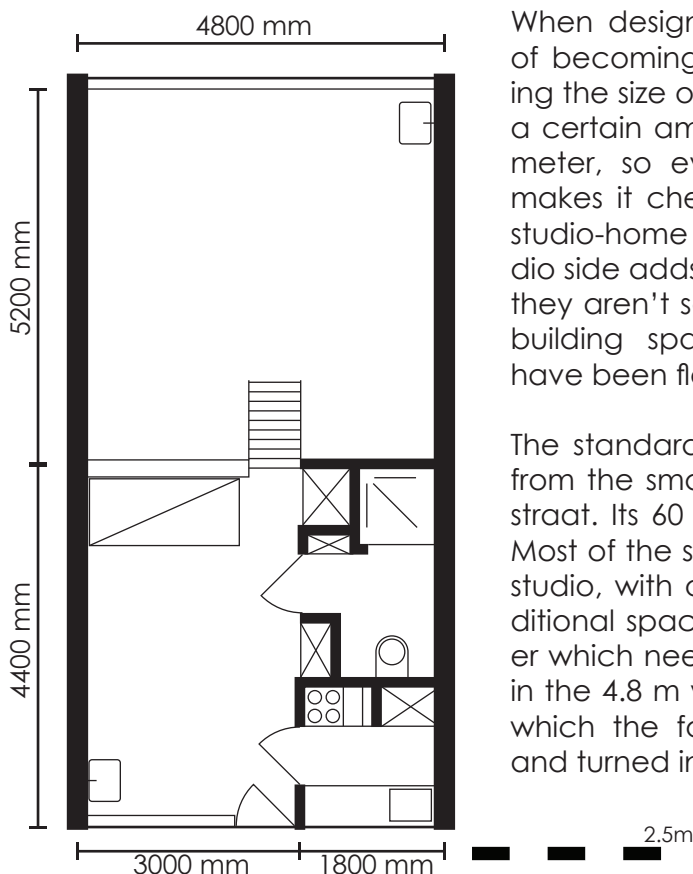




The Zomerdijkstraat studio-homes adapted to the design

Adapting the Zomerdijkstraat studio-homes

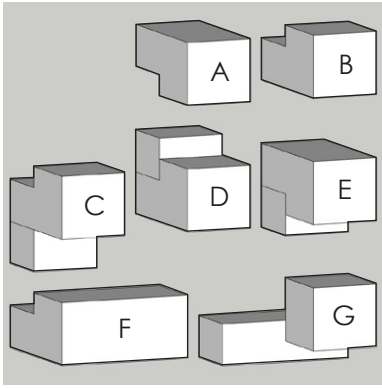
The Atelierwoningen Zomerdijkstraat were taken as the main reference for the spatial arrangement of the studio-homes. This is the preferred option due to its spatial efficiency. The standard artist studio-home has 2 residential floors for each studio floor, whereas the Zomerdijkstraat manages to fit it in as 1.5 residential floors for each studio floor. The adapted version in my building has 3 studio floors and 4 residential floors. This allows the creation of 3 studio-homes with 1 floor to spare to add some level of modularity to the homes. This residential floor can be added to the dwelling above or the dwelling below, or it can be combined in a different way, which allows for a series of different arrangements of different sizes of residential and working size for a studio-home.



Standard unit

When designing affordability, one way of becoming affordable is by decreasing the size of the unit. Homes often cost a certain amount of money per square meter, so every square meter smaller makes it cheaper. In the situation of a studio-home the extra height of the studio side adds extra costs, because while they aren't square meters they cost the building space that could otherwise have been floor space.

The standard dwelling will be adapted from the smallest unit on the Zomerdijkstraat. Its 60 m² shrinks down to 44 m². Most of the space 'lost' comes from the studio, with only a small amount of additional space coming out of the shower which needs to be moved to fit within the 4.8 m width of the apartment, for which the former hallway is sacrificed and turned into the bathroom.

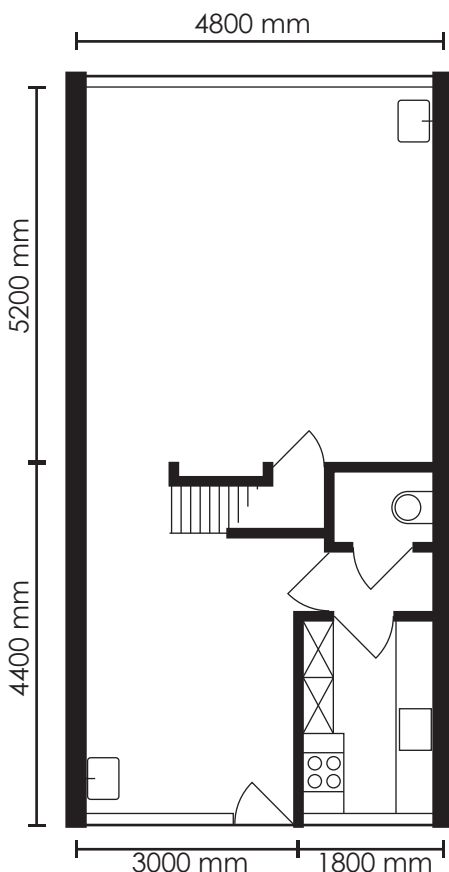


- A: Standard split-level (44 m²)
- B: Standard same-level (44 m²)
- C: Same-level + below (66 m²)
- D: Same-level + above (66 m²)
- E: Split-level + below (66 m²)
- F: Double same-level (88 m²)
- G: Double width + split-level studio (66 m²)

