

Space for a Place

PROJECTBOOK

NOV. 2014

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BOUWKUNST

SJORS
ONNEWEER

Preface

In November 2014 I graduated at the Academy of Architecture in Amsterdam. This is a part-time Master education which in its final year s has a graduation assignment which is composted by the student itself completely. I chose my assignment, my location and my teachers.

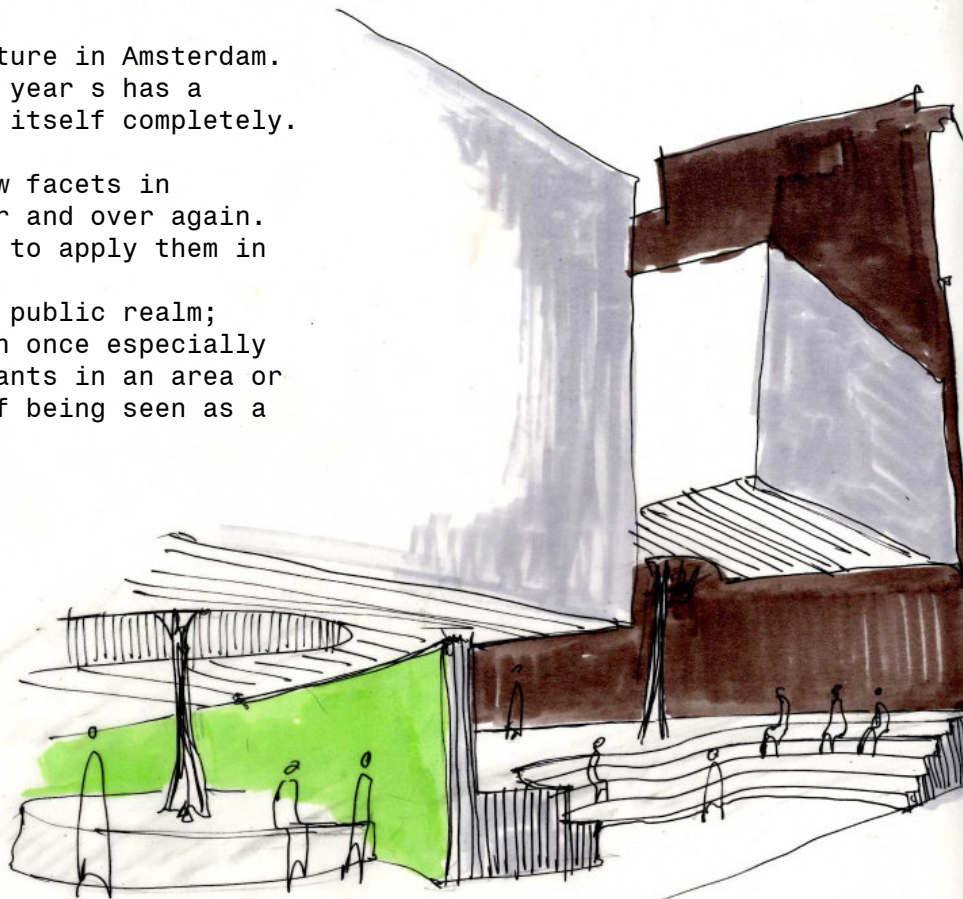
In my graduation project I tried to bring together a few facets in architecture which I find interesting and inspiring over and over again. This is the chance to research them in a proper way and to apply them in the assignment I like the most.

These facets are; the relation between private- and the public realm; what kind of space are people willing to share and which once especially not, collective spaces?; how can the density of inhabitants in an area or building amplify the relations between people instant of being seen as a problem? how can architecture bring people together?

Beside these questions I believe architecture should go back to its base. To shape the living space of people with the livability as most important aspect and where technology, harmony, materialisation are the means to make a pleasant space.

I chose a location in Cuba. I come there a lot and every time I find it an inspiring atmosphere. Here people are trying to make spaces (to live) with minimal use of means and are trying to use each square feet they have.

For me this is the perfect location to give answer to my inspirations and the important theme's of architecture.



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Assignment

Elderly

To get old in your own neighbourhood. To stay in contact with your neighbours. It seems logic, but this is not always the case. In my graduation this theme plays an important role. The project is located in Centro Habana, a neighbourhood in Havana, Cuba. This neighbourhood for me is very inspiring because its inhabitants are looking for space on different scales, space to make places. The neighbourhood misses a few places though. For example a place where the elderly can live properly and maintain and choose their position in society.

Centro Habana

Centro Habana is a neighbourhood in Havana, near the historical centre Habana Vieja. The neighbourhood has a very high density of inhabitants, practically the highest of whole Cuba. It has a low built environment, in average 3 to 4 layers. Due to the lack of space people live near each other and a kind of pressure-pan-effect came into existence. This has led to creative solutions where people are looking for space everywhere. Space to make places. The intensive use of space and the social cohesion that comes along it very inspiring.



Space

Due to the high density within the existing built environment and the general lack of maintenance it happens regularly that a building (partly) collapse. This leads to empty space in the neighbourhood. Through time these space have been taken over by the inhabitants and are being used as an addition to the public space of the neighbourhood.

Music

The pressure-pan-effect also has had its influence on a cultural level. Especially in Centro Habana the culture of music reached a high level. Because everyone is living so near to each other and everyone hear everything, many new styles and variation came into existence.



Music can also influence the experience of a street. Often when people are practising music or dans, passers stop to listen or to watch them playing or dancing.
Music has the quality that it brings people together.

Space for a place

Architecture can bring people together, can make a meeting between people happen, but can also give space to people to do what they would like to do. This project is using the chances in the neighbourhood. The space and qualities that the empty lots offer and the culture and ability that the inhabitants have learned to shape this space.



CENTRO HABANA



Relevant data:

Cuba

- Tropical climate. 11 months a year about 30 degrees Celcius.
- It rains in average as much as in Holland, only in strong storms.

Centro Habana

- Municipality next to Habana Vieja (historical centrum)
- Mostly built in the 18th century, however most of the buildings are not older than 100 years.
- Has the highest density in population in Havana (most probably of whole Cuba) Average of 44.000 inh./km². Average heighth of the buildings is 2 or 3 stories.
- There is very few green and squares. The street is most often the public space.
- Due to a shortage of houses, many people are making chances to thier own houses.

Colón

- Is a neighbourhood os Centro Habana where the density in population is the highest of Centro Habana.
- In Colón there are the most empty lots and has the highest average of changes to the houses. This is why this area is the most interesting for closer research.

Current elderly housing

Today the elderly case is different in each municipality. Especially Habana Vieja has a different approach where a network of different locations where the elderly live with one location where they can recreate. The houses are renewed, but in reality too big for the elderly to maintain them completely by themselves. Centro Habana does not know a similar network. Here the elderly live together in old houses. Most often in the ground floor in collective bedrooms and without privacy. The system of Habana Vieja has the benefit that the elderly have more contact among each other, but still they have very few contact with the neighbourhood and the society.

Goal:

A new form of elderly housing should give them the possibility of a choice to look for shelter or to approach the neighbourhood and 'be seen by the people'. They should be able to make a contribution to society if they would like to. The housing facility should have a small additional function on the same site with which the inhabitants should feel connected. This will make the connection between elderly and the neighbourhood stronger. Furthermore the scale should be kept small and preferably the elderly should be mixed with a different kind of target group, like starters.

Centro Habana

Habana Vieja





Centro Habana



Habana Vieja

Places for music

In music schools in Havana students often use the collective spaces, like staircases, galleries, etc to make practise music.

This is different then for example in Holland, where everyone has a fully isolated room to play in. In Cuba people apparently have less troubles to play in public and, especially, in Centro Habana, they have a higher level of tolerance to listen to other people.









The neighbourhood



Centro Habana

The largest part of the neighbourhood was built in the 18th century, however most of the buildings are not older than 100 years. Originally most buildings were single family houses, often big high class houses. Not until the 20th century the market for apartment complexes started to grow.

In general the buildings were built fast, mainly due to the speculation in that time. This is why many buildings have in general a bad quality. After the revolution in 1959 the lack of houses grew. The centre always was a popular location to live, and still is. Due to the high density in population many of the original big houses were divided into smaller houses, sometimes not bigger than only one room. The so-called cuarterias or ciudadelas. Due to the lack of space that followed people became very innovative in searching for space within their small private domain. Houses often were splitted in height and balconies were added to the houses.

Centro Habana was once the commercial centre of the city. After the revolution many shops and commercial buildings became empty. Many of the kind of buildings, like theaters, cinemas, shops, which were never meant as houses, are through time converted by the inhabitants to a place to live.

Everyone in the neighbourhood is looking for space to make a place.

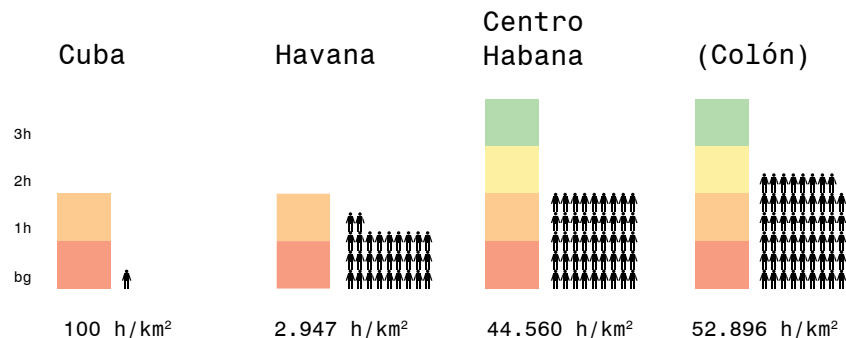
The splitting of houses lead that the owners made many adaptations to his house by himself. A house is in generally seen as a structure to live in.

Space

Originally the neighbourhood barely has green or public space. Besides the small streets and a rare square there is nothing.

A negative aspect of the changes to the houses and the overcapacity is that it happens regularly that a house collapses. In average 3 houses collapse every 2 days*.

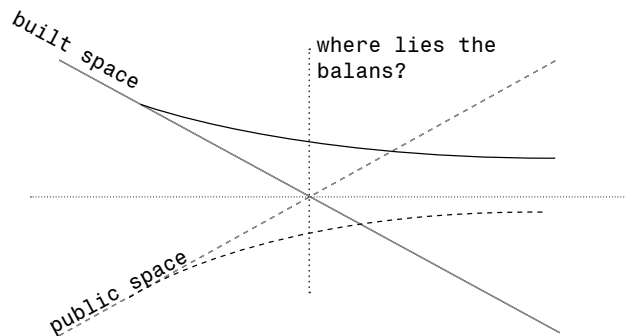
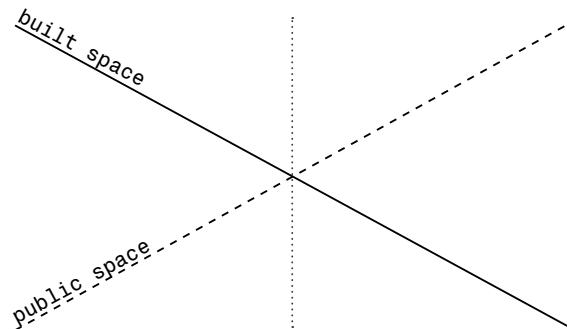
Density of inhabitants with an average of 4 floors



This why the neighbourhood has many empty lots.

These lots has been taken over through time by the inhabitants of the neighbourhood and are in general being used as public space. They offer give space to the missing functions in the neighbourhood as markets, playing- and sportfacilities, parkingslots, etc. Currently they are an important addition to the public realm and offer the chance to add new programm and new housing typology.

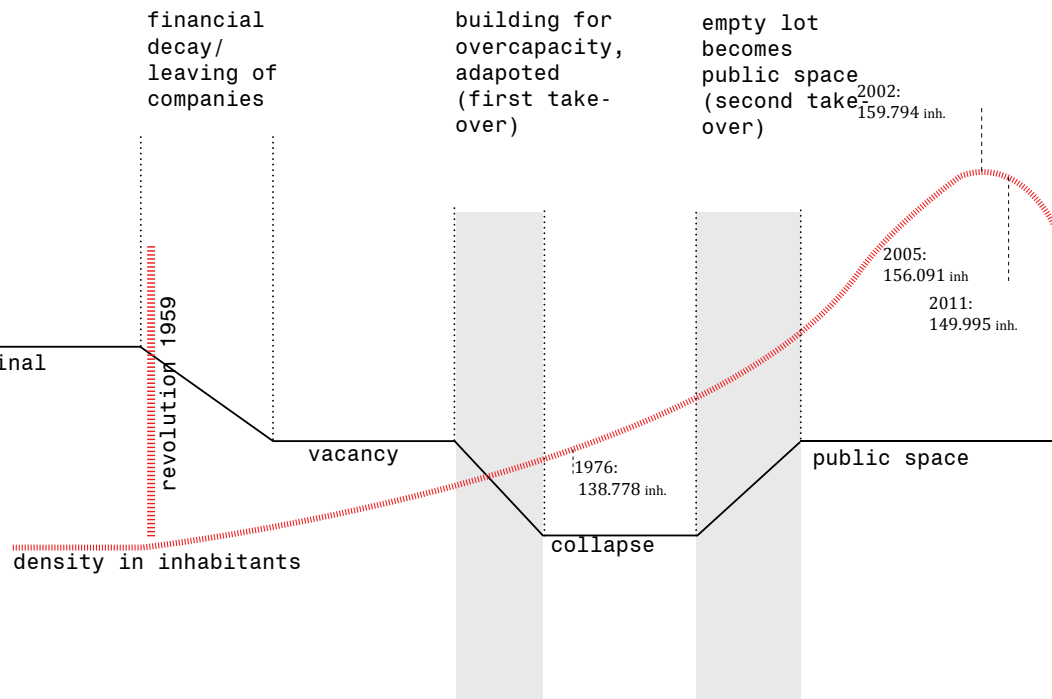
The shortage of public space in the neighbourhood slowly is given back through the decay of the existing buildings. This is why the empty lots have a high value within the neighbourhood. It is a process which only goes one way. Public space in general only has value when there are sufficient users, otherwise it is only empty space. If the proces continues this way there will be a moment when there will be too many buildings colloped and so on too many empty lots, while there are too less buildings left for living. It is important that a balance will be found between empty and full, build and open space.



Evolution empty lot in Centro Habana

The spacial development through the years can be divided into two different periods. Before and after the revolution. The revolution in 1959 and the changing of the political system in combination with the economical isolation was of great influence for the development of the empty lots.

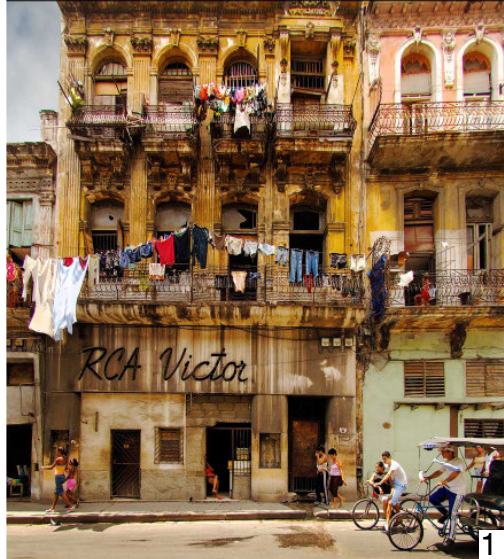
The situation after 1959 is marked by a shortage of houses and the moving of companies to other countries. Many buildings became empty and out of use and at the same time many people were looking for houses. Especially the centre was very popular to live. The buildings that became empty were taken over by the people whom were looking for a house. This could be called the first take-over. Also many of the original big houses were split into smaller apartments.



A good example is the 'RCA Victor' recording studio in calle Neptuno. This company left Cuba after the revolution and was taken-over by people to live. A direct consequence of the densification of houses in a existing structure is that the construction of overloaded. Due to the limited space of the inhabitants people are making many adaptations, which weakens the structure aswell. Small extensions, new windows, split-levels, etc. This process causes in many cases the collapse of a part or the whole buildings with the result that an empty lots remains.

This leads to the second period in the development, what also could be called the 'second take-over'.

Due to the shortage of public space in the neighbourhood many empty lots have been taken over by the inhabitants. This offers space to missing functions in the neighbourhood like, playgrounds, vegetable markets, parking space and even self-made houses. The street image of the neighbourhood is always changing.





