

AR3AP131 | MSc3 | Public Building Graduation Studio
Public Condenser | The Hague | Copenhagen

RESEARCH BOOK

Haiqi Deng 4905040

CITY

CONNECTION

PEOPLE

POWER

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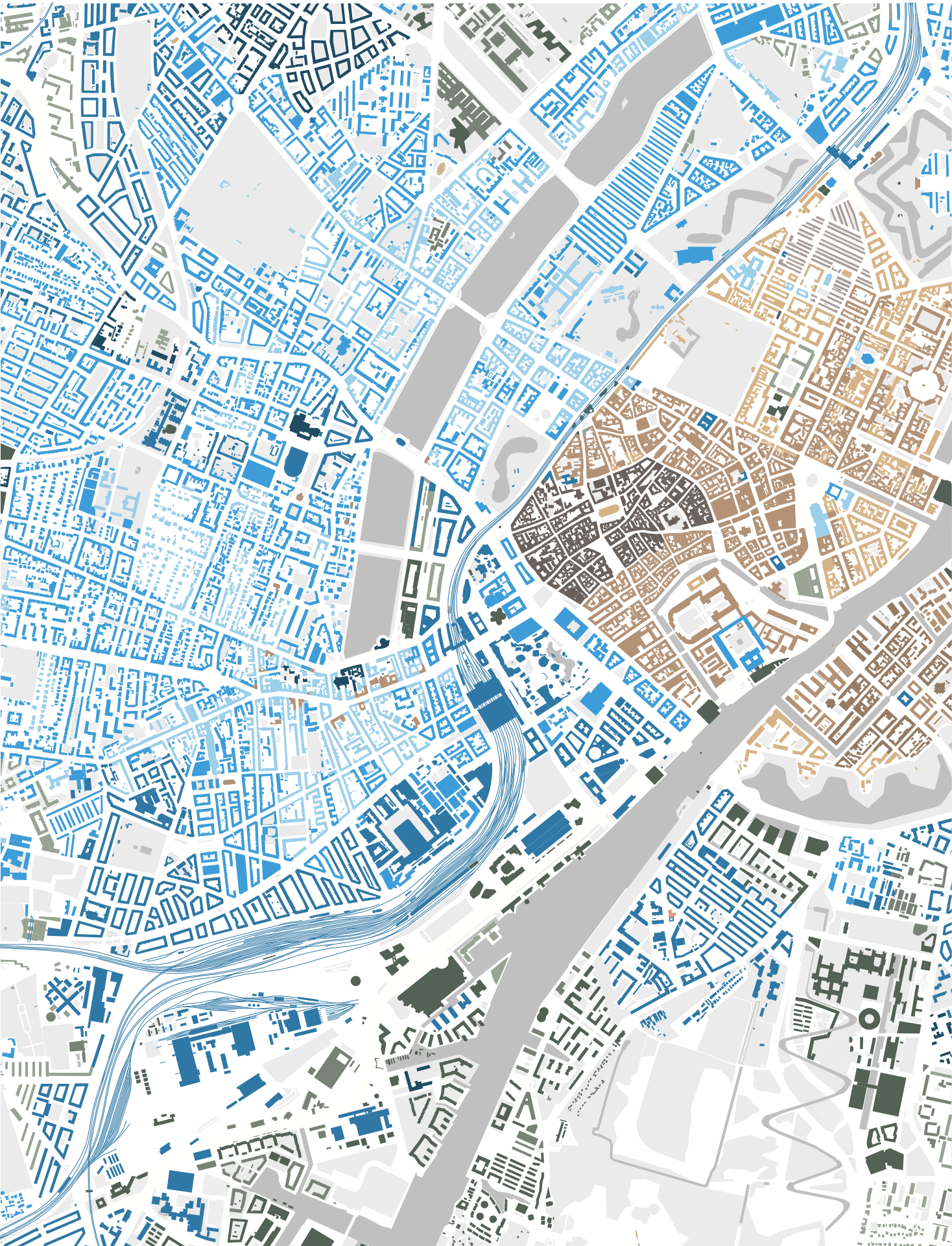