Some variations of studio-homes

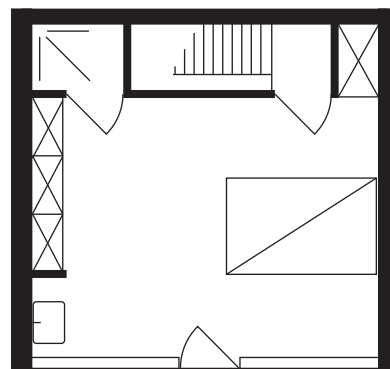
Live-Work

The artists have both living and working spaces in their homes. But from the zomerdijkstraat it appears that not all artists find this an enjoyable experience. If an artist has enough money to spend on an additional studio elsewhere they have that opportunity and can use the entire unit as a residential space, however this is discouraged. Some artists do, however, work with special tools that create a hazardous situation if used within the live-work units. For those artists there is the space in the plinth workshops. The same goes for artists whose work is too large to be created within the space of their home studio. As such the building becomes a combination of live-with and live-nearby workhomes, as described by Holliss (2015).

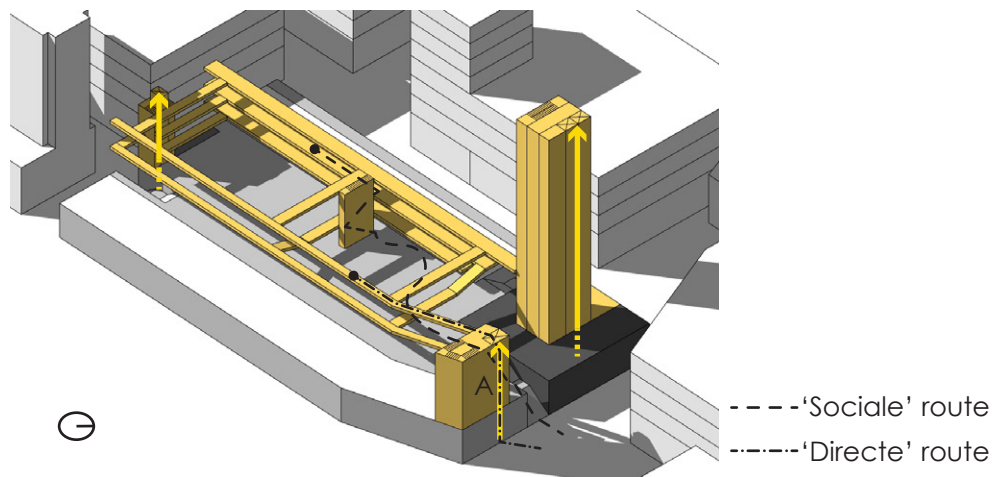


+Unit

The +Unit is adapted from the Zomerdijkstraat as well. In this case it's the similar small unit but with an additional residential floor. This unit's 82 m² shrinks down to 64 m². Like the other unit, it mainly loses its size to the studio, as well as from the nook with the shower and toilet. The shower moves to the position of the old paintings storage. This version has a larger kitchen and bedroom space than the standard unit, however it does have a less generous bathroom.



2.5m



Routes of access to into the building

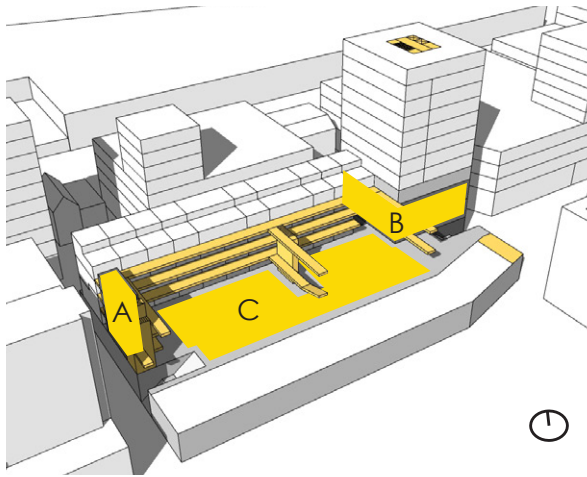
Access

The building has several different routes of entry, depending on the mobility and mood of the resident. In the middle of the building lies the semi-public courtyard which is accessible via stairs to the surrounding neighbourhood. This courtyard gives access to the three staircases that bring residents up to the galleries that lead to their homes. A socially inclined resident may take the stairs to the courtyard on the way to their home and potentially greet one of their neighbours there, after which they take another staircase up to whatever level their house is at.