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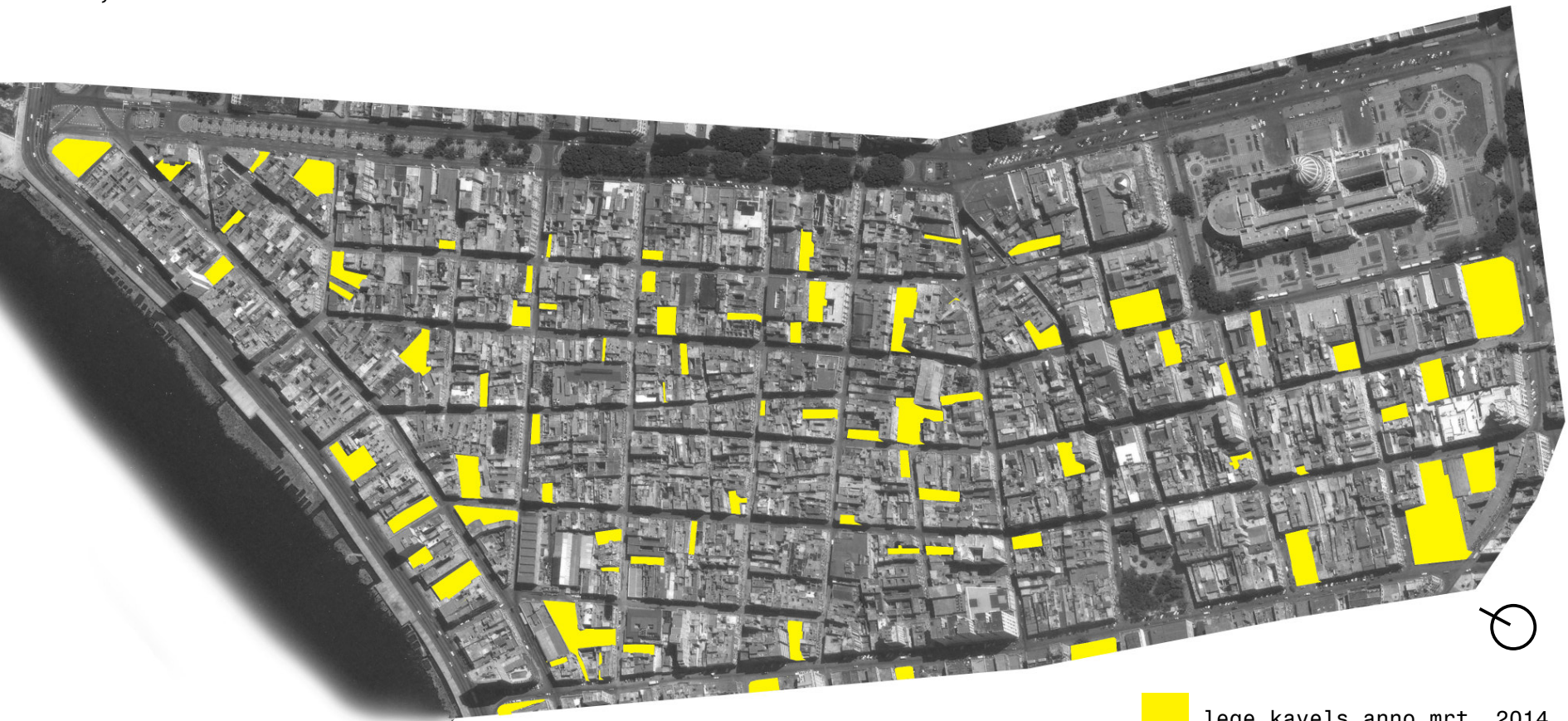


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1. Picture of RCA Victor after first take-over, were it is split in many small houses..
 2. Archive picture of building in original state.
 3. Picture of building when partly collapsed, July 2013.
 4. Picture of building when completely collapsed, March 2014.
 5. Archive picture of Teatro Campoamor, Centro Habana.
 6. Picture of interior of Teatro Campoamor, which was closed in the early '60 due to lack of maintenance. Since then it was used as a parking for bikes and right now someone is living there.
 7. Example of vegetable market on an empty lot.

Colón, Centro Habana



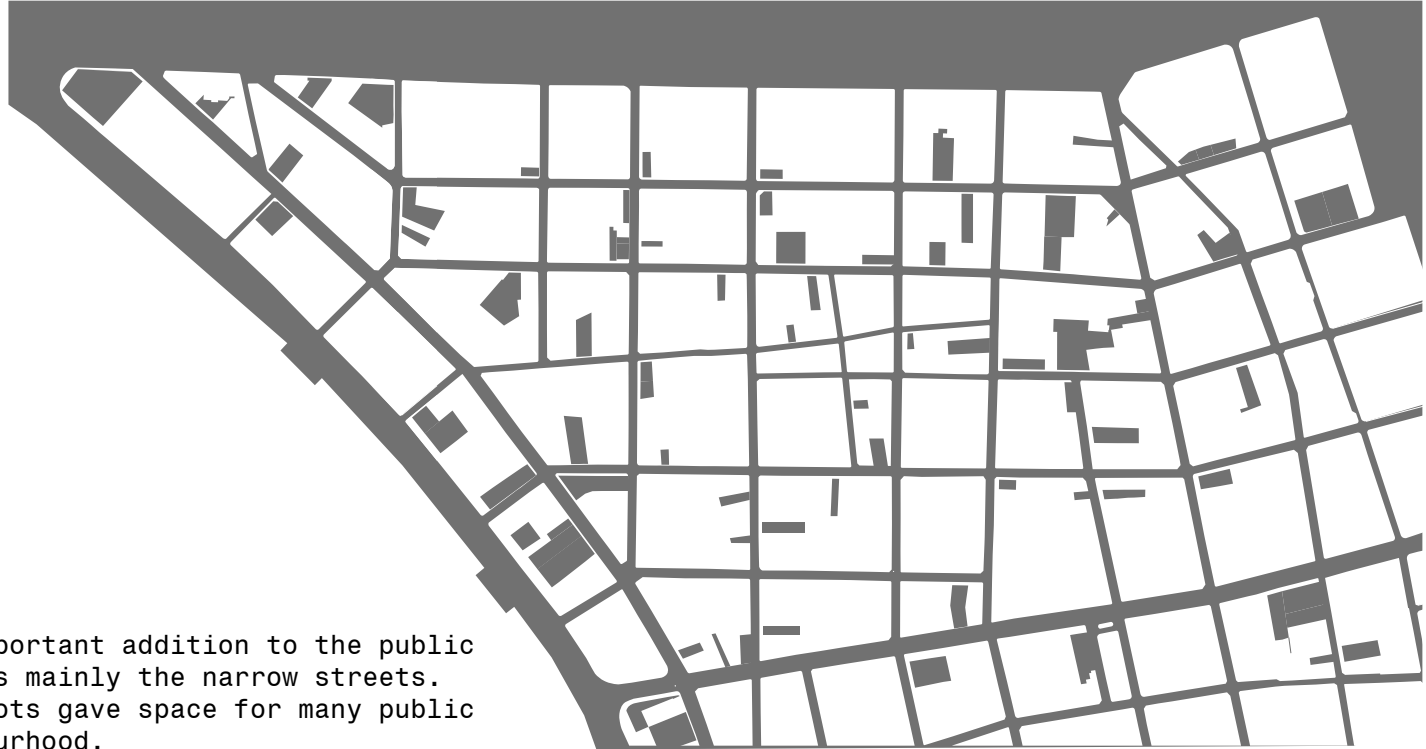
Colón, Centro Habana



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Opbrengsten in de wijk



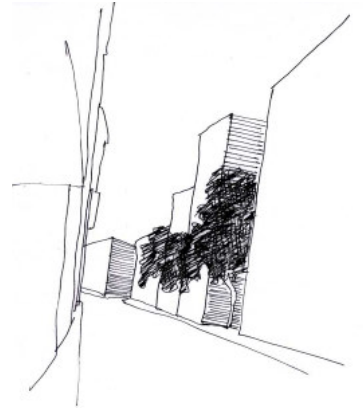
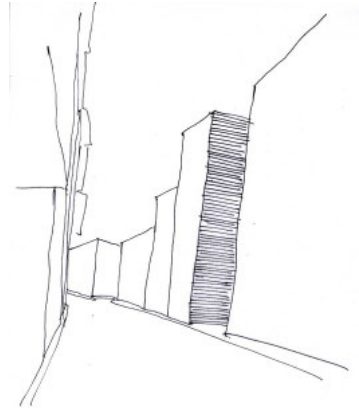
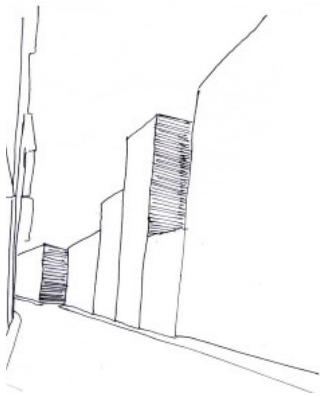
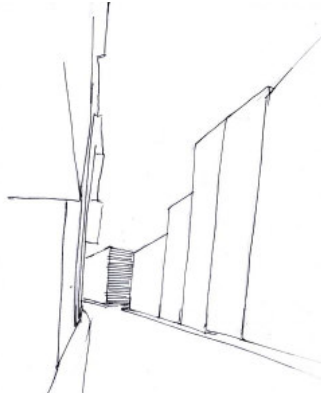
The empty lots are an important addition to the public space. Originally this was mainly the narrow streets. Through time the empty lots gave space for many public functions in the neighbourhood.

Functions of empty lots

- New buildings
- Storage
- Parking for cars or bikes or other car related services.
- Terras/cafe
- Vegatable market
- Empty or unknown
- Sports
- Living
- School
- Workingspace
- Services
- Shops

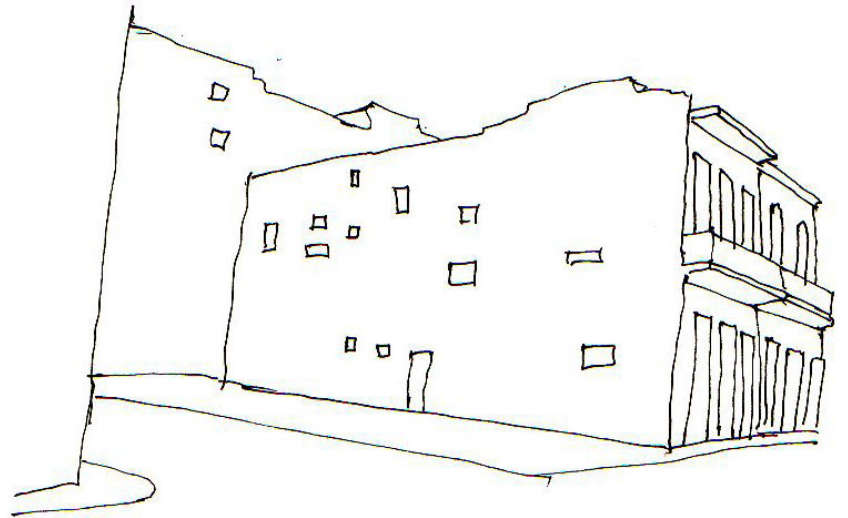


Spatial change in the streets

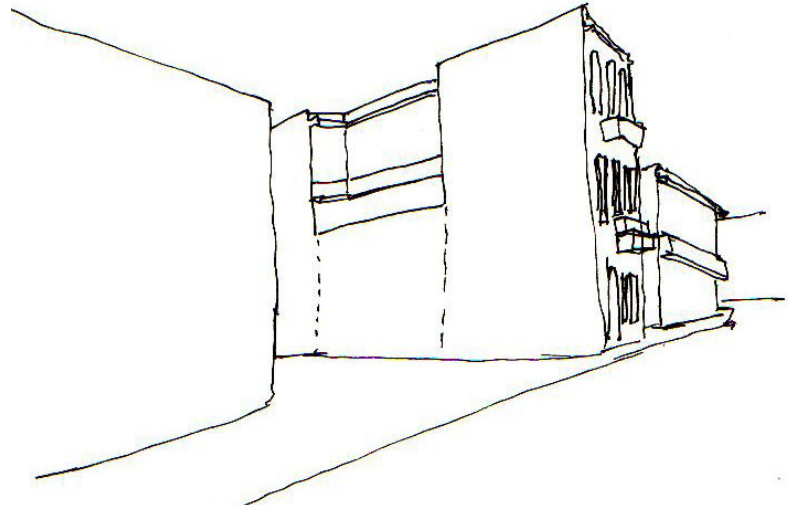


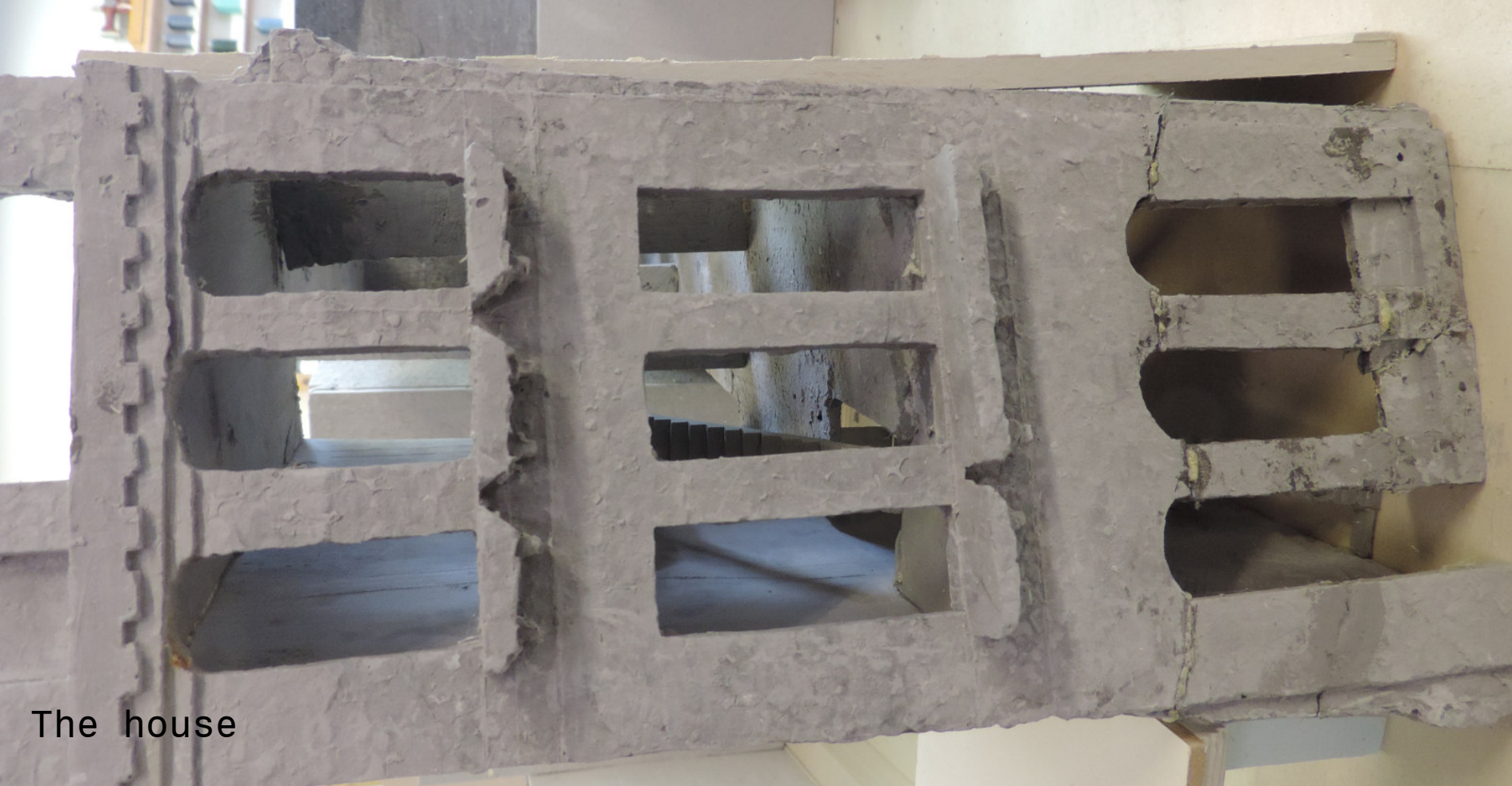
The image of the street is changing continuously