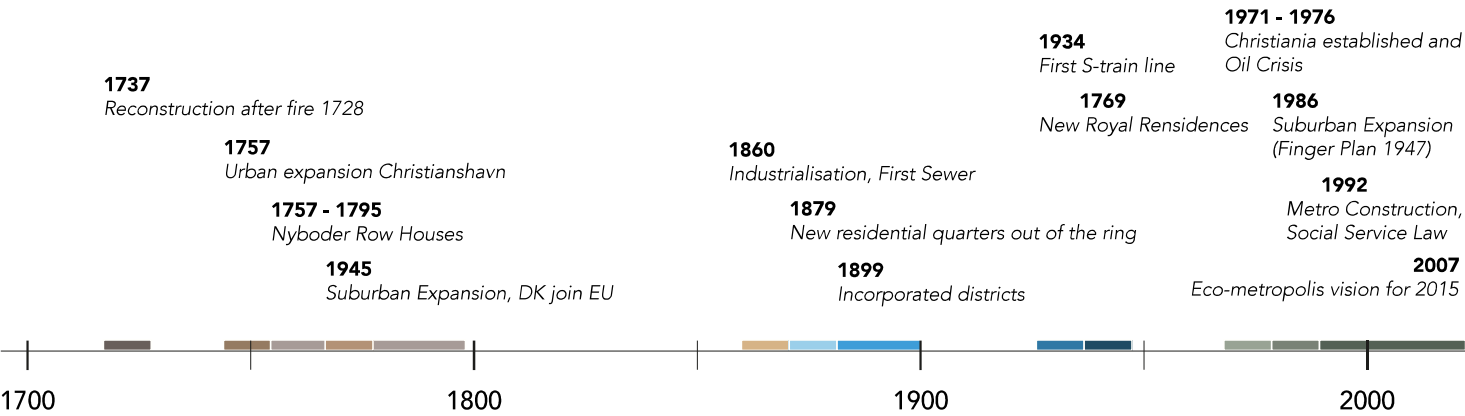
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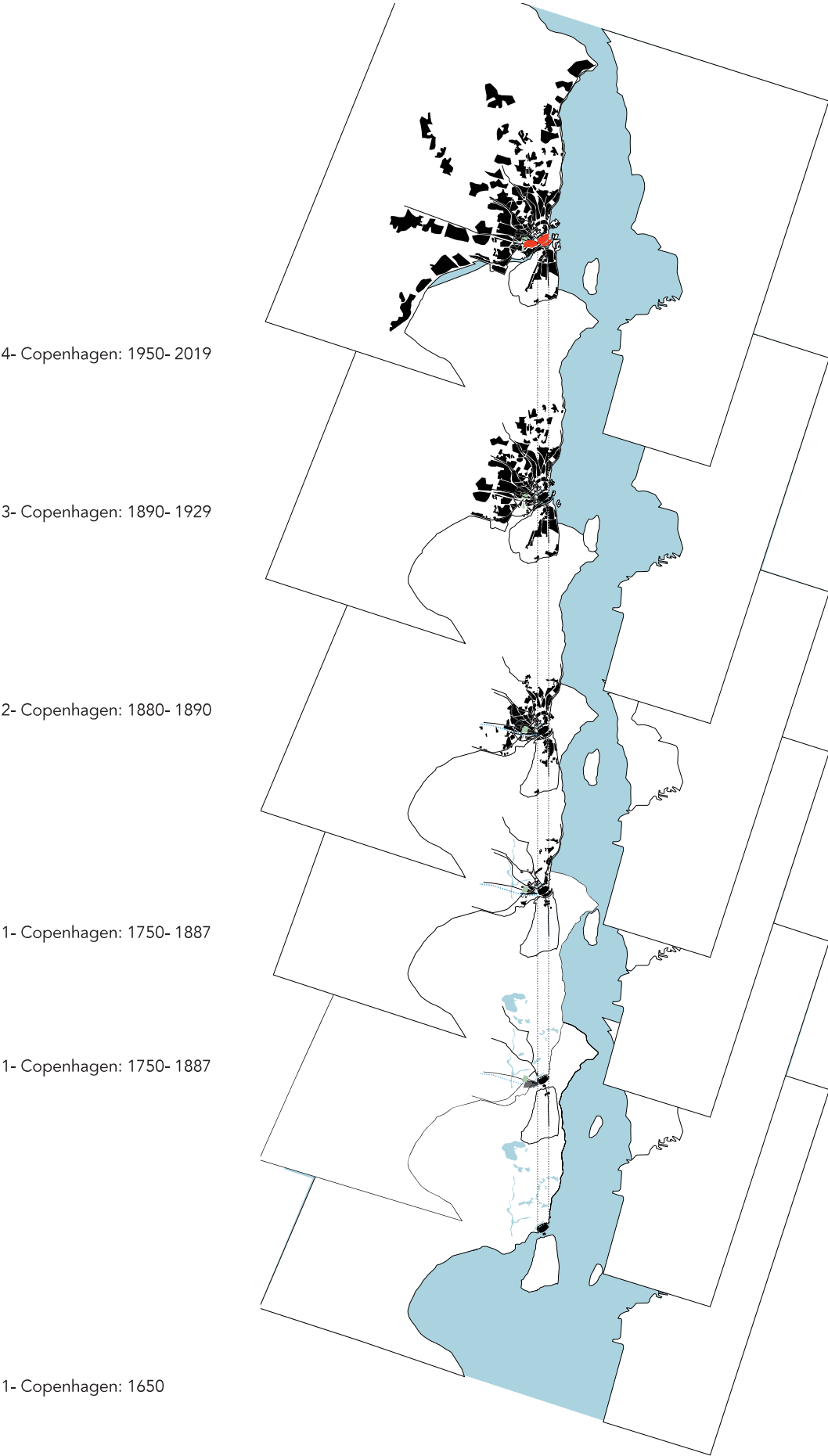
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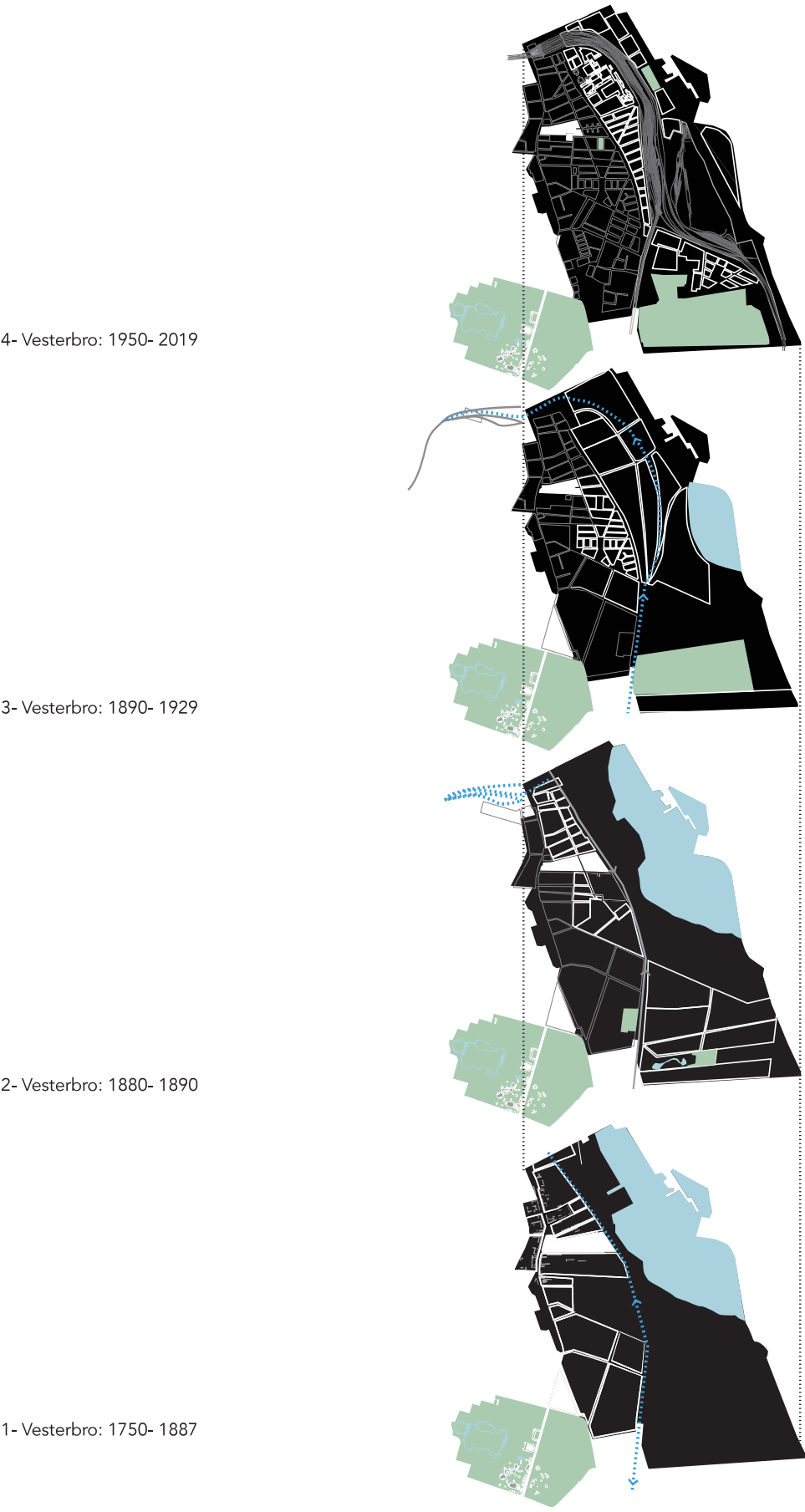