There are also two elevators adjacent to the courtyard that allow those less mobile or less socially inclined to ascend to the courtyard or galleries. The reason I name this route less social is that this route through the building is more hidden and crosses fewer people's visual range or path. This is the reason for the central staircase as well: To encourage the usage of the courtyard as a mobility space as well as a social one. Important to note is that the eastern elevator (A) will also allow for heavy art pieces to be moved up and down between floors.

All studio-homes have their front-door either on the courtyard or on the gallery, and with the 24-hour occupation of work-homes there should always be a potential moment for greeting a recognised face or a short conversation if possible. Especially on the northern side the gallery has been made broader and can be used as outside and social space for the adjacent homes, while on the south side the gallery is narrow to allow as much light as possible to enter the underlying studios. The galleries are connected by bridges at three points, however because of the difference in height between the studio floors and the residential floors the galleries on the north side and the south side are at different heights. This means that the bridges have to make up for this height difference. This is solved either through the staircase or through a ramp.

Meanwhile, like explained before, the luxury apartments in the tower have their own exit with elevators and lobby at the ground floor. This provides those apartments with additional privacy and prestige. Their separate route of access will however still connect to the courtyard and galleries of the studio-homes, so that high end renters in those homes can access the services in the tower and so that residents of the tower have easier access to the courtyard and the artists' work.



- A: All-purpose communal spaces
- B: Dancing studios
- C: Courtyard

Collective artist spaces

Collectivity

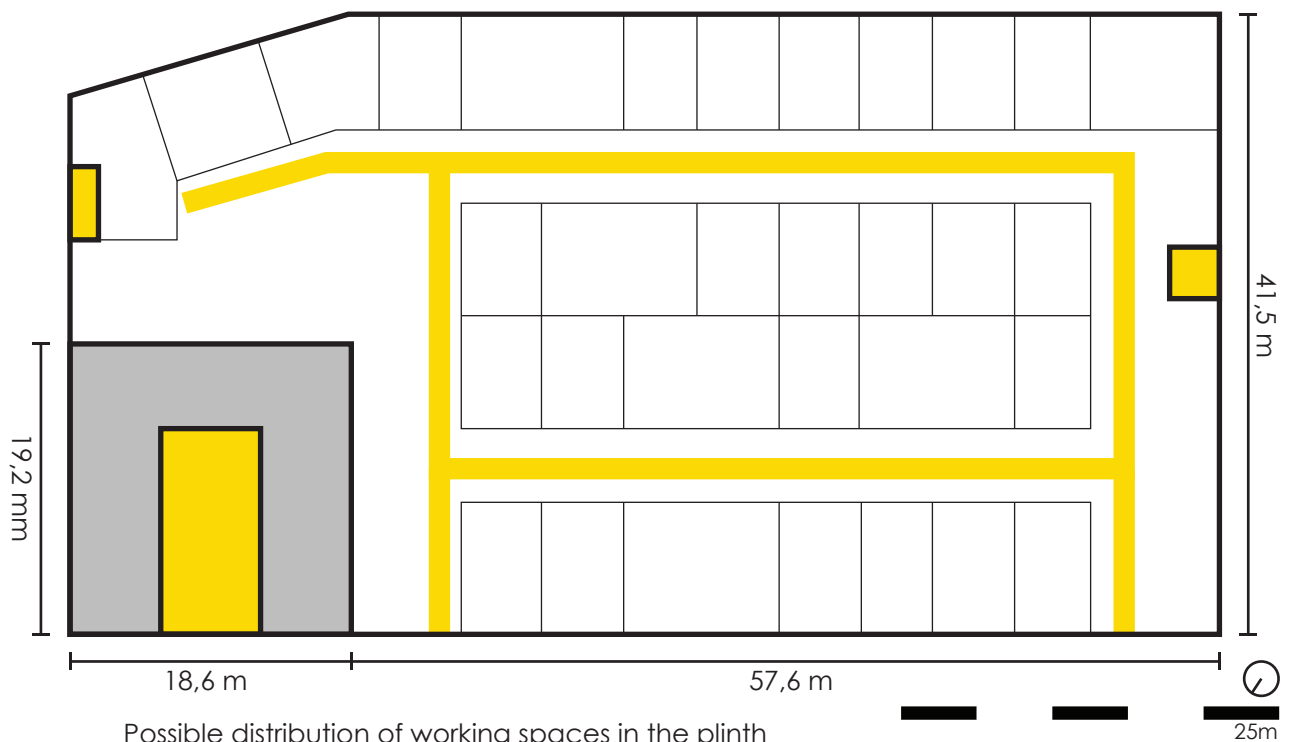
Within the design there are several steps that have been taken to reinforce the social connections and feelings of collectivity among its residents. The first step is the basic conception of the building: A building with a single group of like-minded individuals that live and work in the same environment as one another is conducive to creating a sense of neighbourliness. Live-work units are more intensively occupied and so their occupants will have more time to create social connections to those that live nearby and do similar work (Hollis, 2015). Additionally the courtyard structure of the building creates both a place for social meetings and gatherings. The perpetual presence of the artists creates a high amount of social control in this space and can shape it into a safe, collective semi-public space for the residents. Lastly, the housing cooperation organisation of the project creates a level of democratic control over the block and encourages participation and social encounters with the neighbours.