Walls between houses become facades



Original collective patio's become visual public

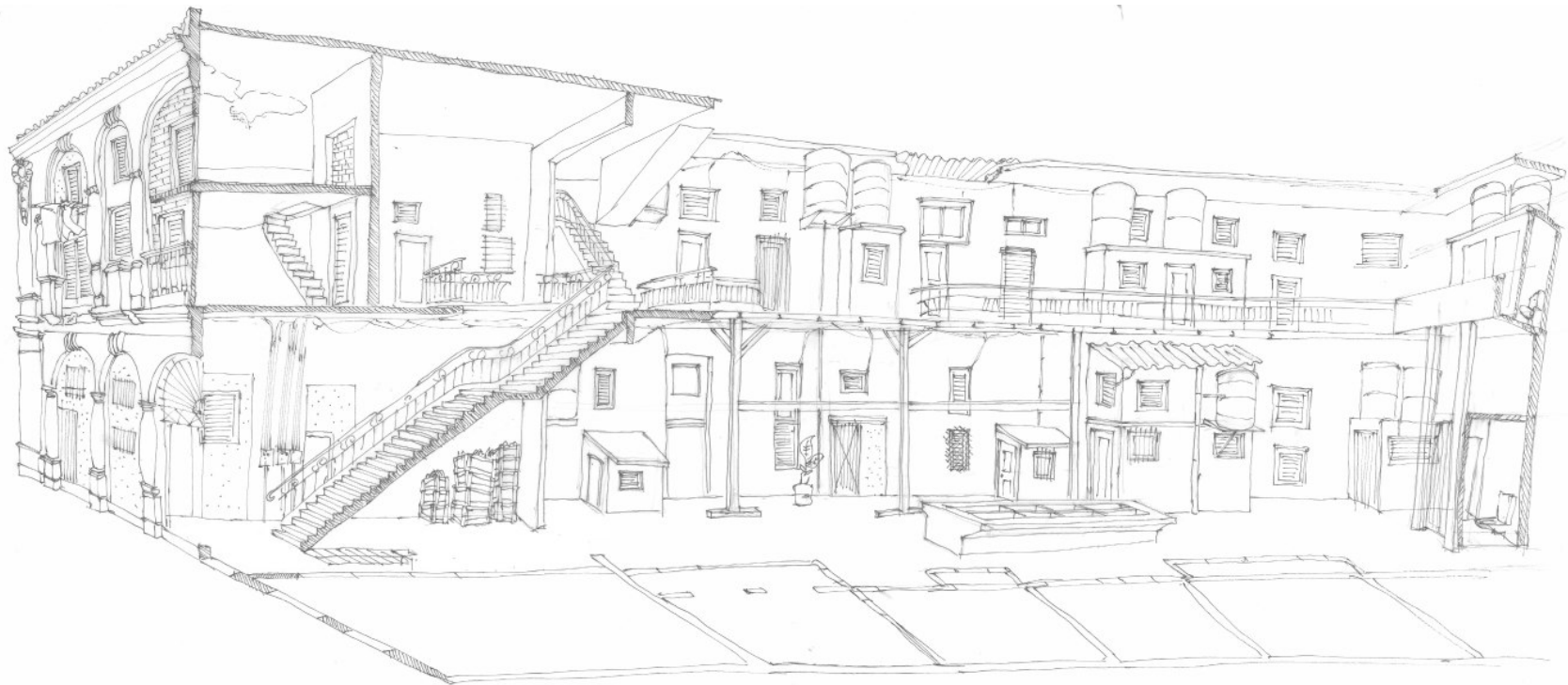




The house



Example of typical house in original state



Example of typical house after being transformed

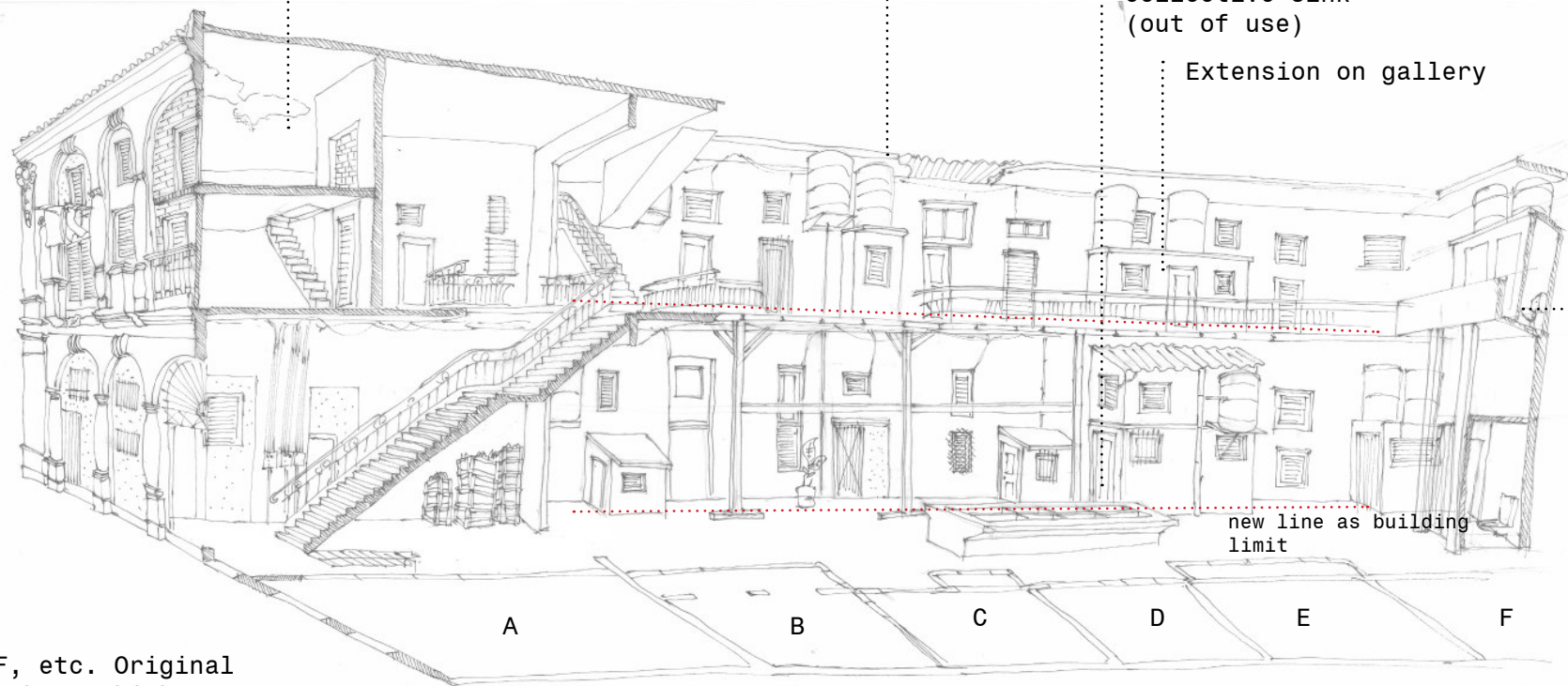


Barbacoa

Waterbassin

Collective sink
(out of use)

Extension on gallery



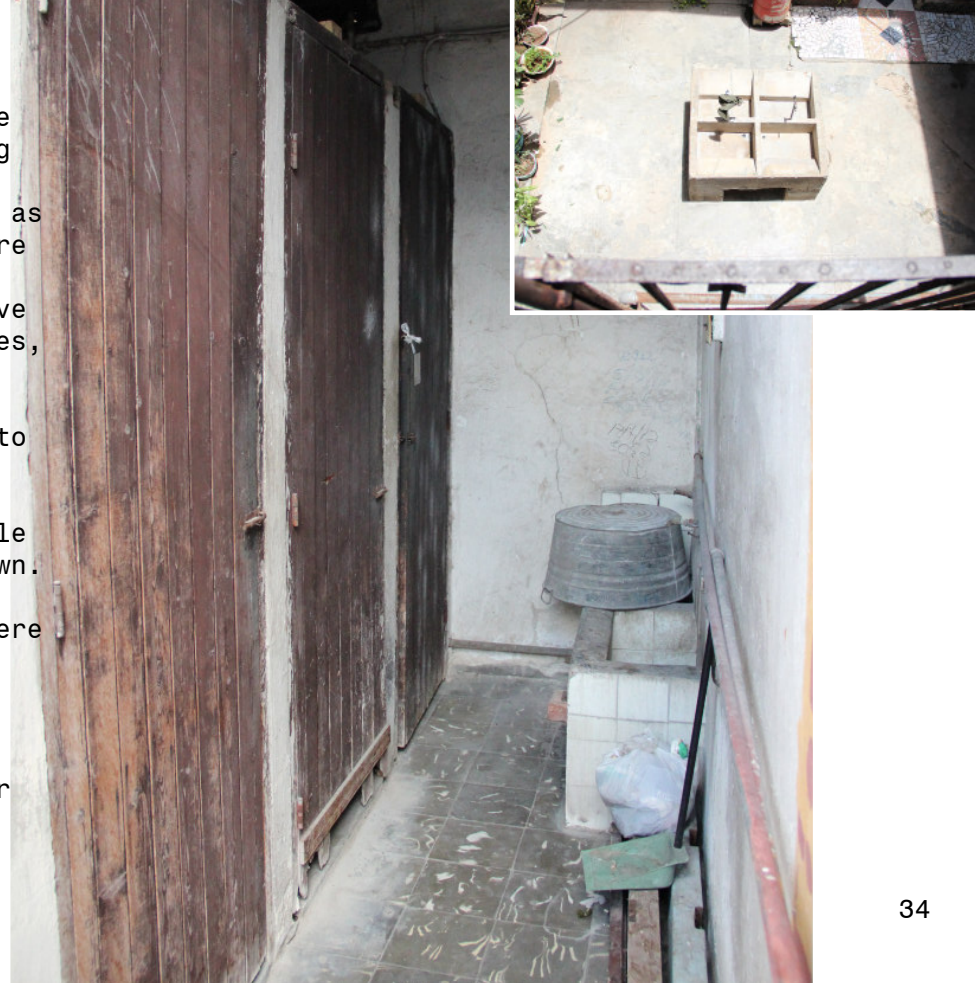
A-F, etc. Original
chambers which are now a
whole house

Collective toilet (is not
frequently used.)

Shared space

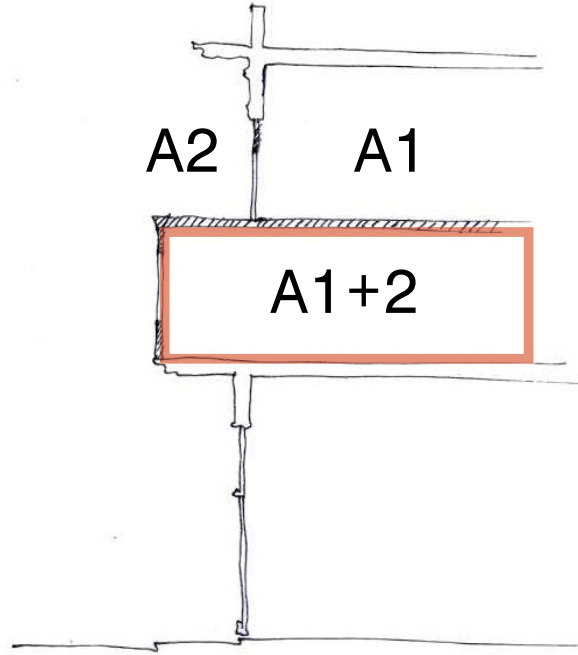
In Centro Habana the density of inhabitants mainly rose quickly after the revolution. The process of splitting the big houses into smaller ones is in many cases a state planned action. Many people left the country and as a result many houses became empty. At the same time there was a huge shortage of houses in the whole country. In many examples you see that originally many collective functions were planned in the patios of the split houses, like toilets, showers, sinks, etc. Through time people started to shape their own houses and in many cases the transformation has as a goal to add the function which normally had to be shared, like a own bathroom or toilet. It is clear that a number of planned collective elements doesn't work and that people find it important to have a complete house for their own. The patio is most often the only strong collective element that really works and is shared intensively. Here people hang the laundry, play music and do meet each other.

It is interesting that when people are building for themselves, they often made agreements among each other about the sizes they extend, so there always is enough space to pass if necessary.





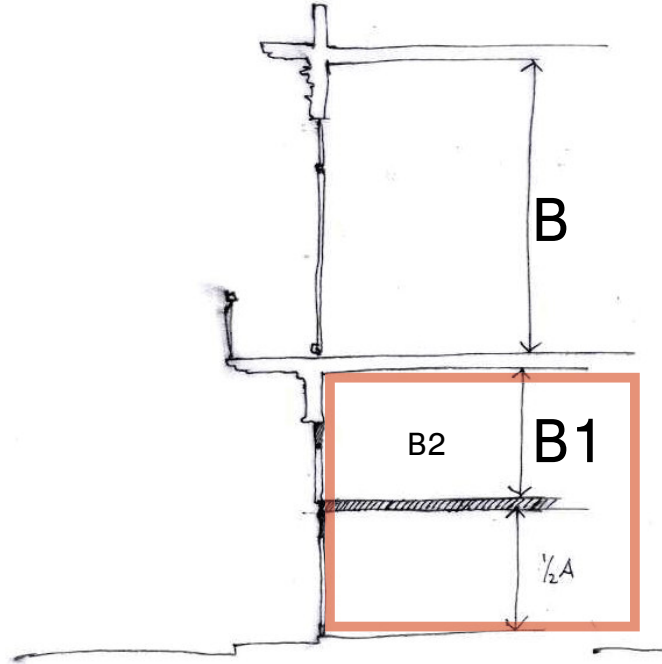
Ways to transform the space by
the inhabitants



Horizontal extension by adding space
over the balcony

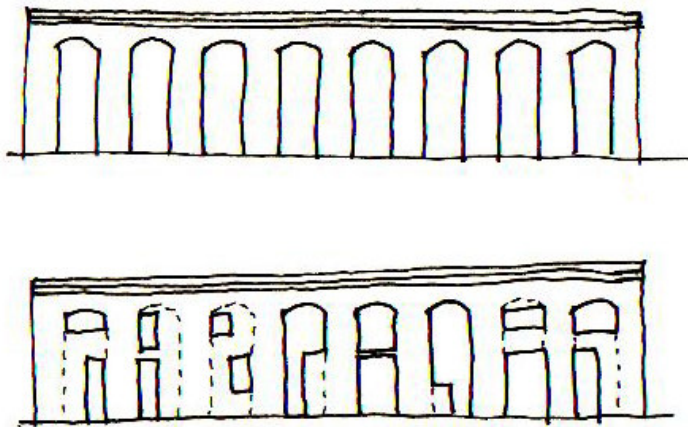


Ways to transform the space by
the inhabitants



Vertical extension by
splitting the space





A house is seen as a structure to live in



Strategy

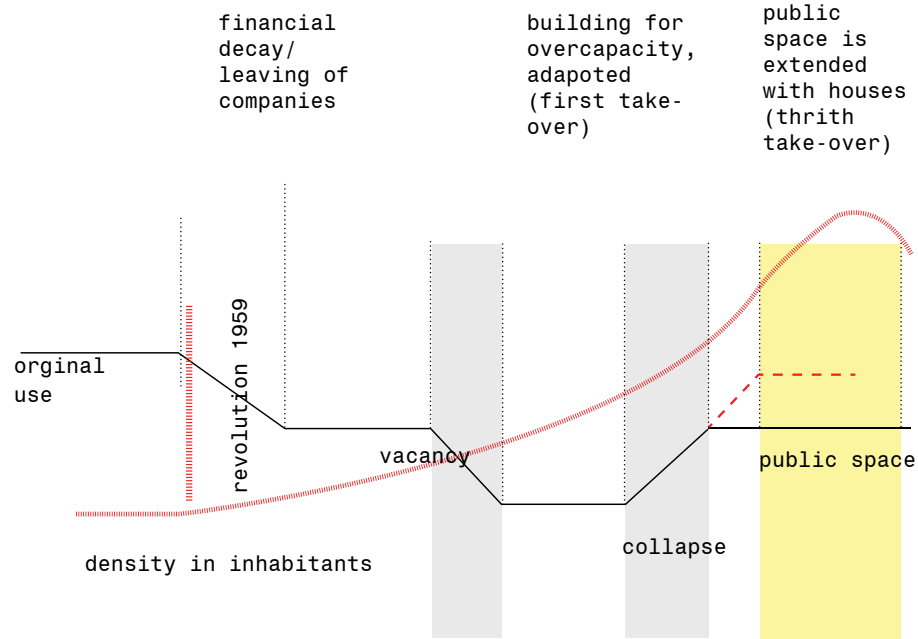
Excercise:

To give a good place to the elderly and to make a good connection between them and the society/neighbourhood. The target group is specifically elderly whom cannot be taken care off by their family and are getting less mobile.

Strategy

As a prototype the design principles can be used on other empty lots in the neighbourhoods. The most important principle, besides the target group, is: **to integrate the value of the empty lot as public space has in the neighbourhood.**

Besides this main principle, a number a different types can be recognized which have certain spacial qualities one their own. These can be supporting to the type of program which will be added to the empty lot.



Design principles for elderly housing

1. A good connection means to give a choice to the inhabitants. A choice to easily enter the public realm but also to look for shelter nearby. The transition between the public realm and the private house.