Copenhagen Construction Age, 1:20.000

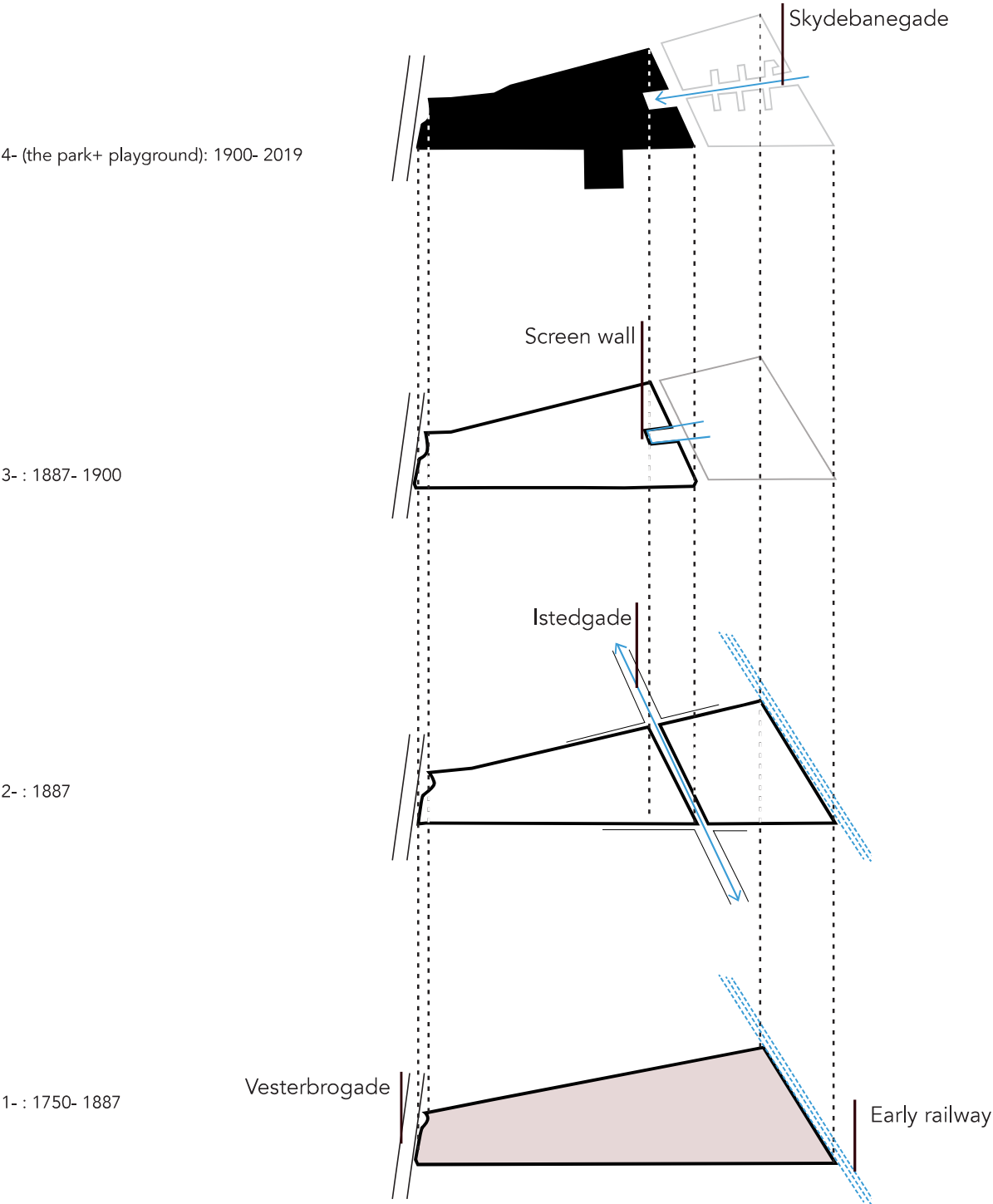
COPENHAGEN (XL)



VESTERBRO (L) SEQUENCE OF DECISIONS



SKYDEBANEHAVEN (M) SEQUENCE OF HISTORICAL LAYERS



Map of Vesterbro, Conservation Value of Buildings, 2019.
(from Atlas of Vesterbro 1991-1996, and Danish Geodata Agency)

250m

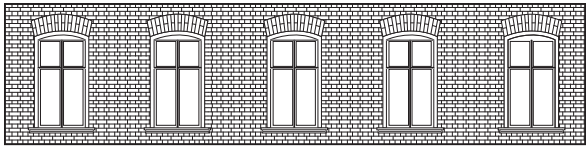
- Protected
- High conservation value
- Medium conservation value
- Low conservation value
- Not assessed

CONSERVATION VALUE

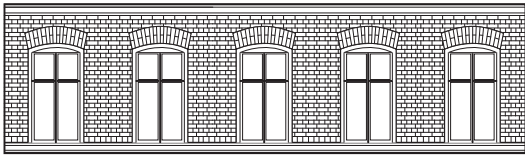
In 1996, the Municipality of Copenhagen published in district Atlases the maps of the conservation value of the buildings. The different degrees indicate the frequency of maintenance. As shown, a large portion of building with a high conservation value are located around Vesterbrogade. Furthermore, the former Maison of the shooting range is regarded as a protected, and the residential buildings next to the wall are more conservation-worthy than others on Absalongade and Dannebrogsgade.

CONCLUSIONS OF ELEMENTS OF ARCHITECTURE - DNA

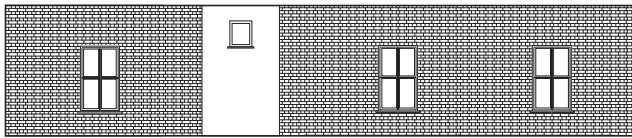
Most common element composition



Only living with no discernible circulation part



Only living with no discernible circulation part



Living with a clear circulation part

ELEMENT COMPOSITIONS

There seems to be 2 major element compositions, which can be found in various forms and shapes. The first one is the composition where there is a dedicated circulation part within the buildings, which is visible in the facade. The second one is a composition which does not showcase such a circulation space, and merely portrays the function of the building.