To reinforce this collectivity the building has several collective functions. The ones that are exclusively tied to the luxury apartments have been discussed before, and will not be reemphasised here. The artists have their own shared facilities. The largest shared 'facility' is the courtyard. They have control over its furnishing and goings-on. It can be used as an exposition space which is both private and public, but they can also use it as outdoor workspace or collective social space with a picnic table. On the west side of the building, facing the courtyard, is a stack of several all-purpose communal spaces. These can be furnished for relaxation (by placing a football table) or for communal washing facilities, or be made into a communal kitchen in the case of the ground floor. Lastly, two floors of the tower, where due to little sunlight entry they aren't suitable for homes, are dedicated to function as dancing studios or art space for those who do not have sufficient space within their own apartments. These rooms are intended to be shared and not permanently claimed by one occupant. They can also function as a meeting space with potential clients if an artist does not wish to receive them in their home.

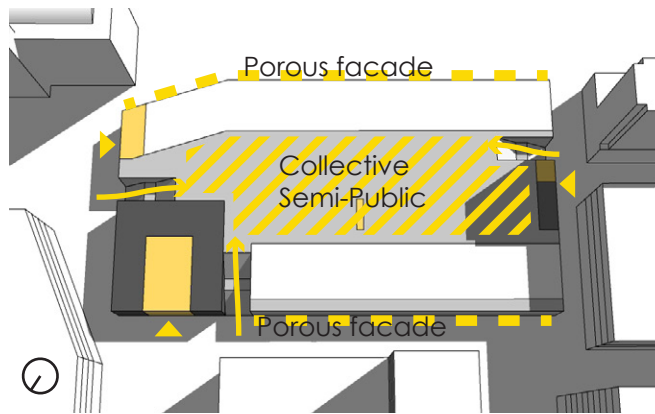
Plinth functions

While the upper floors of the building are aimed at a mix between living and working, the plinth level is aimed entirely at business. This business appears in two ways. One is making and the other is showing and selling. The latter is done through the realisation of an art gallery underneath the tower. This gallery will primarily work to show and sell the artworks of the artists that live and work in the building. It gives them an additional platform to promote their work to the world and a proper space to display it in an environment that art critics and potential buyers are familiar with.

The majority of the plinth floor will be taken up by the makers in the building. These small companies shall be provided by space inspired by the Keilewerf. Craftsmen, designers and artists are each given their own open plot of floor space to set up their own business in. This both means they can create their own workspace and it means that rents are lower. However it does mean that some initial investment is required to create that individual workspace. These available spaces can vary in size, since not all makers in the building will need the same amount of space. Like in the Keilewerf these will be arranged around a few paths (two in this case, as a consequence of the building's width). The goal is that this arrangement of open shared space, combined with the expertises of the different companies will create a fertile environment for growth and success. Some of these plots will also be available to the artists living above if they need a truly large space to create their art and their home proves insufficient.