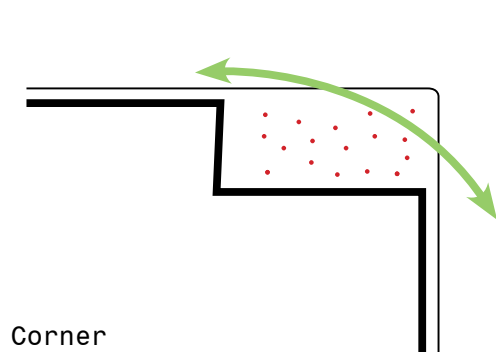
A combination between a corner lot and a 'included' lot has the best spatial quality to support in this choice.



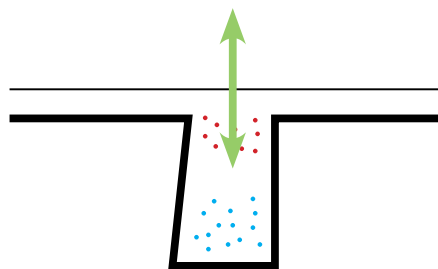
Open (more public)



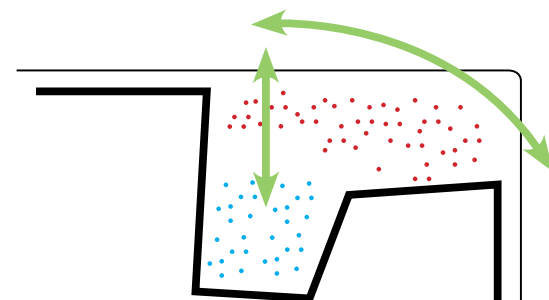
BShelterd (less public)



Corner



Included



Combination

Relation public - private



Private domain



Collective spaces



(Semi) Public spaces



2. A good place mains a small community in which there is a mix between old and young inhabitants. The big number of empty lots in the neighbourhood give ample choice to make different types of communities with different qualities for different types of inhabitants.

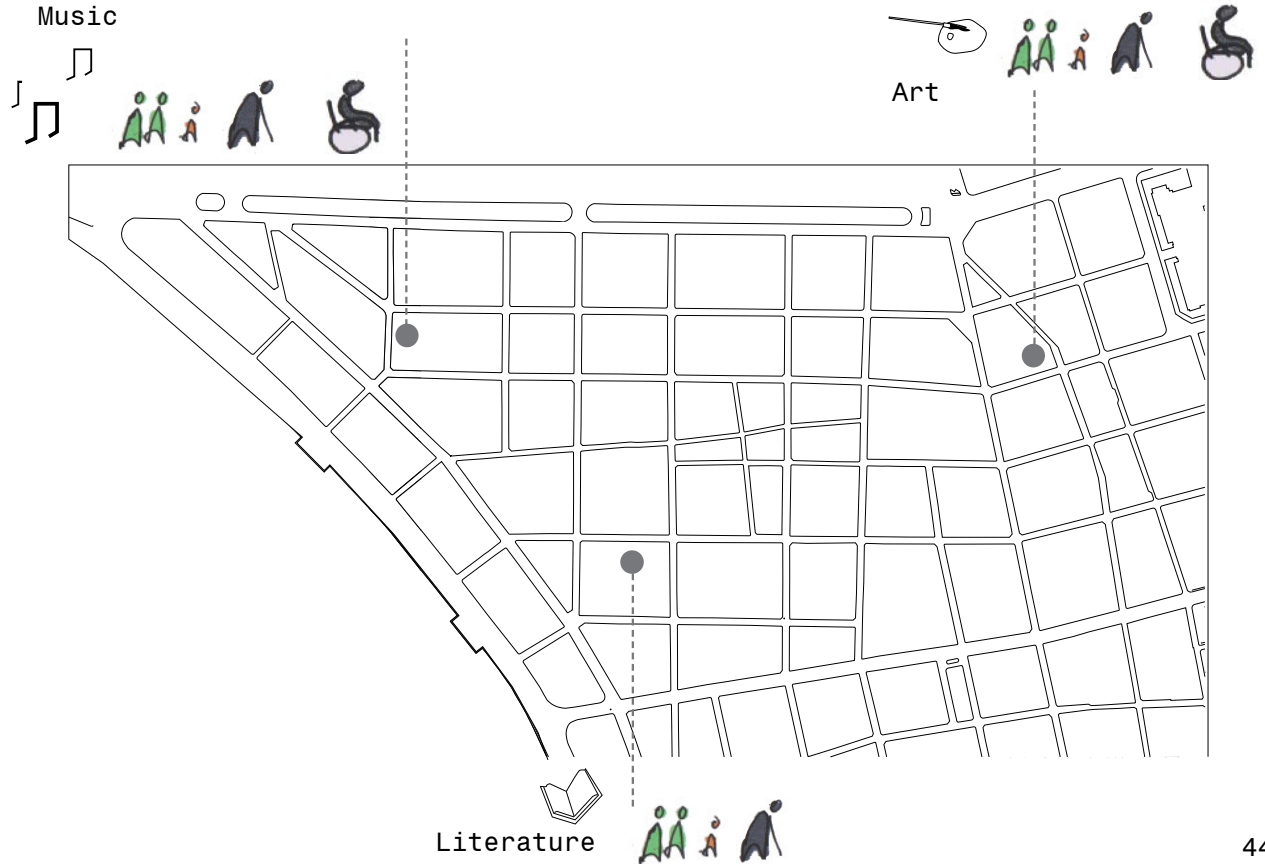
Mixing



3. By adding new program it is possible to strenghten the connection between the inhabitants and the neighbourhood. Every community could get a different type of added function. Like this it is possible to give the elderly a choise where they would like to live. In this project a small music school will be added, due to the strong connection with music people have in the neighbourhood.

Strategy for elderly housing

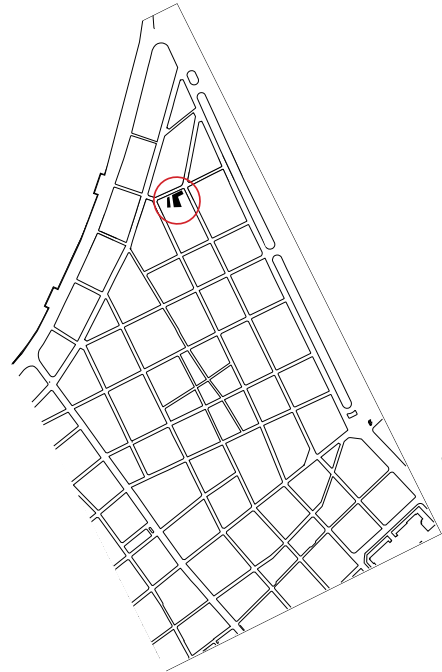
To make small communities where different ages can live together and extra program is added to give choice and variation.



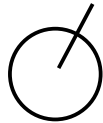


Location

Projectlocation

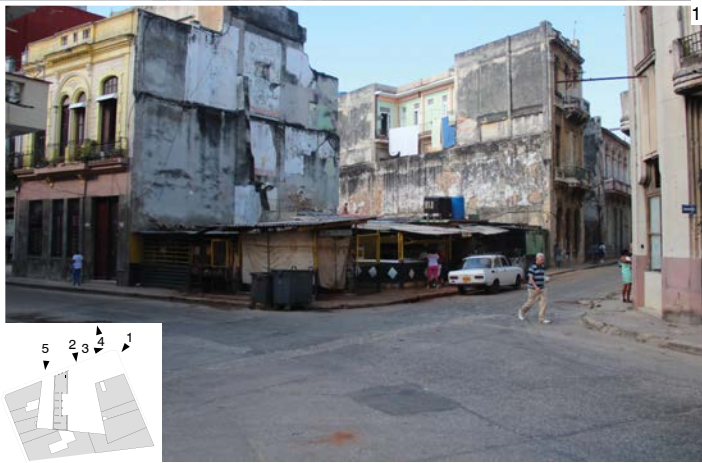


Wind





3



1



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2

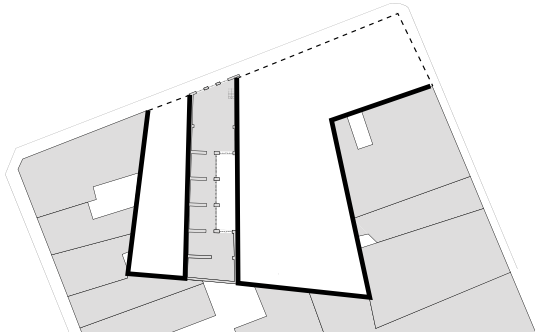
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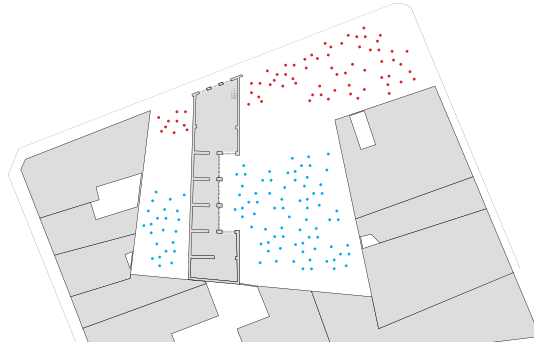
Two empty lots and one existing building.

Many of the empty lots have characteristic aspects. The final choice of the location depends on a number of facts. It is a combination of a corner lot and an included lot, which gives it naturally a public character as more sheltered space.

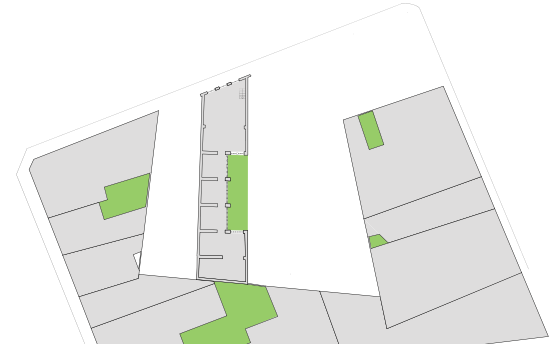
Besides that there are two empty lots very close to each other, only separated by one existing building. By taking both lots as project area there is a chance to show the spatial potential between empty lots among each other, which until now is rarely the cause. The existing building in between gives the chance to look at the relation between the surrounding buildings and the empty lots.



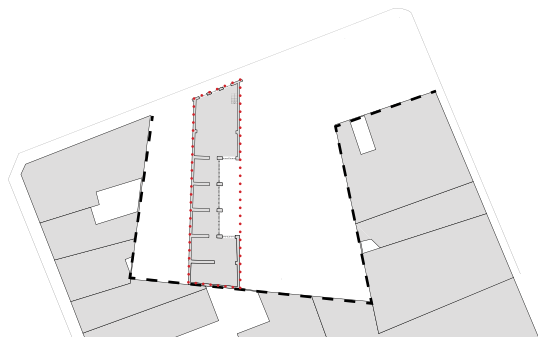
2 empty lots close to each other



Lots have both a public character and the possibility to make a place with more shelter