BUILDING HEIGHT

The most common building height that the new building will have to react to is a height of 5 to 6 stories. This is approx. 18 to 20 meters. Within the analysed area, there are very little exceptions to the height of the buildings.

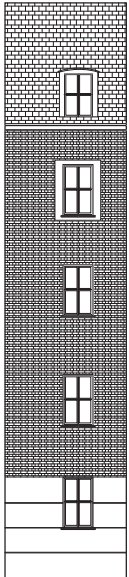
Building height



6 story building
Approx. 20 m.

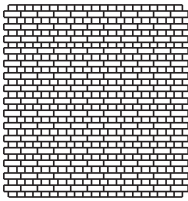


6 story building
Approx. 20 m.

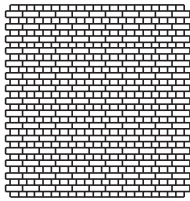


5 story building
Approx. 18 m.

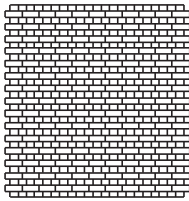
Most used/common elements



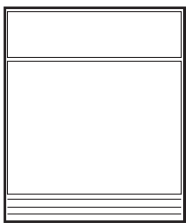
Red/brown brick
English bond



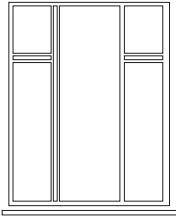
Brick
Mainly English bond,
different colors are possible



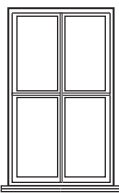
Brick
English bond, different
colors are possible



Big unpartitioned
windows, in several
variations
&
Sash windows, in several
variations



Partitioned windows, in
several variations with
different amounts of
partitions



Partitioned windows
In several variations

MOST USED/COMMON ELEMENTS

Even though there is a very broad selection of elements analysed within this catalogue, these 9 elements are the most commonly used elements in the determined important styles.

Brickwork is a very important material which can be seen all around the site and the analysed area. This brickwork most commonly appears in a brown colour, yet is also on display in different colours in certain cases. The brickwork appears most commonly in an English bond.

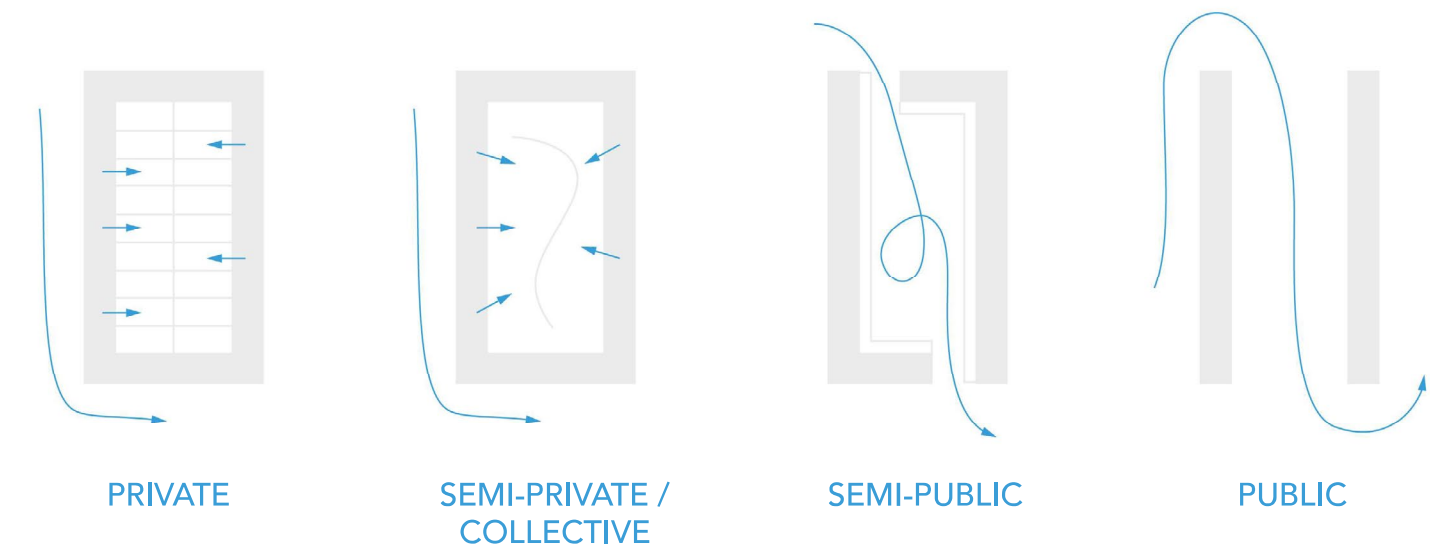
Opening wise, it is visible that the most common openings are rectangular openings. Most of these openings are then further divided into different sections. These windows appear as sash windows, as well as modern windows that are subdivided.

Single (subdivided/sash) openings seem to be the most common openings in the analysed area of Copenhagen.

On top of this, the ornament plays an important role within the buildings of Copenhagen. Most notably the ornamental divider, which seems to be present within every time period.



Ornamental divider,
Along with other
ornaments
In different
variations



THE BLOCK

The urban space of Vesterbro is shaped by its building blocks. Together these blocks form the urban fabric and create different environments with different uses between and within them.

A small amount of blocks have completely private gardens for their residents, in which every household has its own garden. The better part of the building blocks have collective/semi-private gardens. These are shared with the residents of the block but are closed off to the public by fences and walls. Other blocks have gardens that are hidden but are open for everyone to enter. These can be called semi-public urban spaces. However, most of these blocks do have a strip of semi-private space along their houses, closed off by a fence. A fenced-off strip of semi-private space is also seen along buildings that are placed directly in the public space.

It is remarkable that the transition between public and private is made to be very gradual, but every gradation of privateness is very clearly defined. Since all gradations offer mainly the same or similar facilities, the question rises whether there is any difference in use. If yes, what is the difference? and if no, why are they fenced off?

For every type a case study is chosen to compare the following five characteristics to the type of use and the rating on activity, liveliness and social contact.

CONCLUSION & ADVICE

Skydebanehaven fits perfectly into the neighbourhood: it is designed in detail, it consists mainly of a paved playground, it is surrounded by pastel colours and fences are seen everywhere.