Possible distribution of working spaces in the plinth



Interfacing with the urban fabric

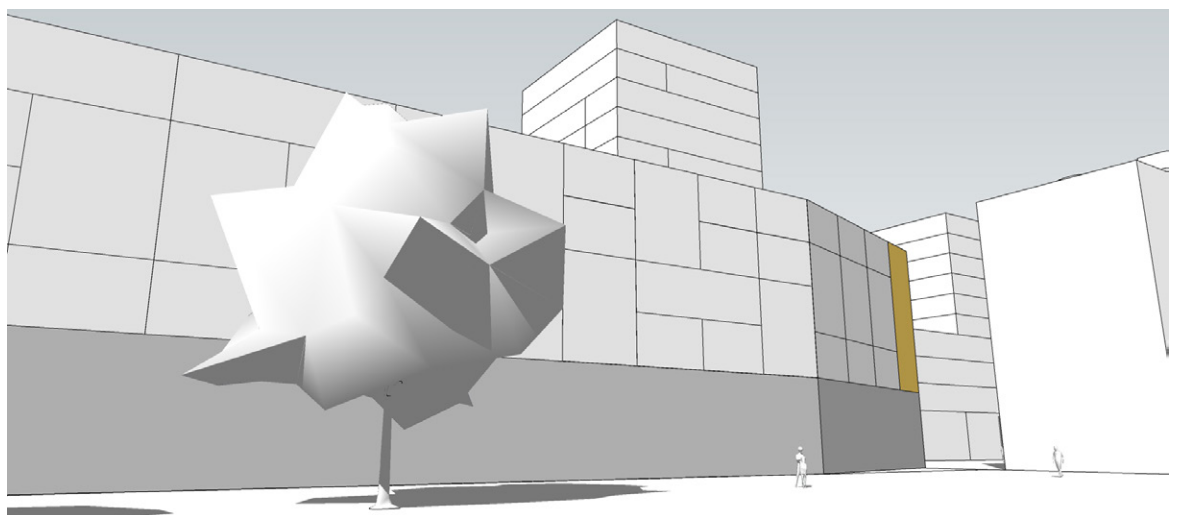
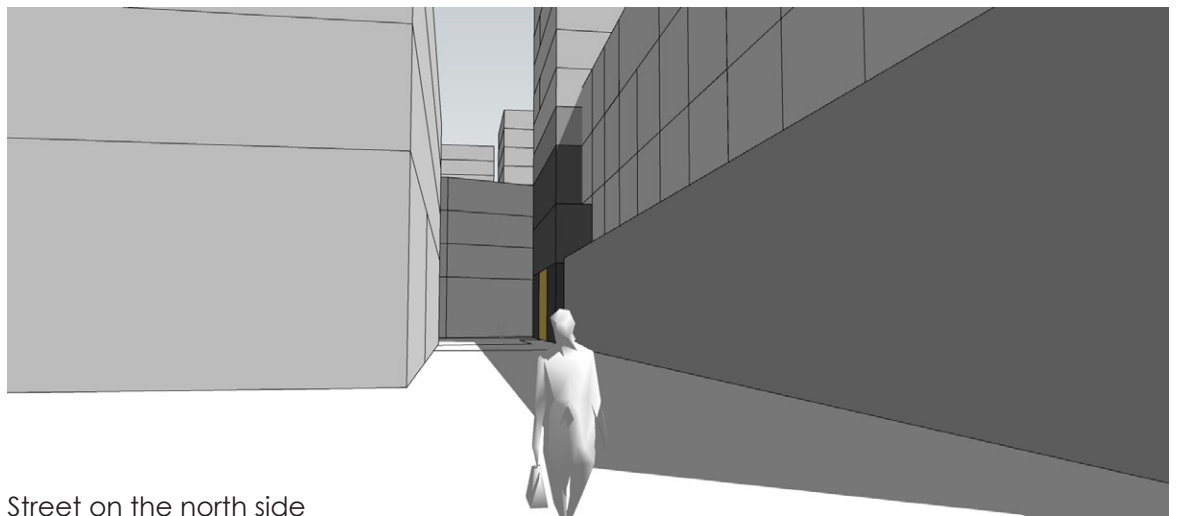
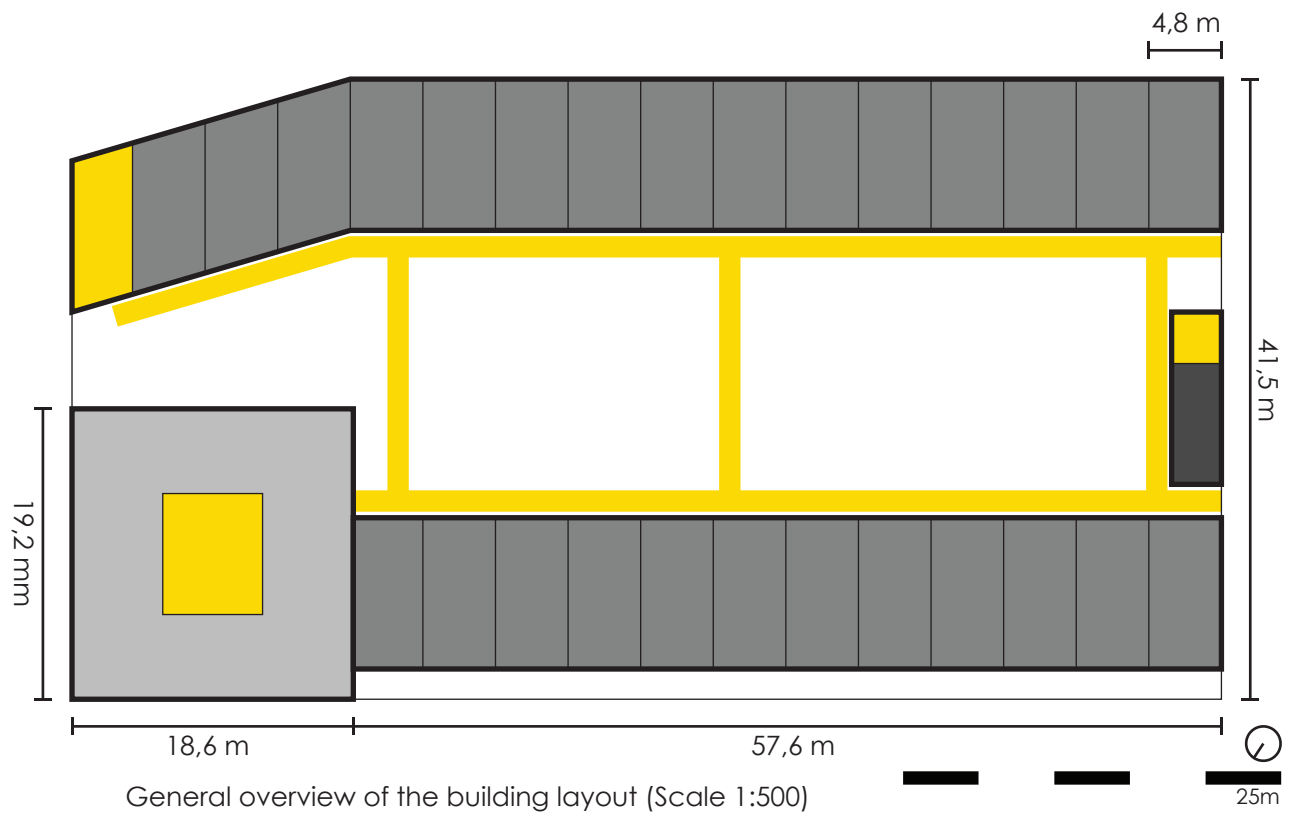
Public-collective and urban interaction