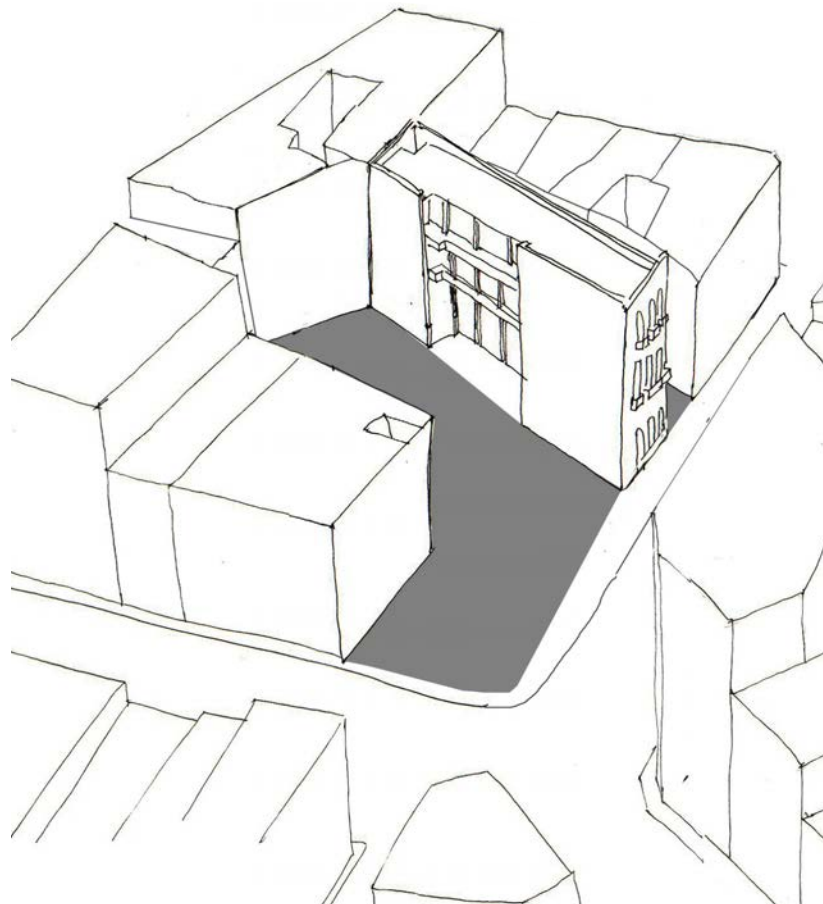


Patio's of the surrounding buildings are chances to connect



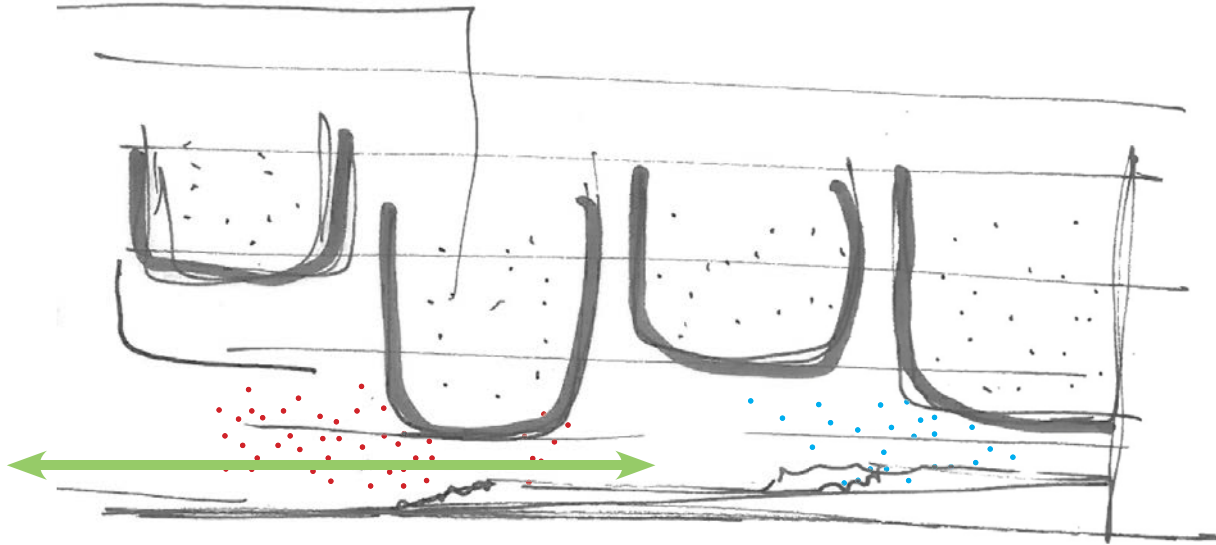
Project area

Reprogram the existing building
between the 2 empty lots

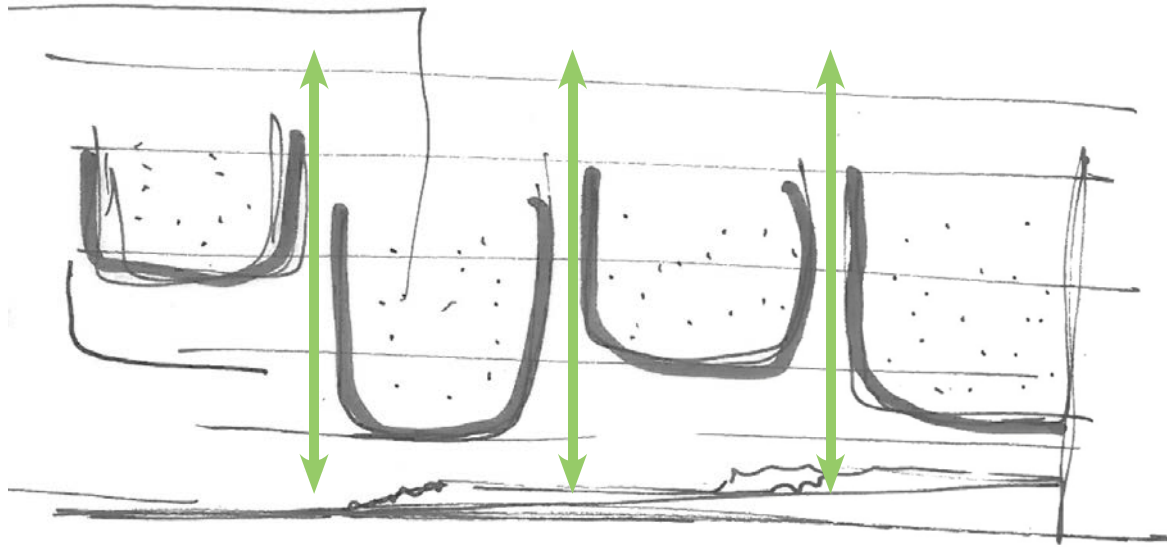




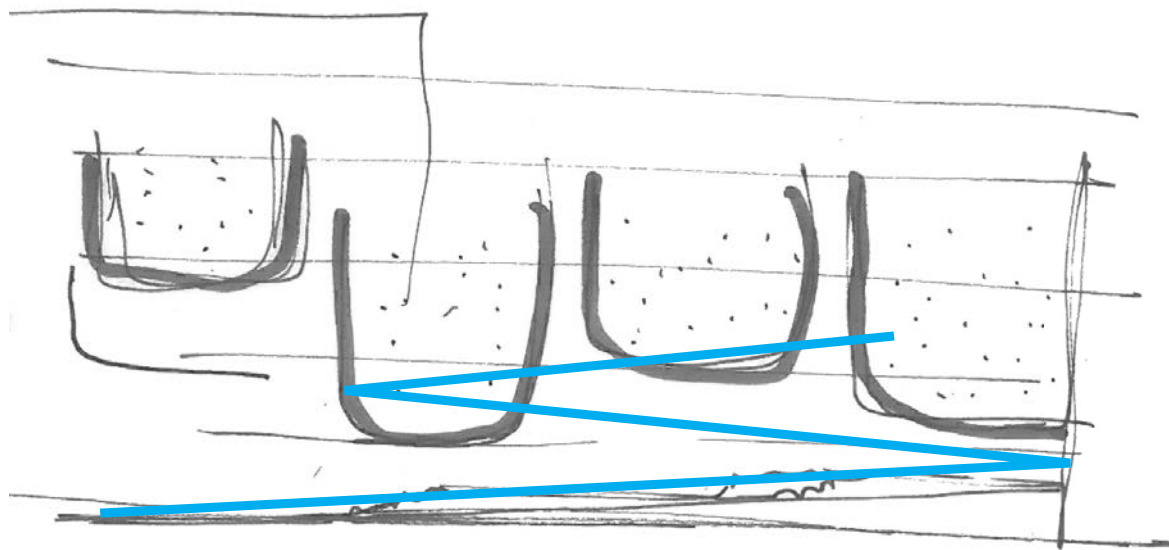
Concept



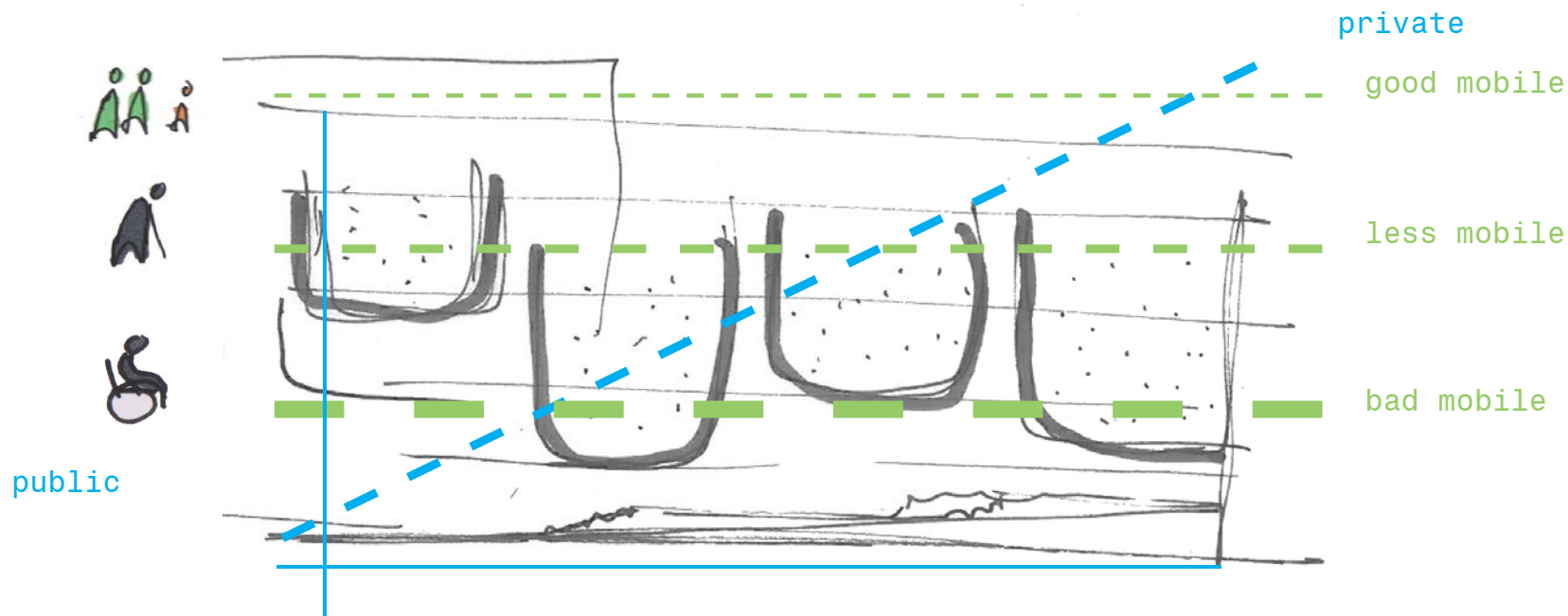
1. To combine the existing public space on the empty lot and adding volume for new program.



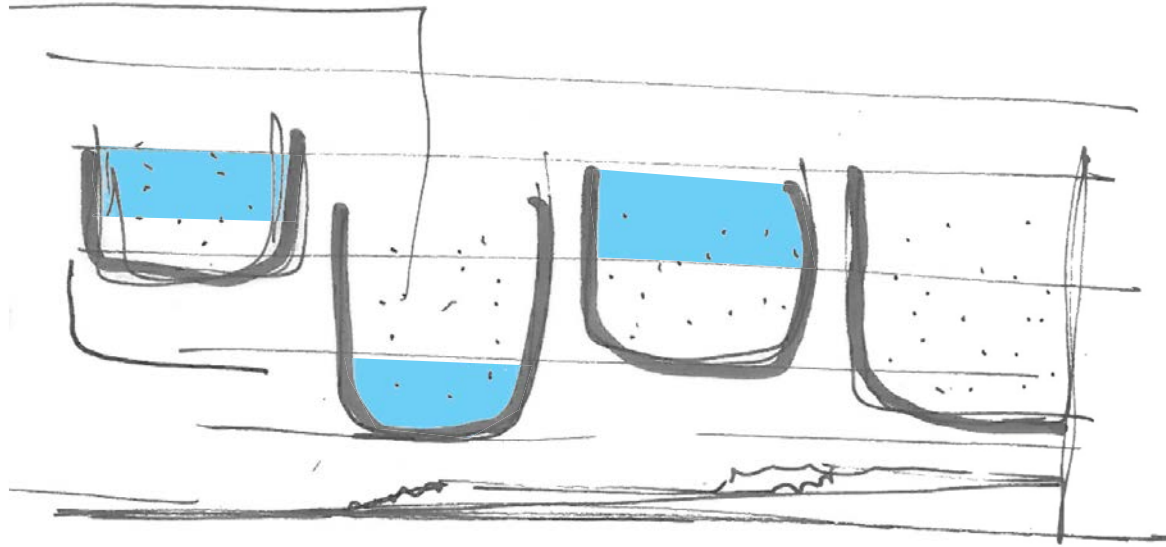
2. To make it possible for light and air to enter.



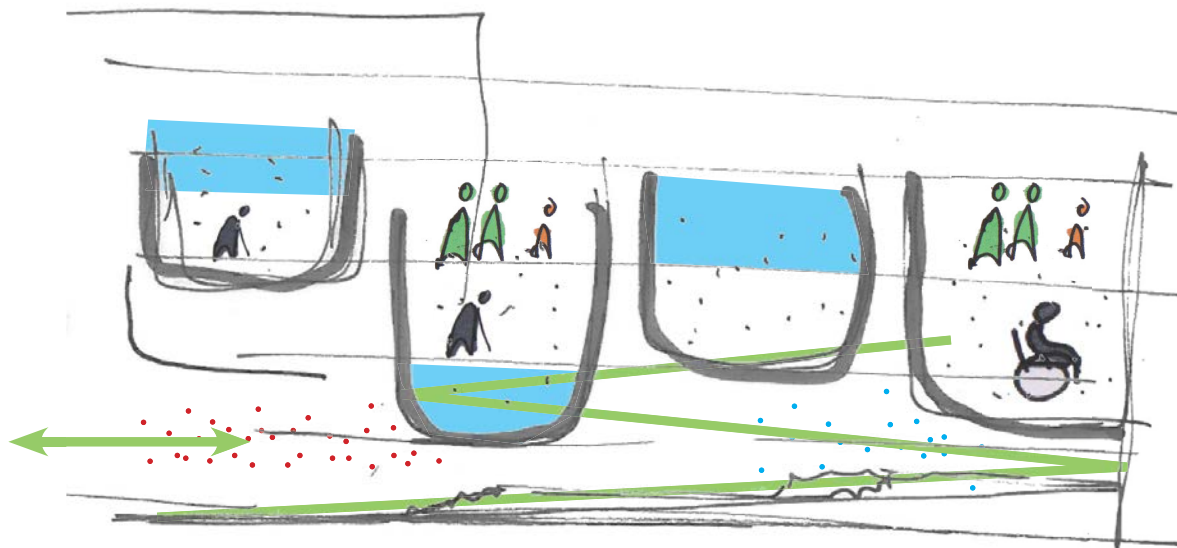
3. Make the volumes accessible through a ramp.



4. Locate the inhabitants whom are the least mobile nearby the public space.

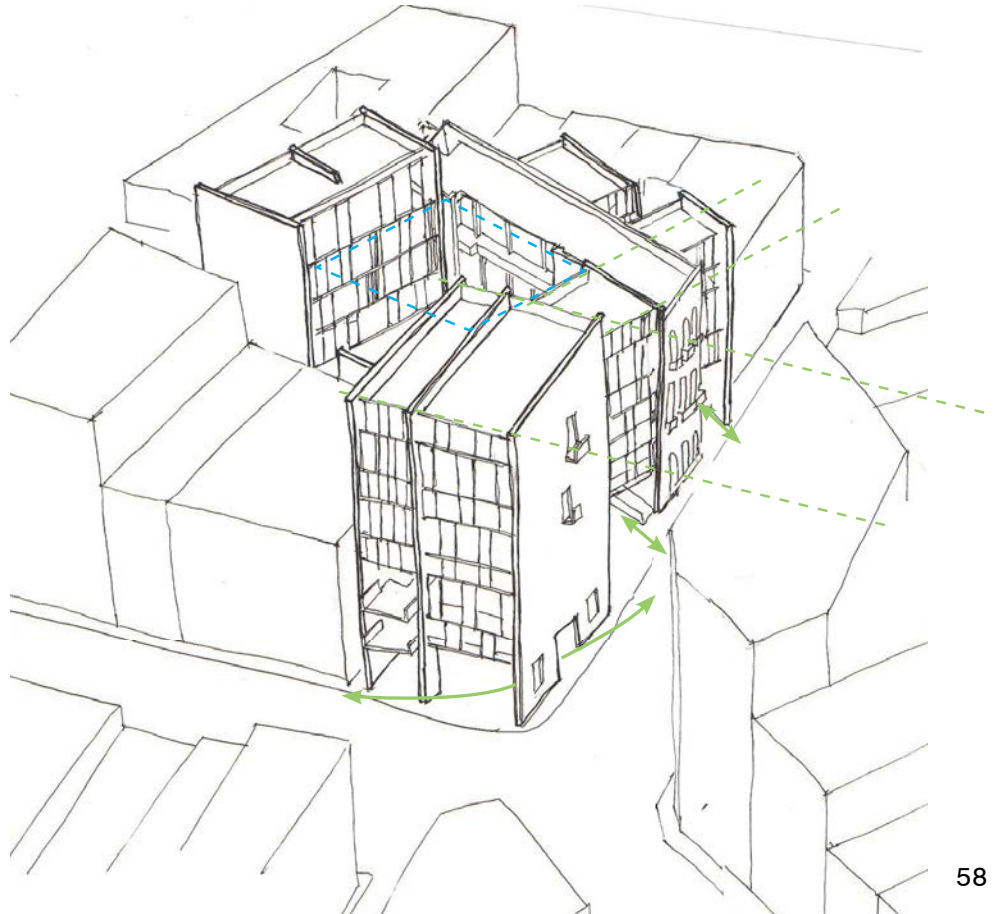


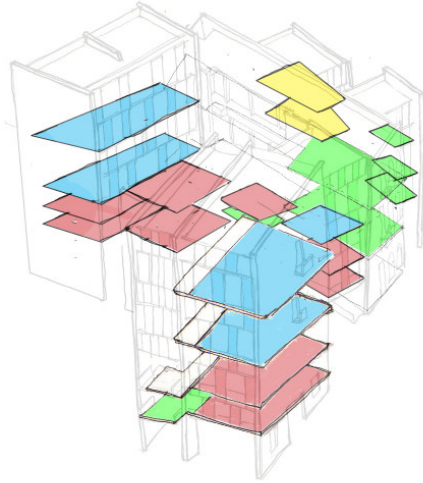
5. Use musical program to make attract people from the neighbourhood inside the building.



Total concept

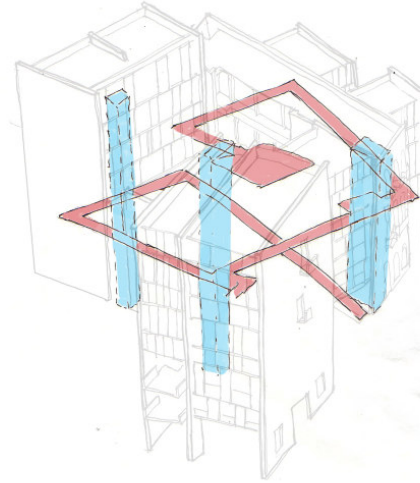
Urban intervention





Program

- Type A (wheelchair accessible)
- Type B (accessible by stair)
- Type C (extension of existing house)
- Music



The ramp connects all the volumes. 3 staircases give access to the houses at the top floors.