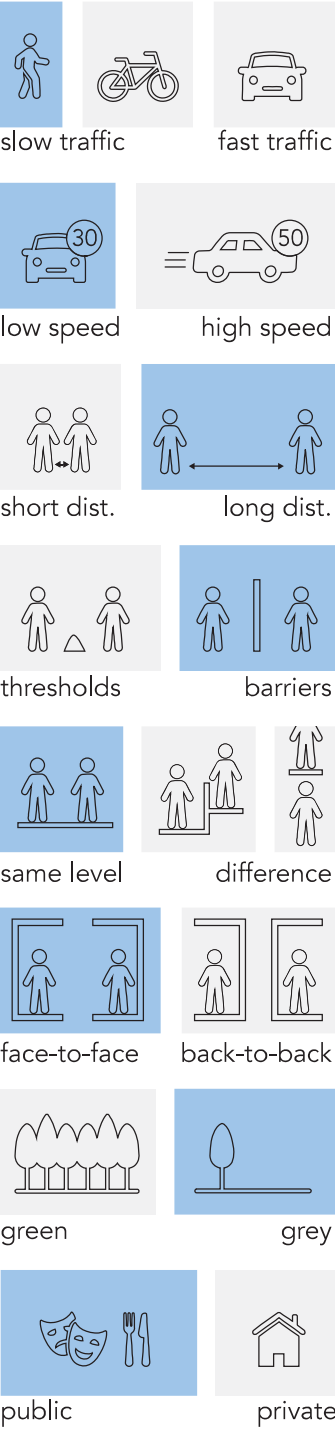
In general the place looks well-maintained, although the park and the rosegarden have a more neat **appearance** than the playground and the schoolyard. Even on rainy days there is a lot of **activity** going on, mostly by young children (0-6) and their parents on the playground. Other age groups mainly use the park and the rosegarden, separated by fences and green. The continuous presence of children and the ice-cream/coffee bar works well for its feeling of **liveliness** during the day. Although the hard edges and interrupted sight-lines limit this liveliness to the playground itself. The 'hidden' character of the playground gives an enclosed feeling and fosters a sense of togetherness; encouraging **social contact**. Also the common interest of the playground user makes it easier to engage with one another. Social contact between the different urban spaces of Skydebanehaven, however, is limited.



The leisure-type of activities in Skydebanehaven seem to be a result of recent renovation of the neighbourhood, with the young, rich families as the face of gentrification. The original residents, the working-class people, are no where to be found on the site. Around the corner, however, these people are still a part of the neighbourhood.

I would advice to make sure all the social groups you want to connect are actually present in the urban space. When that is the case, we can take a look at the characteristics of the space itself. In Skydebadehaven, six out of 11 characteristics inhibit social contact. Social contact could be promoted by shortening distances and replacing barriers by thresholds. Also integrating different functions and opening up the plinth could easily improve the situation in Skydebanehaven.

Yet, it should be kept in mind that these characteristics are *likely* to promote social contact, but the actual experience of a place depends on many more aspects.



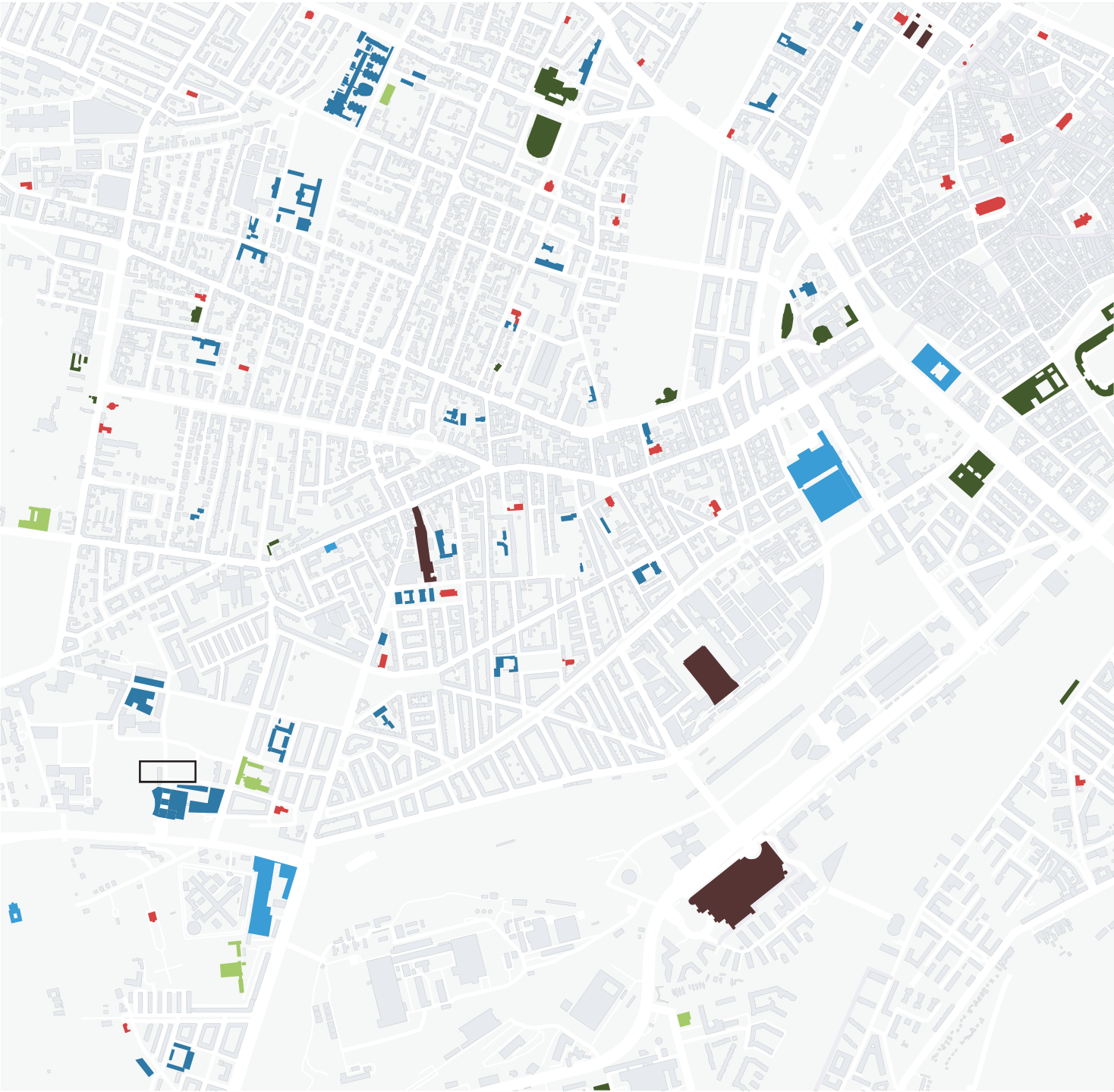
PROMOTING SOCIAL CONTACT

INHIBITING SOCIAL CONTACT

COPENHAGEN

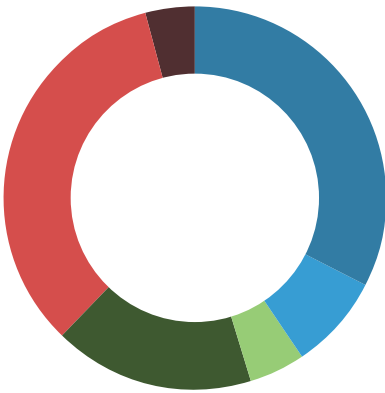
The situation in Copenhagen is as followed. Through the scales, the amount of educational buildings is steady and significant. This means that there are a lot of educational buildings and they are always closeby. The amount of religional buildings is also quite large. However, on a lower scale this amount decreases, meaning that there are a lot of but not nearby in that amount. The amount of cultural buildings is also steady through the scales, meaning that there are several and also closeby. What is also interesting is the absence of sports buildings and commercial buildings. The amount of community buildings on a large scale is rather small, but on a smaller scale, this amount is quite significant.