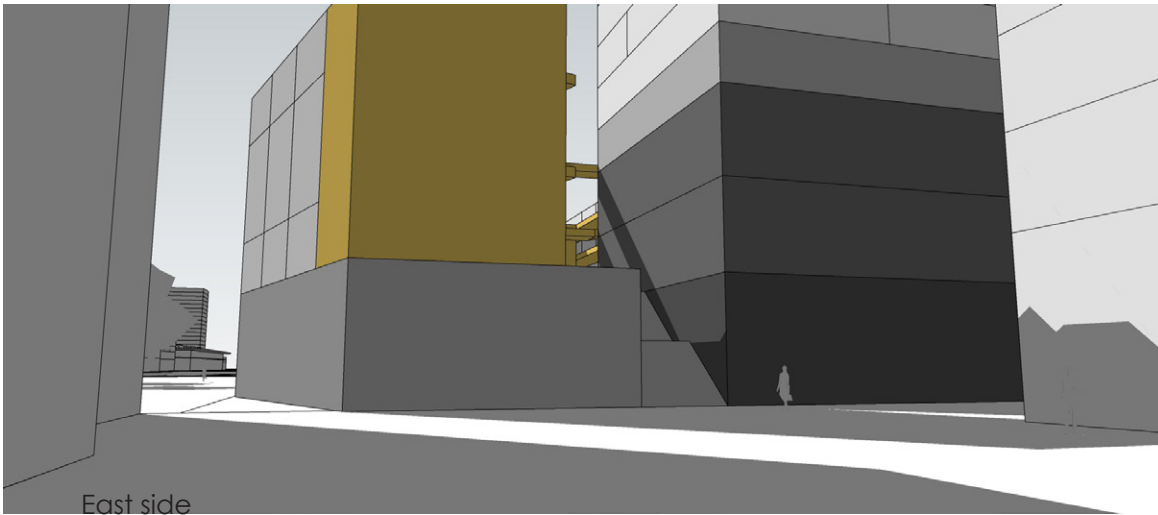
While the building is designed as a collective building for its own inhabitants and it is very inwardly focused (in two ways actually, the luxury segment in the tower and the artists around the courtyard), it is also very much a part of the urban fabric and interacts with it in a few ways. One major concern about the building's interface with the surrounding streets is the way in which the façade of the makers' plinth can liven up or deaden the surrounding streets. The aim is to activate the façade through large doors that can be opened or closed to let in light and fresh air into the plinth, while at the same time giving a visual and physical connection between the street and the makers' space inside. The audio element of the work going on within the plinth can then in turn add to the sense of liveliness on the street.

The other primary way in which the building interfaces with the urban fabric is by adding to it. The courtyard forms a semi-public collective space that stands in open connection to the surrounding streets. The courtyard is the artists' space, with visitors there being guests. The transitioning zone between the artists' space and the public space are the three stairs that connect them. Their openings turn the otherwise close walls into membranes between the different zones of public and collective, as Sennett (2019, p. 222) describes. The stairs become liminal edges, conveying a feeling of transition between zones through ascension of stairs. The act of climbing the stair emphasises the movement between two worlds: You ascend from the public to the private as you ascend from the mundane to the world of art.