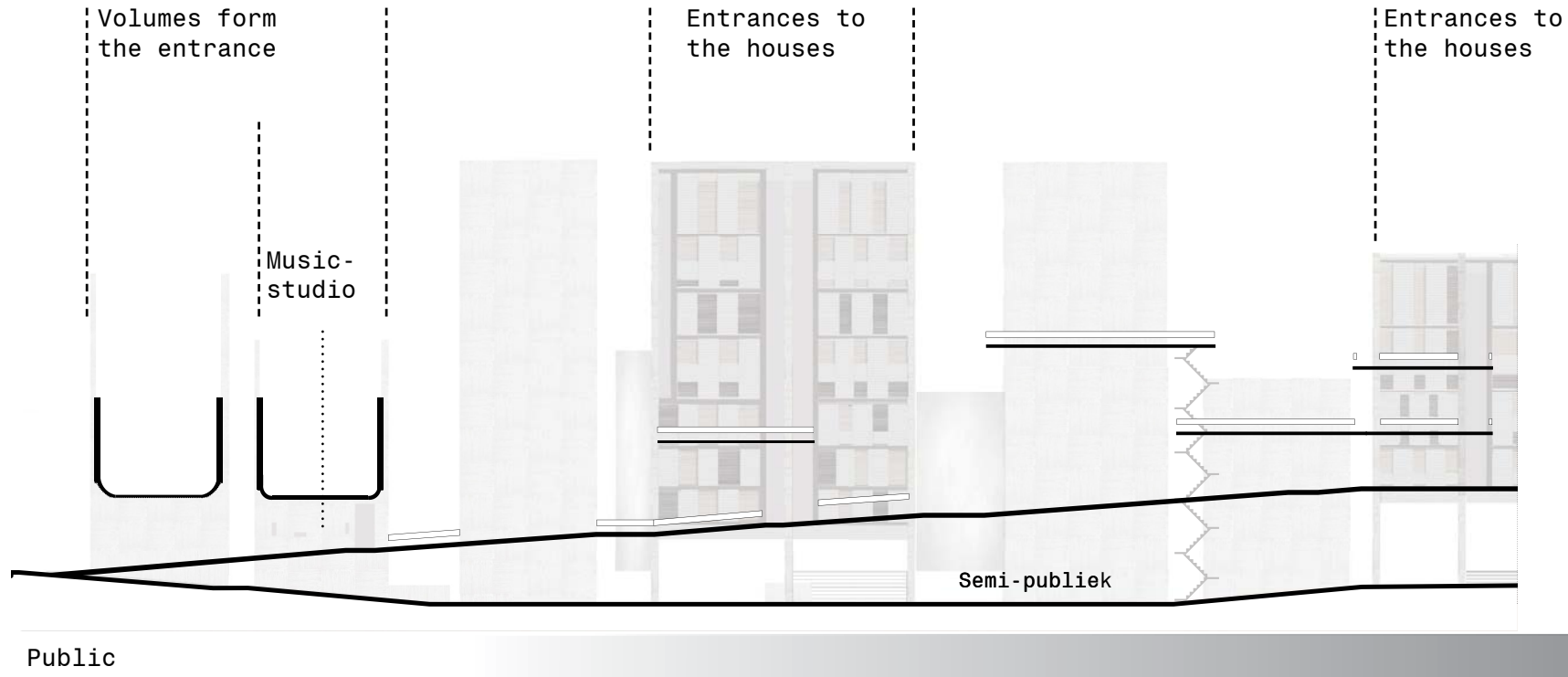


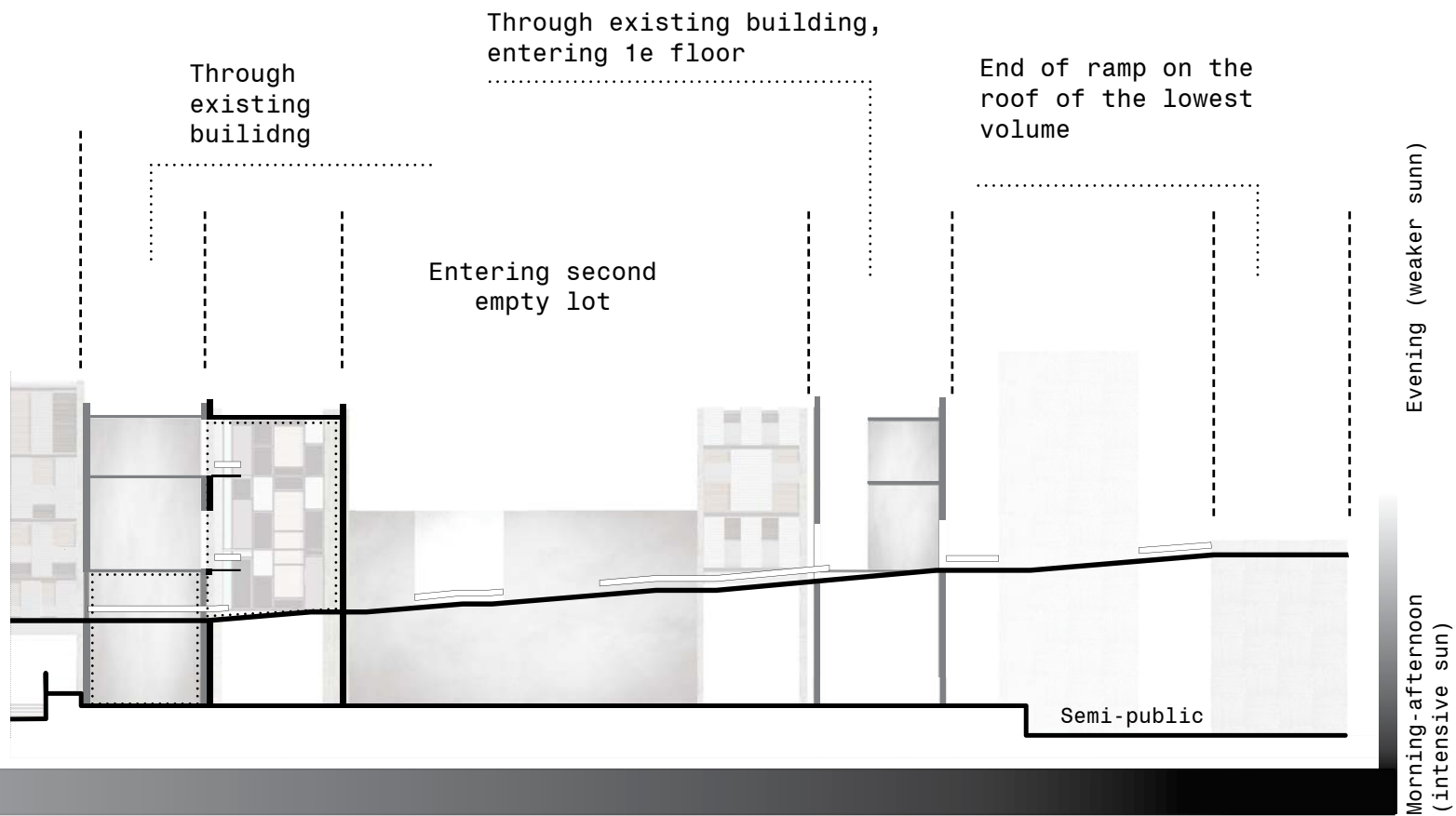






Route as whole





Public - Collective

The ramp symbolizes the transition from public to collective. It connects the different volumes to each other and the inhabitants to the music. Along the route various places for resting and functions are located.

The transition is designed in a subtle way. The start of the route has a strong public character. The first place man crosses is a small music studio, here you could watch or listen for a while, In front of the studio there is some space to rest and to meet.

If man continues to climb he will find a second point for rest. This one is located nearby the patio of the existing buildings. Man walks towards the light.



In the meanwhile he passes the semi-public space on the ground floor. Here inhabitants can meet people from the neighbourhood. The space has a sheltered character because it has some distance from the street. Musician whom go to school in the building can also choice to practise music here. Playing music has everything to do with concentrating. In the building various places have been designed with different kinds of relations with the public realm. Hereby the musician can choice his own place n the building which fits the best with his level of concentration he needs.





The character of the route soon will become more collective when man passes the first houses. Simple by connecting a window or door to the route it will feel like you enter a different domain. The domain of the inhabitants.

Along the route more and more houses are connected. About halfway the route will cut through the existing building. Here it will give access to a small library.

As man continues one will enter a specific volume only for music. It contains 3 music studios and is meant for loud instruments, mainly orientated towards the street to spread the music into the neighbourhood and a connection can be made.

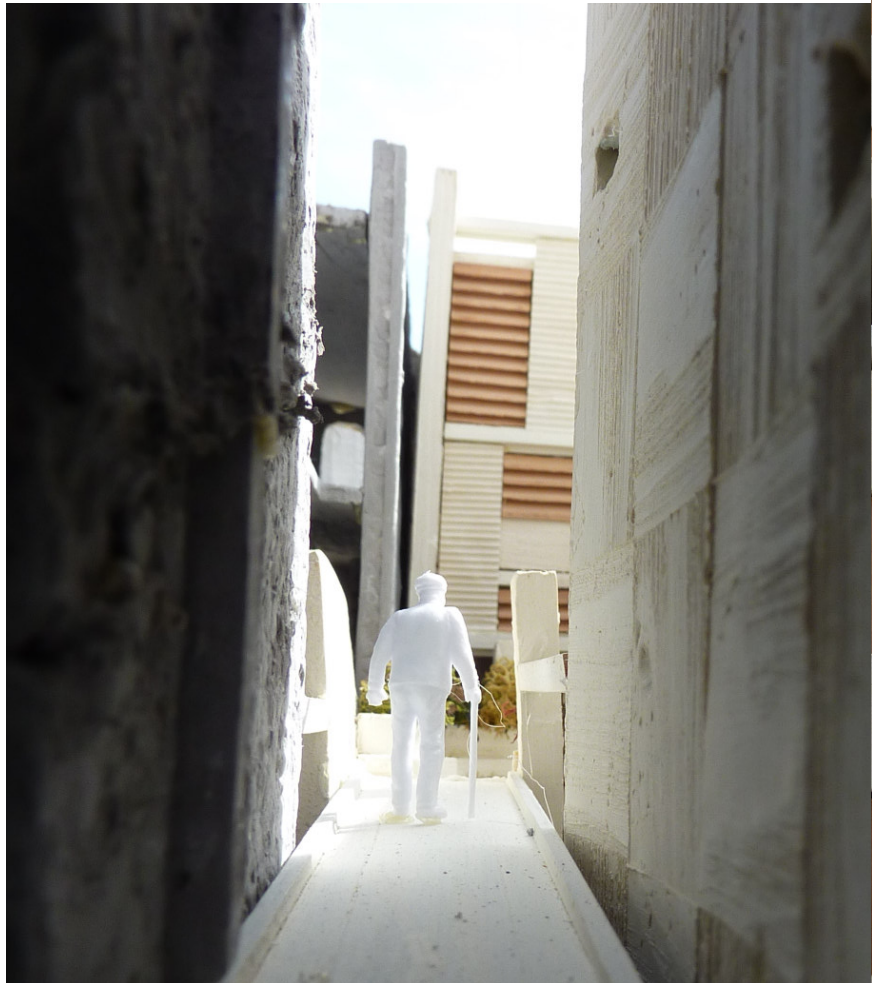


After the volume with the music studios one will enter the second empty lot, which has a more sheltered character. Here musicians can play without people actually looking at them. The music will spread through the building still though.

Again the route cuts through the existing building. Now man can enter the 1st floor of the building where 2 houses are and a classroom.

The route ends at the roof of the lowest volume. This is mainly a place for the inhabitants and people they invite. It is the most collective point of the route.

The semi-public space on the ground floor is very valuable during the day, when the sun is very intense. The collective space on the roof has its value more in the evening, when the sun gets weaker and the inhabitants rather be among each other.







Houses

eye height of standing person 165 cm

maximum reach 160 cm

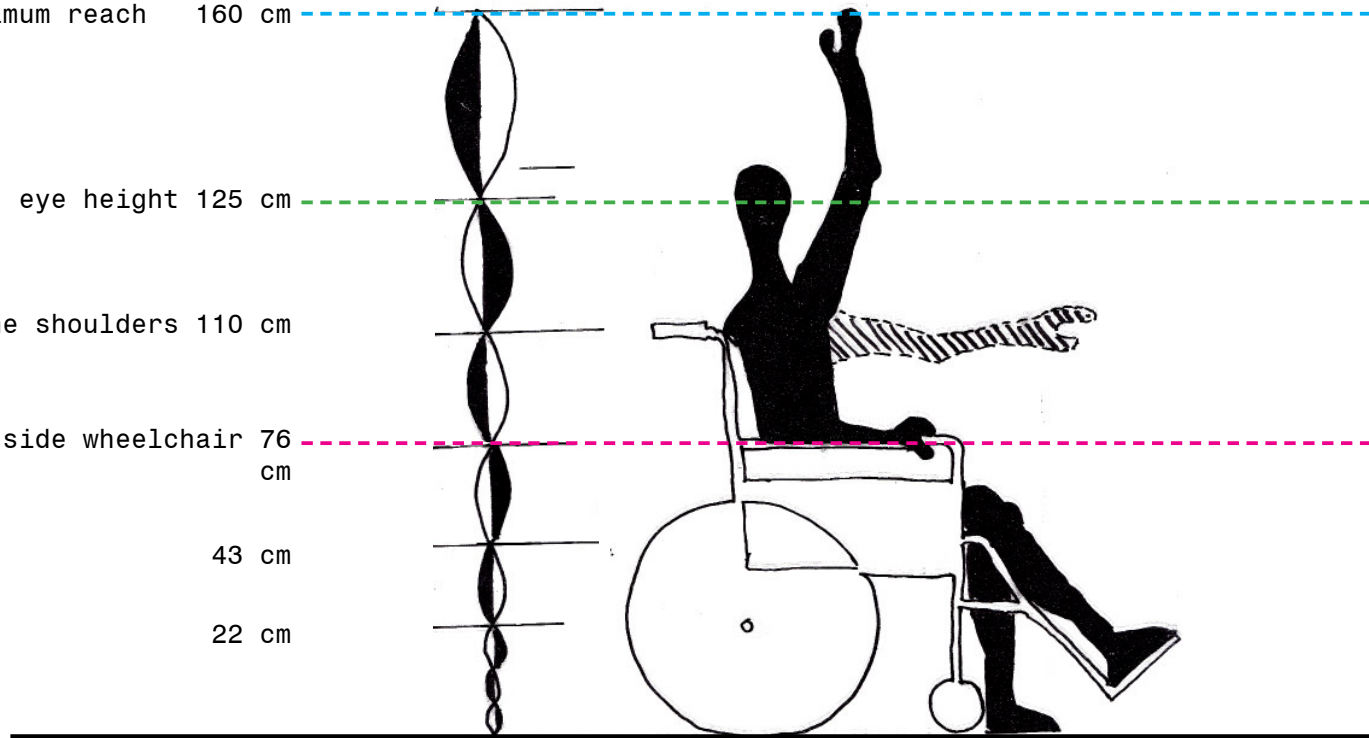
eye height 125 cm

top of the shoulders 110 cm

top of side wheelchair 76 cm

43 cm

22 cm



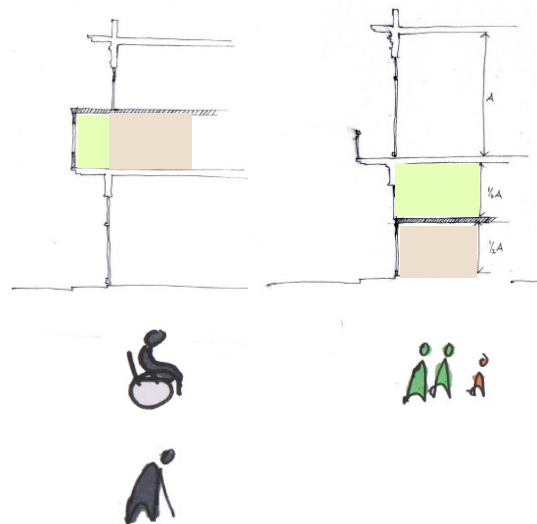
Living

People in Centro Habana have shown they are capable to adjust their house in a number of specific ways. The goal is not to see the house as a static 'whole', but rather as a space in which the inhabitant can find its own place. To give one the choice to how they would like to live themselves.

This choice is shaped by designing a few types of houses which can easily be adjust in a horizontal or vertical way. Every house has a base, a private domain. This contains a bedroom, a kitchen, a bathroom, a small living room and a balcony.

Type A is a house which is accessible through the ramp and is completely wheelchair proof. In this type the balcony plays a crucial role. This gives the possibility for the inhabitant to extent his house in a few ways to make it bigger. How bigger the house will get, the smaller the balcony and the more he probably will just the collective balconies.

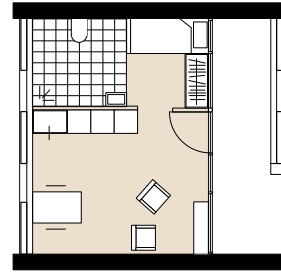
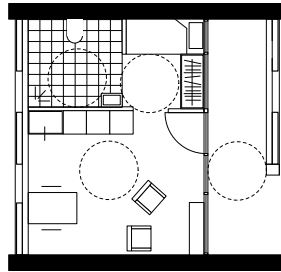
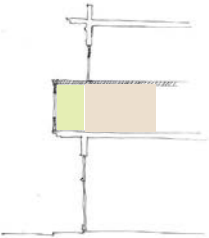
Type B is a house which only is accessible by the staircases. In this type the height is used to make it transformable. By making a barbacoa the inhabitant has the choice to extent its living space.