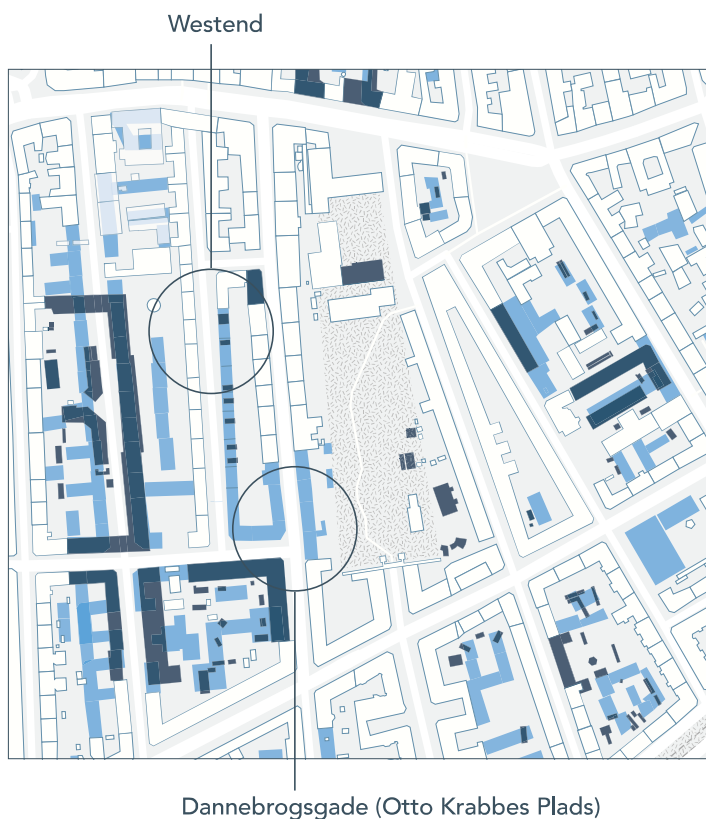
The case of Copenhagen can mean several things. Overall, the absence of sports buildings is the most striking one. On a small scale, the absence of sports, but the presence of community and educational could lead to an interesting spot.



COPENHAGEN

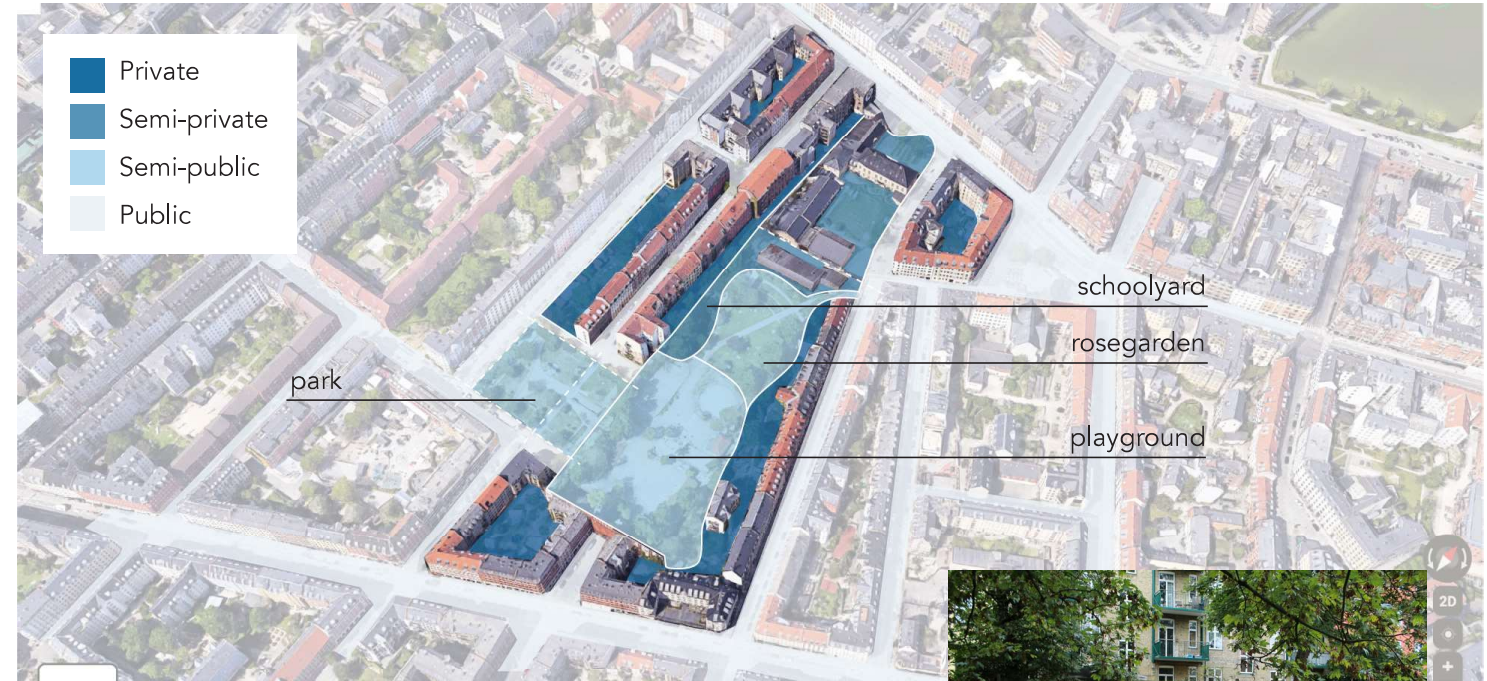
	educational	33
	community	8
	sports	5
	cultural	17
	religion	34
	commercial	4





FORMATION OF OTTO KRABBES PLADS

As illustrated on the map, the urban renewal (byfornyelse) started in 1991 and included the removal of the residential buildings Dannebrogsgade and Westend to improve the living condition. In 1992, it was built Otto Krabbes Plads, a public area connected with Skydebanehaven and crossed by a new pedestrian route on Dannebrogsgade. Similarly, changes were applied to the western blocks and in the same year was also built Saxopark.