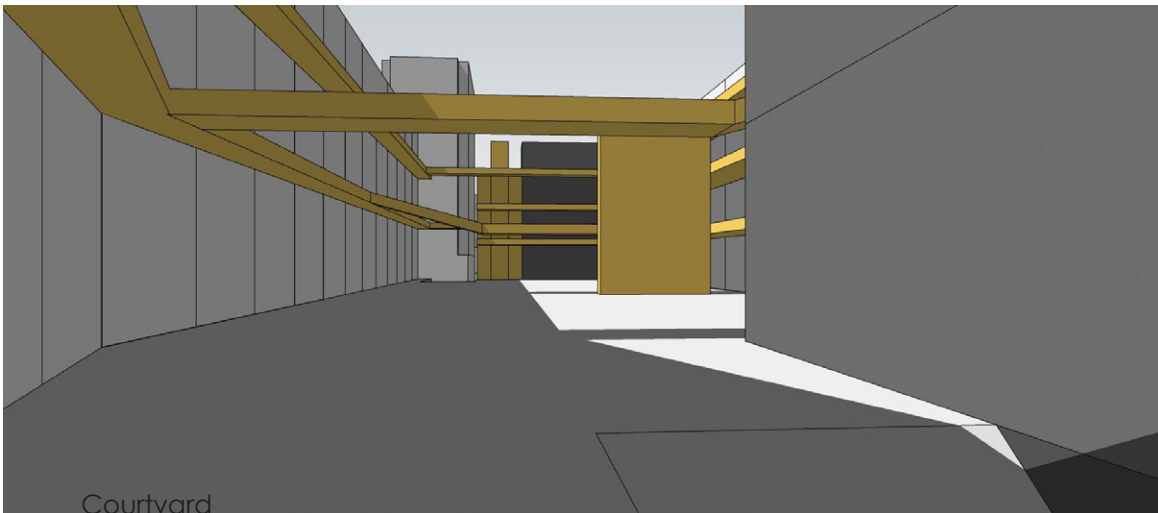
The exact nature of the courtyard is undefined, it is a space for artists to do their craft or expose their work. It is also a social space for the residents and may be a performance space when so organised. It is a synchronous space and an extension of the artists' work-homes. But I don't expect to design a synchronous space as Sennett describes. My expectation is that the nature of the space makes it synchronous, especially in the warmer months. Someone is eating their lunch in the sun, two people are conversing about some news topic of interest, while a third is taking the opportunity to work on a sculpture in the open air.

Like with Sennett's designs for open forms, this expectation might not automatically be a success, but if this connection between the public and the private works it can increase the value of the neighbourhood. And it can also work as a platform for the artists to promote their work and forge connections to those within and without the community.

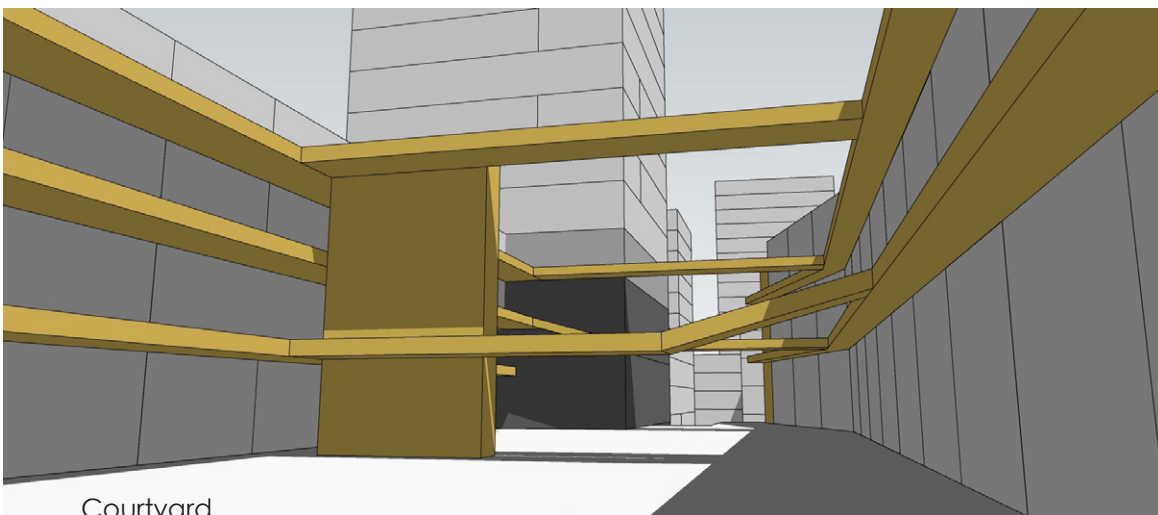




East side



Courtyard



Courtyard

Sources

- Holliss, F. (2015). *Beyond Live/Work: The Architecture of Home-based Work*. Abingdon-on-Thames: Routledge
- Ley, D. (1996). *The New Middle Classes and the Remaking of the Central City*. Oxford: Oxford University Press
- Sennett, R. (2019). *Building and Dwelling, Ethics for the City*. London: Penguin Books
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Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information		
Name	Teun Theijse	
Student number	4474406	
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Studio		
Name / Theme	Dutch Housing	
Main mentor	Theo Kupers	Architecture
Second mentor	Ferry Adema	Building Technology
Third mentor	Pierijn van der Putt	Research
Argumentation of choice of the studio	<p>My choice for the dwelling studio came from a fascination with people and culture and how the two interact. Culture is merely a name to denote how we live and the society that has produced us. Some of the 'culture' we retain in museums has little to do with the culture of our society but it does say something about what we as a society value or have valued in the past. Buildings on the other hand speak much more about how we live and the actual culture of us, people. My choice for this studio came from thoughts about the future of our society and how architecture shapes the way we live.</p> <p>Especially the way we form communities in the contemporary and future urban environments is a point of interest, for since 2007 those urban environments house the majority of the world population. With this shift in habitat for the human tribe come new challenges. We have evolved for the African savanna, yet the world we live in is so different. One of the challenges is the lack of community and close connections to one's neighbours. Humans still seek to be part of a tribe, even when we become increasingly more individualized (and separated?). That is something that has fascinated me and I would like to explore.</p>	