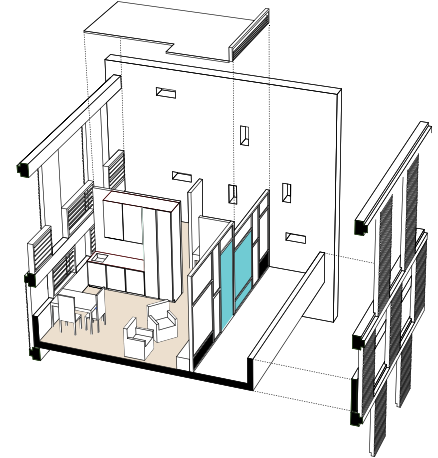
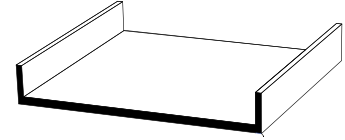
Type A - Wheelchair accessible

Fit of people whom are getting les mobil

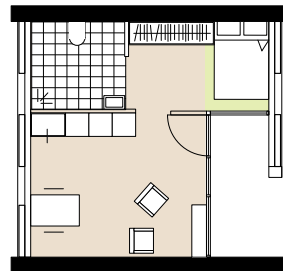
Has the option to be extended **horizontal** to be shaped in the way the owner wants it to be



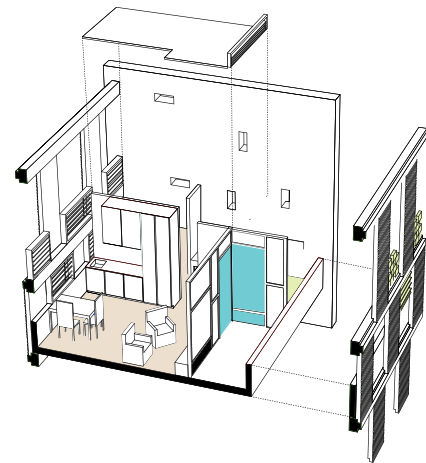
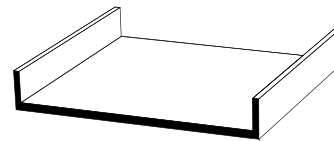
Base, house with the basic functions and accessible for someone in a wheelchair



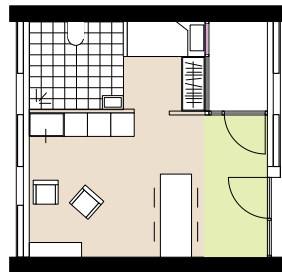
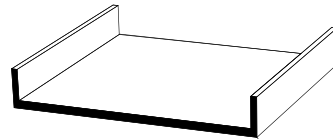
Type A - option 1



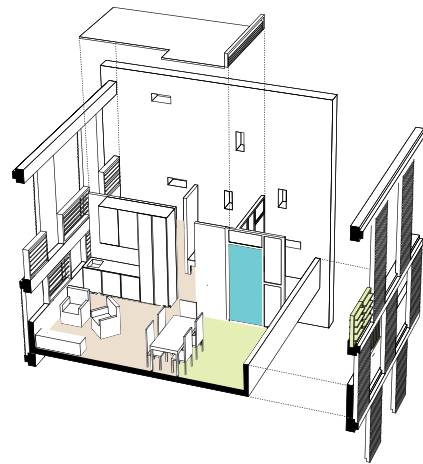
Part of the balcony
is included to the
house so a 2p.
bedroom is possible.



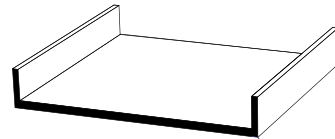
Type A - option 2



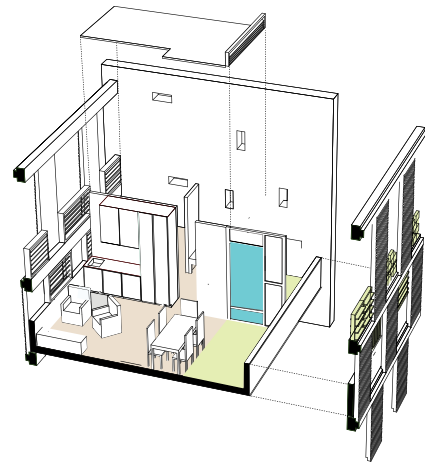
Part of the balcony
is included to the
house so a bigger
living room is made.



Type A - option 3



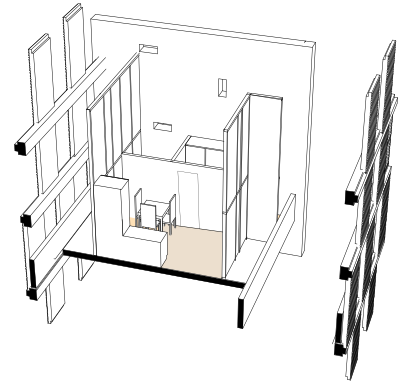
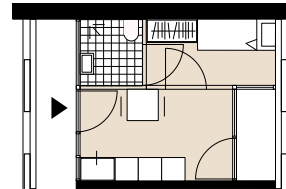
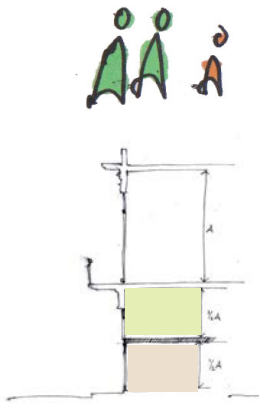
The whole balcony
is included to the
house so that both the
living room and the
bedroom are getting
bigger.



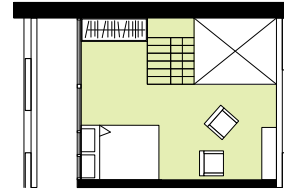
Type B - House with a stair

Fit for people who are still mobile.

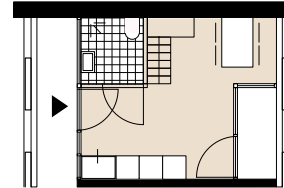
Has the option to be extended **vertical** to be shaped in the way the owner wants it to be



Type B - option 1

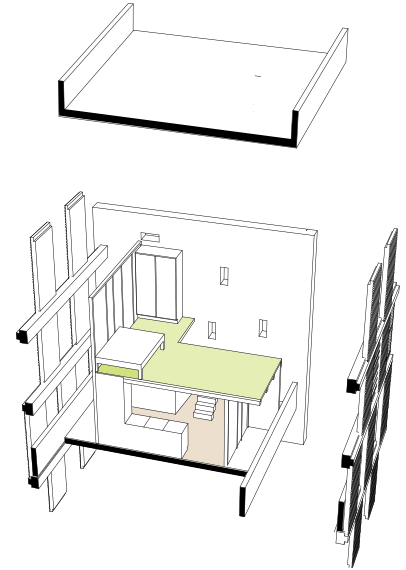


Floor 1

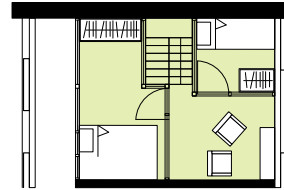


Floor 2

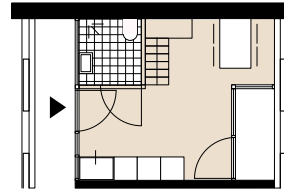
There is room for a bigger bedroom and more space on the ground level.



Type B - option 1

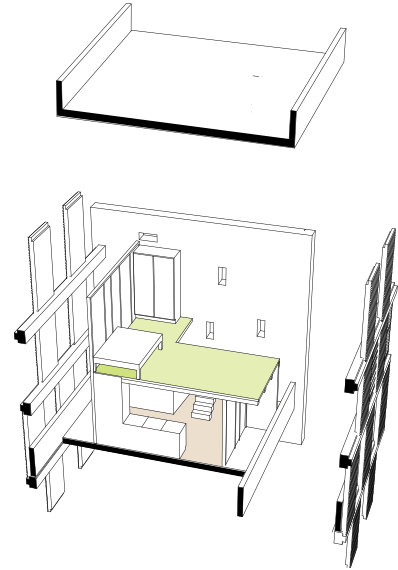


Floor 1



Floor 2

A second bedroom is possible.



Type C - extension of a existing house



Image of the facade just after
completion



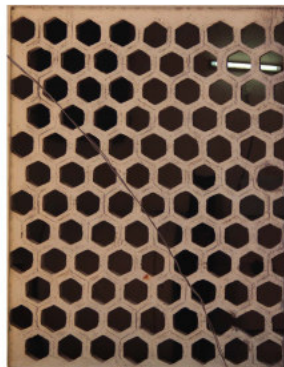
Image of the facade after a few years, a number of inhabitants decided to extent their house



Possible image of the facade when it is in use for a number of years. Some houses are still in the originally state, most however have been adjusted. Slowly the building is adapting itself in the surrounding.



Examples of self-made windows



Section A





Impression of the
start of the route.

Place
along
route
where
musicians
or in-
habitants
can rest
or meet
each
other.



Place on the lowered ground level under the buildings. Here people have shelter from the strong sun and they can meet each other. There is shelter, but still contact with the neighbourhood.





Section B

Place on the groundlevel in the second empty lot. Here musicians have more privacy to practise, but still inhabitants are able to hear them.





Section C



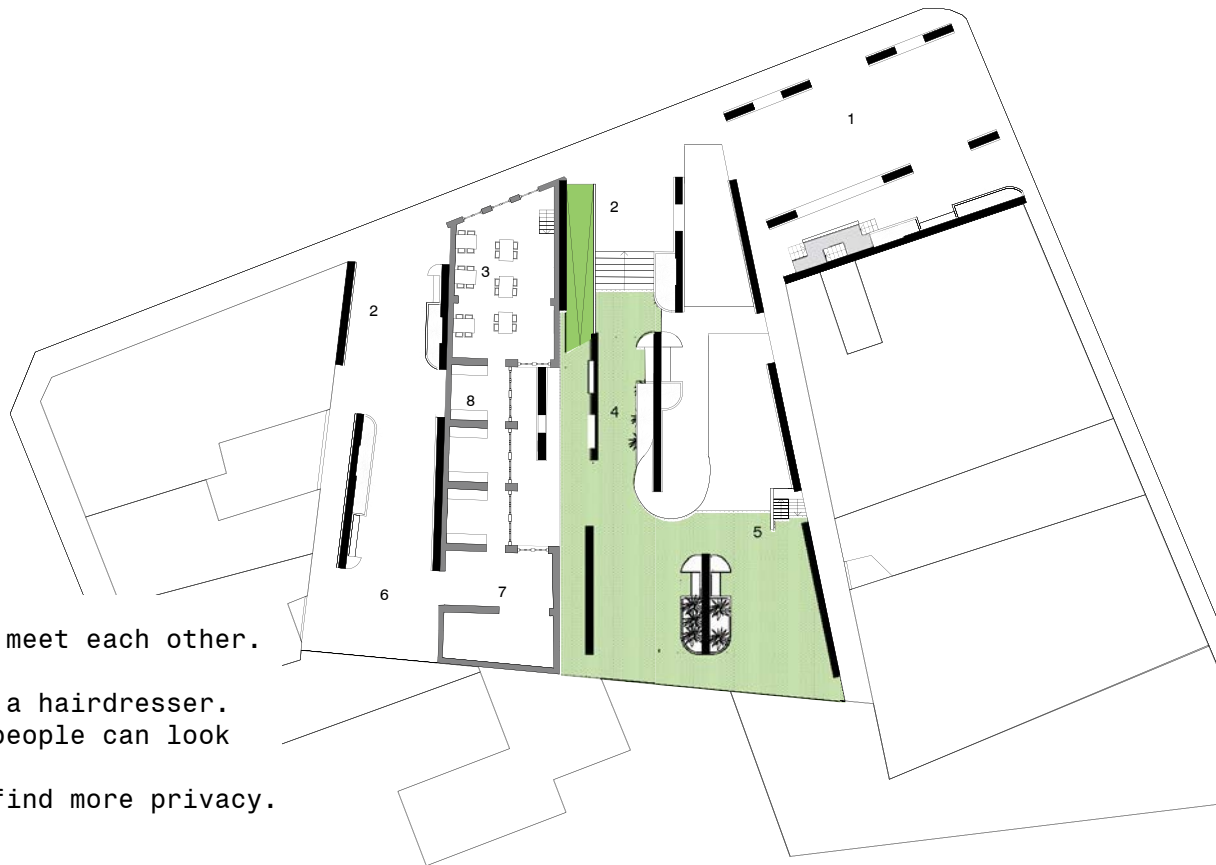
Place in the
'high' volume at
the corner. Here
there is a space
that can be used
for communal
activities, but
also can serve
for a small
concert where the
galleries will
transform in to
tribunes.

Level 0: + 6 m.

Collective/ Musical spaces

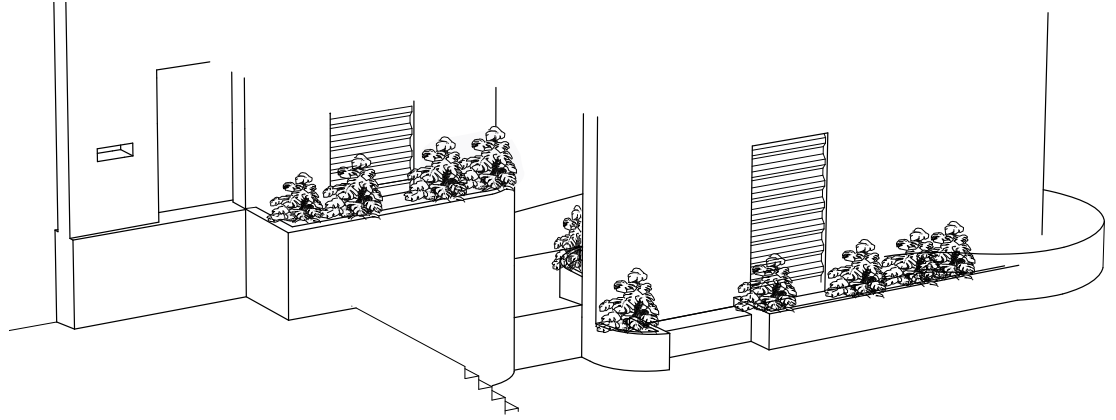
Public route

1. (exisiting) vegetable market
2. Place to for the neighbourhood to meet each other.
3. (exisiting) Cafeteria
4. Place for local buisinesses, like a hairdresser.
5. Open (semi-publieke) place where people can look for shelter.
6. Sheltered place where people can find more privacy.
7. music studio
8. office

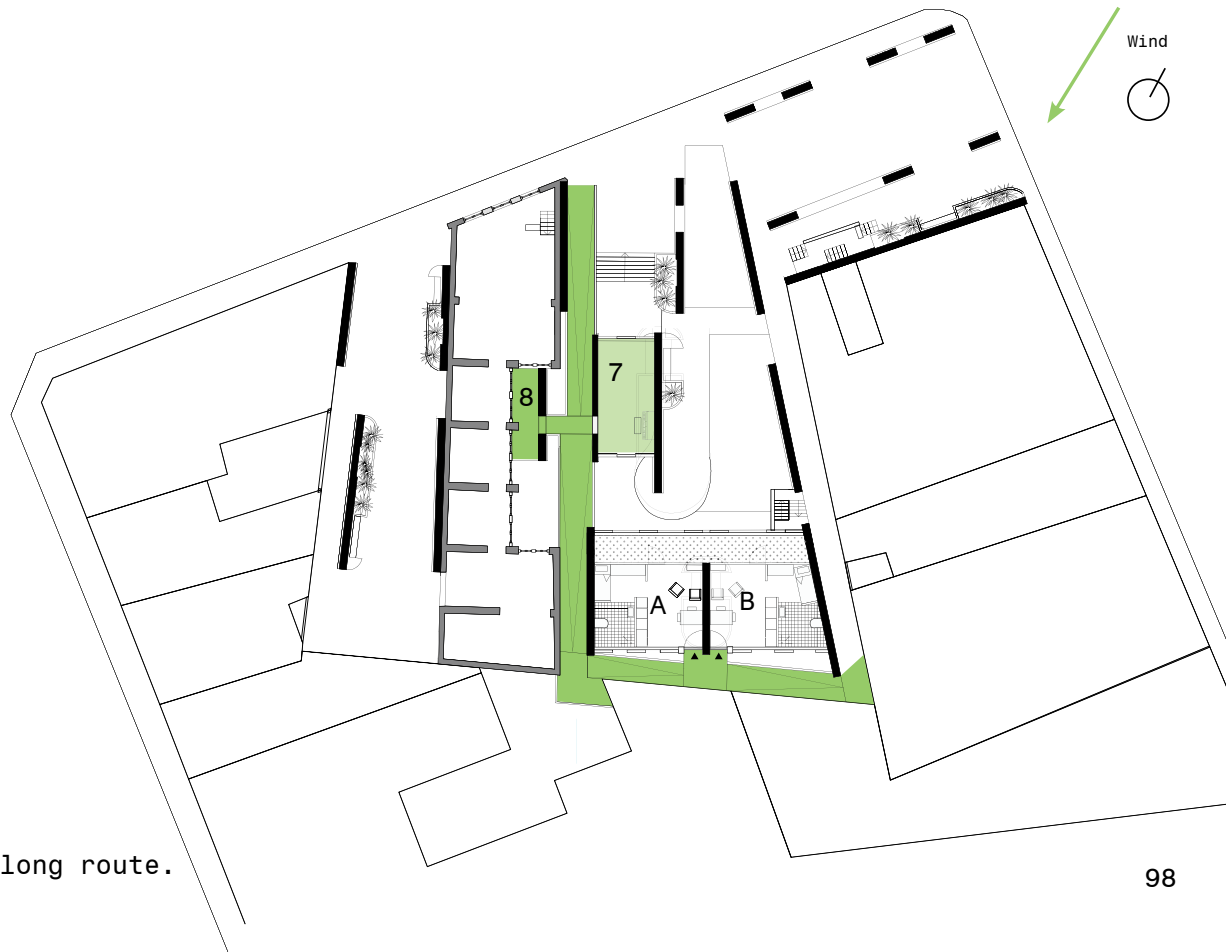


Green

The space under the building is public. To give it quality to want to stay a longer period, green and benches are added. They are the fundament of the constructive walls. The rainwater that falls on the roofs and will be led through the walls to the ground floor, inside the plants. So the plants will get water in a natural way. A number of plants are fit to live with less sun. The Asplenium and the Helecho are good examples.



Level 2: + 3 m.



- 7. Musicstudio
- 8. Point to rest (sheltered) place along route.
- A-B. House type A

Level 3: + 6 m.

- 9. Point to rest along route, where light enters through the existing patio's.
- 10. Collective kitchen.
- 11. Communal space (to eat together or to give small concerts)
- 12. (barbacoa) Route goes through the existing buildings
- 13. Small library
- 14. Music studio
- A-G House type A



Level 4: + 9 m.

- 15. Access to 1st floor of existing building
- 16. End of ramp, place to meet each other.
- 17. Class room (theoretical)
- 18. Music studio
- 19. Second communal kitchen
- I-H House type C
- J-O House type A



Level 5: + 12 m.



- 20. Second class room
- 21. Music studio
- 22. Place on roof (for laundry)
- P-Q House type C
- R-Z House type B (only accessible through stairs)



Materialisation

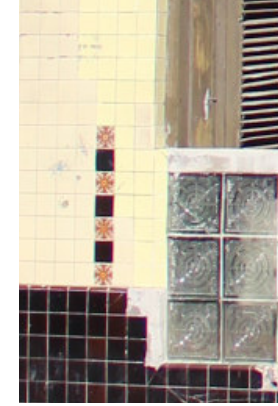
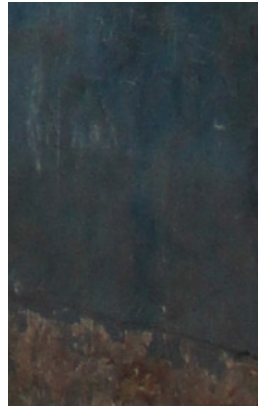
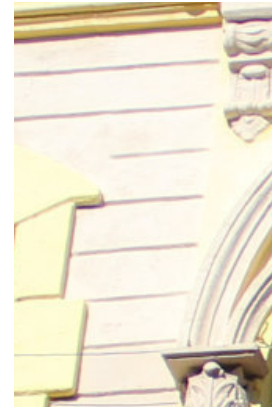
Unity and identity

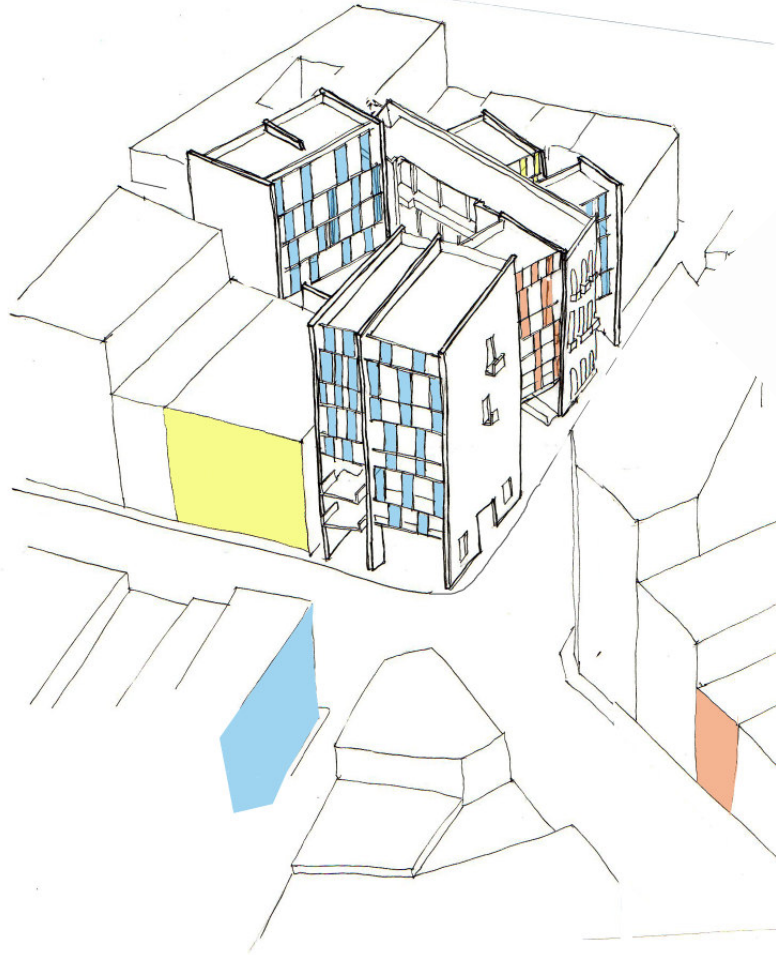
The design exists of an assemble of a number of volumes. The unity comes through the same languages of the shapes.

To give every volume its own character and each inhabitant its own place in the building, colour and texture will be added to each volume. The colours are based on the colours man can find in the neighbourhood.

Material

As main material concrete will be used. Because it is good accessible in Cuba and it can have many different characters. The textures are made with materials which are ample available in Cuba, like corrugated sheet, bamboo and raw wood.







Concrete with corrugated
sheet texture



Concrete with bamboo
texture



Concrete with raw wooden
texture

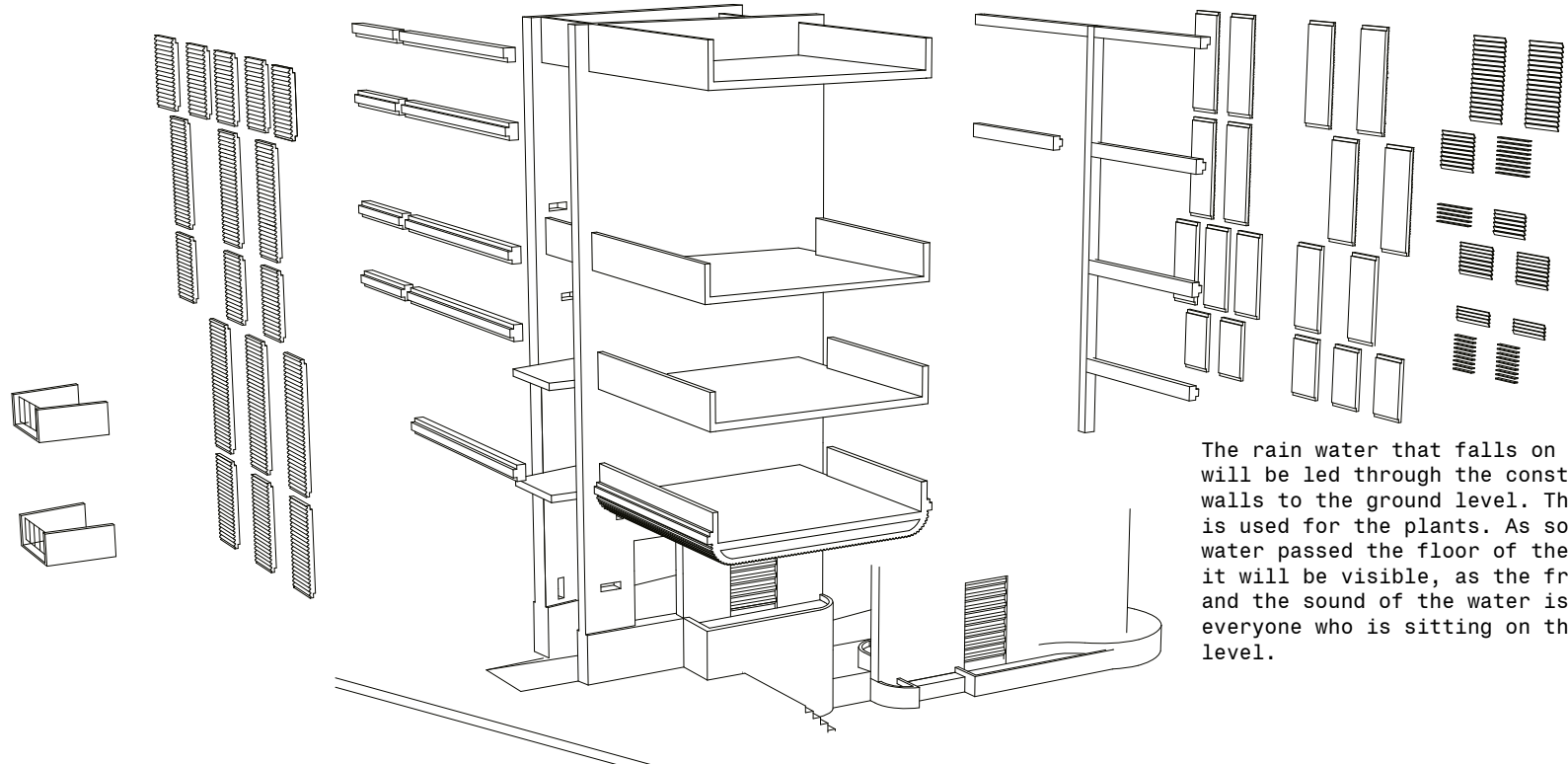
Prefab-elements
with different
textures

Prefab beams to
support the facade
elements

Prefab beams
to support the facade. At
each entry a vertical beam is
placed to make it possible to
entre the volume.

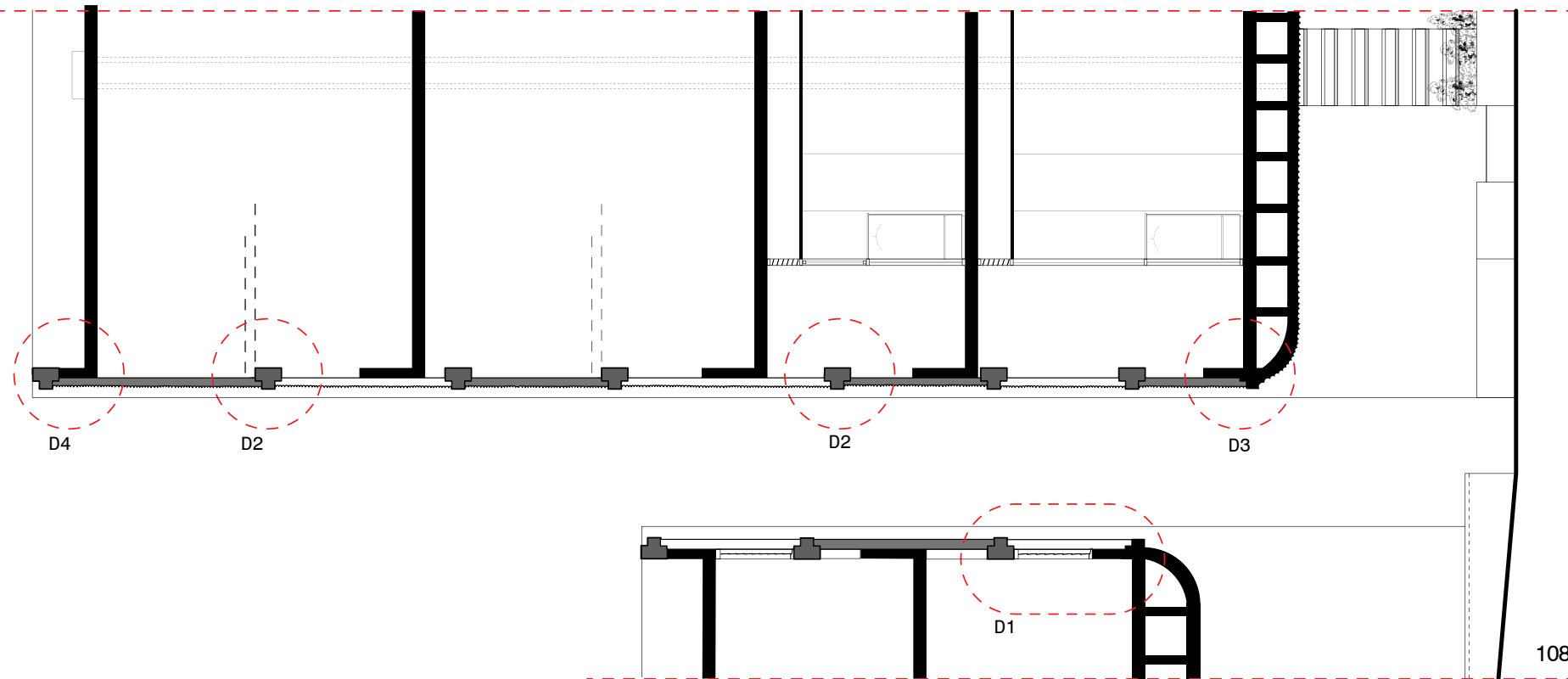
Prefab beams to support the facade. At
each entry a vertical beam is placed to make it possible to
entre the volume.

Window frames in
support the facade the back facade.

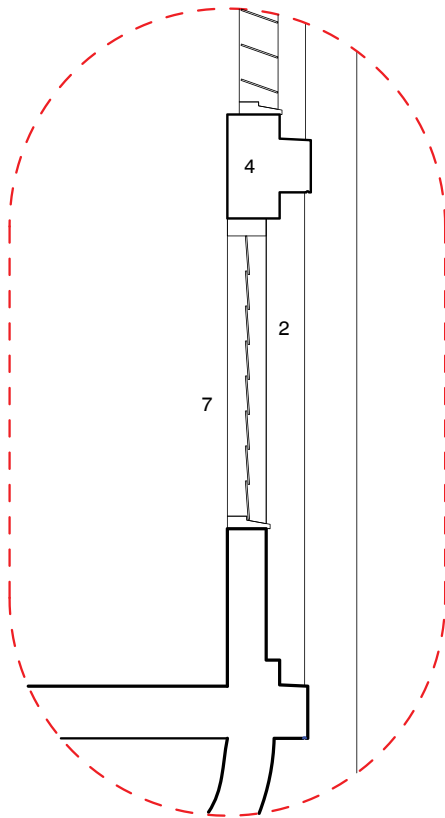


The rain water that falls on the roofs will be led through the constructive walls to the ground level. The water is used for the plants. As soon as the water passed the floor of the volumes it will be visible, as the freshness and the sound of the water is felt by everyone who is sitting on the ground level.

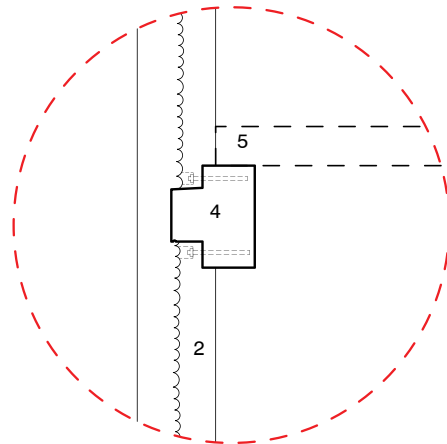
Principal section



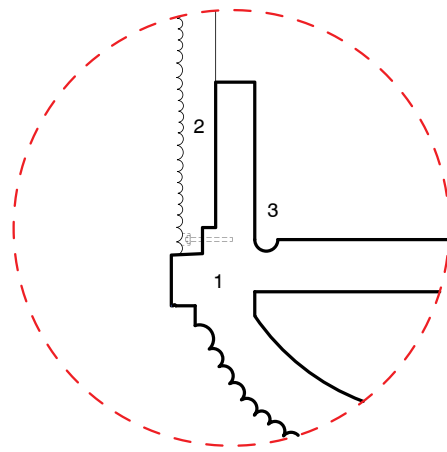
D1



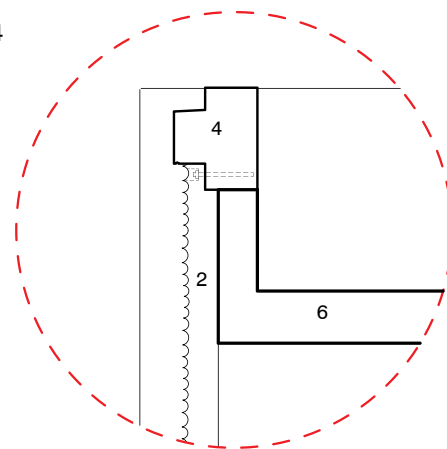
D2



D3



D4



1. Concrete with texture, made on site.
2. Prefab elements for the facade
3. Drain to clean the balcony
4. Prefab beam to support the facade elements.
5. At houses which can be splitted vertical (type B) the beam is designed in a way that it can be used as a constructive base for the new floor.
6. All floors and parapet are made on site.
7. Window frames.

Thanks for to support to:

Bart Bulter (mentor)

Judith korpershoek (commissielid)

Johanna van Doorn (commissielid)

and also to:

My parants, Frans en Tineke Onneweer,

Iruma Rodriguez and

Ria Beijersbergen

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