Graduation project	
Title of the graduation project	The Urban of Art – Designing an affordable communal live-work environment for artists and cultural workers
Goal	
Location:	M4H, Rotterdam
The posed problem,	If we want to build an inclusive city there needs to be suitable (living) space for all groups. Artists are one of the groups that don't have enough of this suitable space. Due to increasing real estate prices they are more and more pushed out of their working spaces, especially in large cities like Rotterdam. Furthermore there is a trend towards decreasing subsidies for culture, including artist subsidies. So they have to deal with increasingly more expensive rental prices, while earning less money for their work.
research questions and	How can we design a suitable live-work environment for artists and cultural workers? Sub questions: <ul style="list-style-type: none"> • In what ways can collectivity manifest as a part of dwelling design? • What aspects of living, working and collectivity create a suitable environment for artists? • What methods can be employed to provide affordable housing and workspace for artists?
design assignment in which these result.	Design a collective live-work building for artists. The goals are to make a building that can both suit the individual artist in their spatial and quality requirements for living and working, while also making it affordable. The collective aspect of the building must also be addressed and a suitable form must be chosen.

Process

Method description

The research and design are done through a myriad of different techniques. To start out got an introduction to the location through a presentation by the municipality, followed by a site visit in which we used annotated photographs to do an analysis of the atmosphere of the location. Following that, during the urban design phase we made use of literary research and several case studies that formed the basis of our design. During this stage the case studies were both of urban environments and of different parking solutions which were studied by group and then presented to the other groups in order to share the acquired knowledge.

During the research for specific target groups I talked to the occupants of the Keilewerf to get an overview of their work and living environment. To study collectivity we again split up a series of case studies amongst one another, which we then presented to the group to convey our acquired knowledge and hopefully teach others things they did not learn in their own case studies. Other experiments we did within the group was to explore what role collectivity plays within our personal living environments through a recording of all our collective activities with other people living in our buildings. As a kick start for the design the collective case-studies were then used to gain a quick impression of how we could shape our building, in manner of thickness and access.

Furthermore my research to artists and their environments as well as live-work environments consisted almost entirely of literary research. This literary research was supplemented through several case-studies.

Literature and general practical preference

Cameron, S. & Coaffee, J. (2005). *Art, Gentrification and Regeneration*. Artist as Pioneer to Public Arts, *European Journal of Housing Policy*, (5:1), 39-58

Holliss, F. (2015). *Beyond Live/Work: The Architecture of Home-based Work*. Abingdon-on-Thames: Routledge

Kompier, V. (2009) Amsterdam versus Berlin: Paradoxes of the Luxury Apartment Market. *DASH*. (2:1) 16-27

Rich, M. (2019). 'Artists are a tool for gentrification': maintaining artists and creative production in arts districts. *International Journal of Cultural Policy*, (25:6), 727-742

Schindler, S. (2014). *Housing and the Cooperative Commonwealth*. Can the limited-equity co-op relieve the American affordable housing crisis? Accessed 01-06-2020 from <https://placesjournal.org/article/housing-and-the-cooperative-commonwealth/>

Sennett, R. (2019). *Building and Dwelling, Ethics for the City*. London: Penguin Books

Zukin, S. (1982). *Loft Living: Culture and Capital in Urban Change*. Baltimore: Johns Hopkins University Press

Case studies:

La Ruche (1900, Alfred Boucher)

Ramírez, J. (2000). *The Beehive Metaphor: From Gaudí to Le Corbusier*. London: Reaktion Books

Atelierwoningen Zomerdijkstraat (1934, Zanstra, Giesen en Sijmons, architecten)

Stralen, M. (1989). *Atelierwoningen Zomerdijkstraat 1932-1934*. Rotterdam: 010 Publishers

Reflection

The studio topic is the inclusive city. And inclusive means for everyone, regardless of race, class, profession or anything else. Artists are one of the groups that are threatened to be pushed out of cities, so their fight is one that directly impacts the inclusivity of the city. No one should be left out, including artists.

The tools we use within the studio to solve this situation are the tools of architecture and those made available to us by that profession. Therefore we are limited to those actions that those tools provide. We cannot change public policy to solve our problem, nor can we invest our money into the problem in other ways, our problem has to be solved through spatial (and organisational) means, for as far as that's possible. Because most problems aren't solvable solely through only spatial means.

The topic of artist housing is broader than just the design of a building, aspects of urbanism and management play a significant role in the topic. Artist housing and facilities and designated space has been a tool and an issue for planners the world over. While some seek to keep them in a location against the tide of gentrification, others are perfectly happy to use them for gentrification purposes and then move them elsewhere. These factors fall outside of the realms of my control. To some extent, that is, for I do use them as tools and information for the setup of my project.

And so my project is broader than just a spatial solution. I aim to not just design affordable artist housing and workspaces, but I also seek to provide a solution to the quality and funding issues that plague artist housing. I bring together several solutions that have been individually attempted, so that we can learn whether this (in terms of spatial design, and project organisation) is a viable strategy to create space for artists within the city.