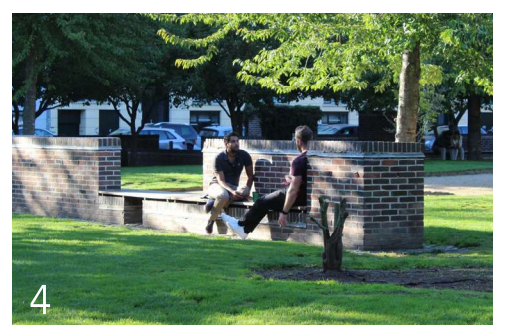


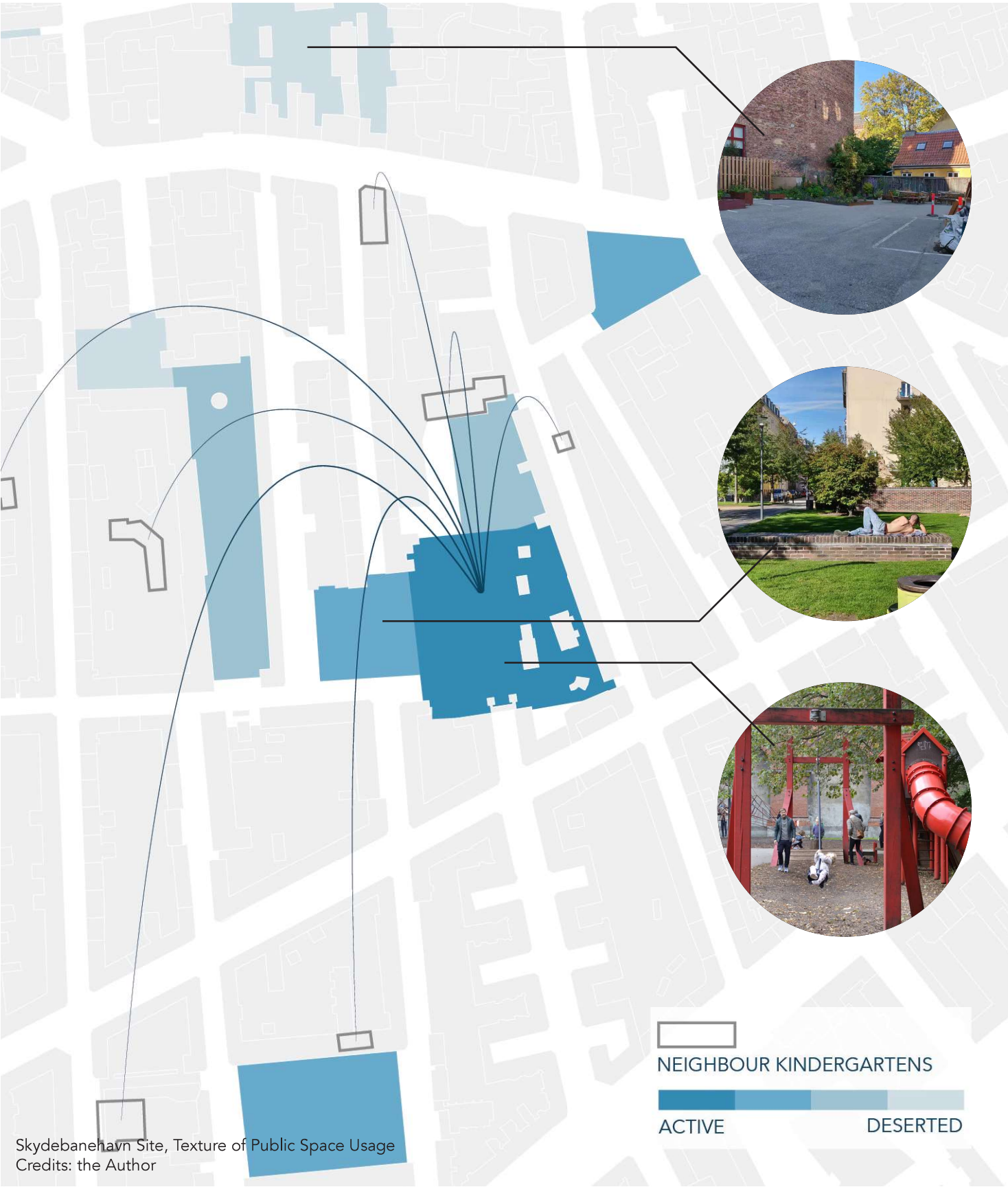
SKYDEBANEHAVEN

The project site Skydebanehaven is a patchwork of different urban spaces. The project site is almost completely located inside a building *block*. Like many of the blocks in Vesterbro, it has varying levels of privacy: a gradual transition with hard edges. All the different zones are divided by fences and walls.

Also the site contains contrasting atmospheres. Apart from the strip of semi-private space along the buildings, it can be divided into the following zones:

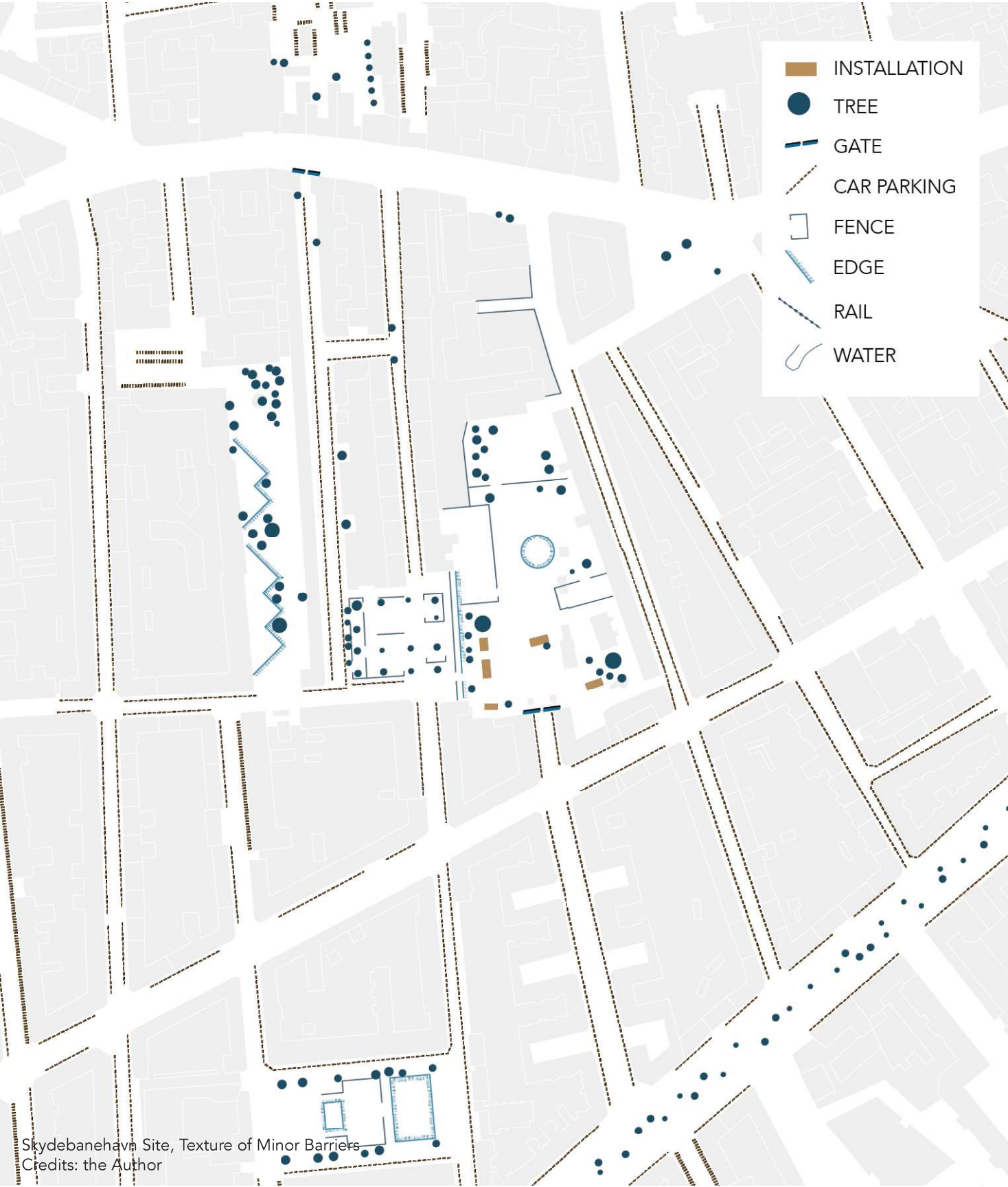
1. **School yard** | In the north end of the plot is a school with its yard in the north-east corner; a quite dark, grey semi-private piece of garden, hidden between two relatively high fences.
2. **Rose garden** | Adjacent to the schoolyard is the gosegarden. A patch of peaceful green land that is mostly used to sunbathe and/ or read when the weather allows it.
3. **Playground** | The playground is the biggest zone, equipped with different types and styles of installations for children, an ice-cream/coffee bar and some benches.
4. **Park** | The park in the south-west of the plot has the most rigid design. It contains a fountain, a bike lane and offers some places to sit and relax.





IMPLICIT TEXTURE 1 - USAGE OF PUBLIC SPACES

Similar spaces might have different condition of usage due to implicit reasons. By on site experience (visit twice both on weekday and weekend) and confirmation by online streetviews, we distinguished 4 levels of activeness of all the public spaces within and next to the site. The central playground of Skydebanehavn is the most popular, while the inner courtyard on the north is seldom used by people. The playground is also use by adjacent kindergartens / schools who don't have their own playground.



IMPLICIT TEXTURE 2 - MINOR BARRIERS

Normally urban texture only consider about the urban blocks and building footprints. However in the real use, minor objects including trees, parking, fences, stairs temporary buildings and installations are no less important. The Skydebanehavn site area has only trees in the public spaces, while only have car parking along the streets. The central public space creates different sized zones by partition walls, stairs and fences, which was appraised by interviewees. The attractions (Installations) concentrates in the southern half of the playground, where the most popular area for children is.

CITY

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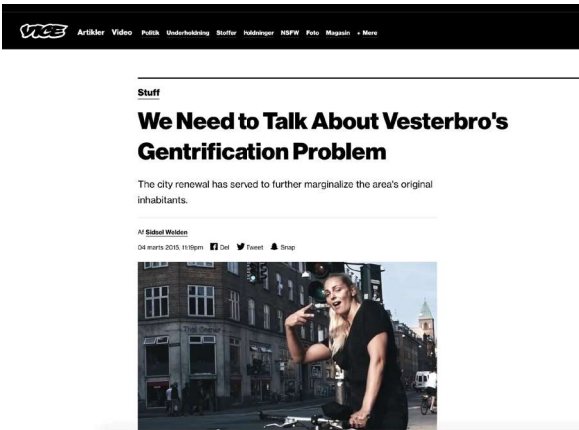
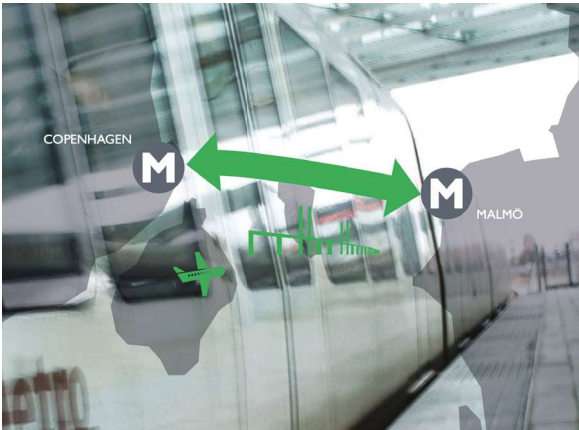
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ÖRESUND - Copenhagen - Malmo metro
All in all the analyses show that an Öresund metro can be realised in terms of construction and building technology. In Copenhagen it will be a part of the metro system which is presumed to be extended with, for example, M6 and M7 as a circular line on the stretch: Copenhagen Central station – Prags Boulevard – Østerport – Copenhagen Central station. An Öresund metro can play a decisive role in strengthening integration in the region by increasing accessibility through fast and flexible transport across Öresund and a greater number of travellers. The metro line would have its terminus stop in Copenhagen Central station and therefore on the edge of Vesterbro. (Interreg, 2017)

New line for S trains on the drawing board
A new tunnel for S-trains connecting Copenhagen Central Station and Svanemøllen with stops at Forum, on Nørrebro and at Rigshospitalet, will be a significant boost to public transport in Copenhagen. Traffic professor Otto Anker Nielsen launches the idea in a new report on traffic in the metropolitan area, writes ing.dk. The rails between Svanemøllen and Copenhagen Central Station are very crowded, as the vast majority of S-trains run on this route. Therefore, a new track could double the capacity of the entire S-train system. Building a tunnel for S-trains will cost around DKK 10 billion. (Ekstra Bladet, 2009)

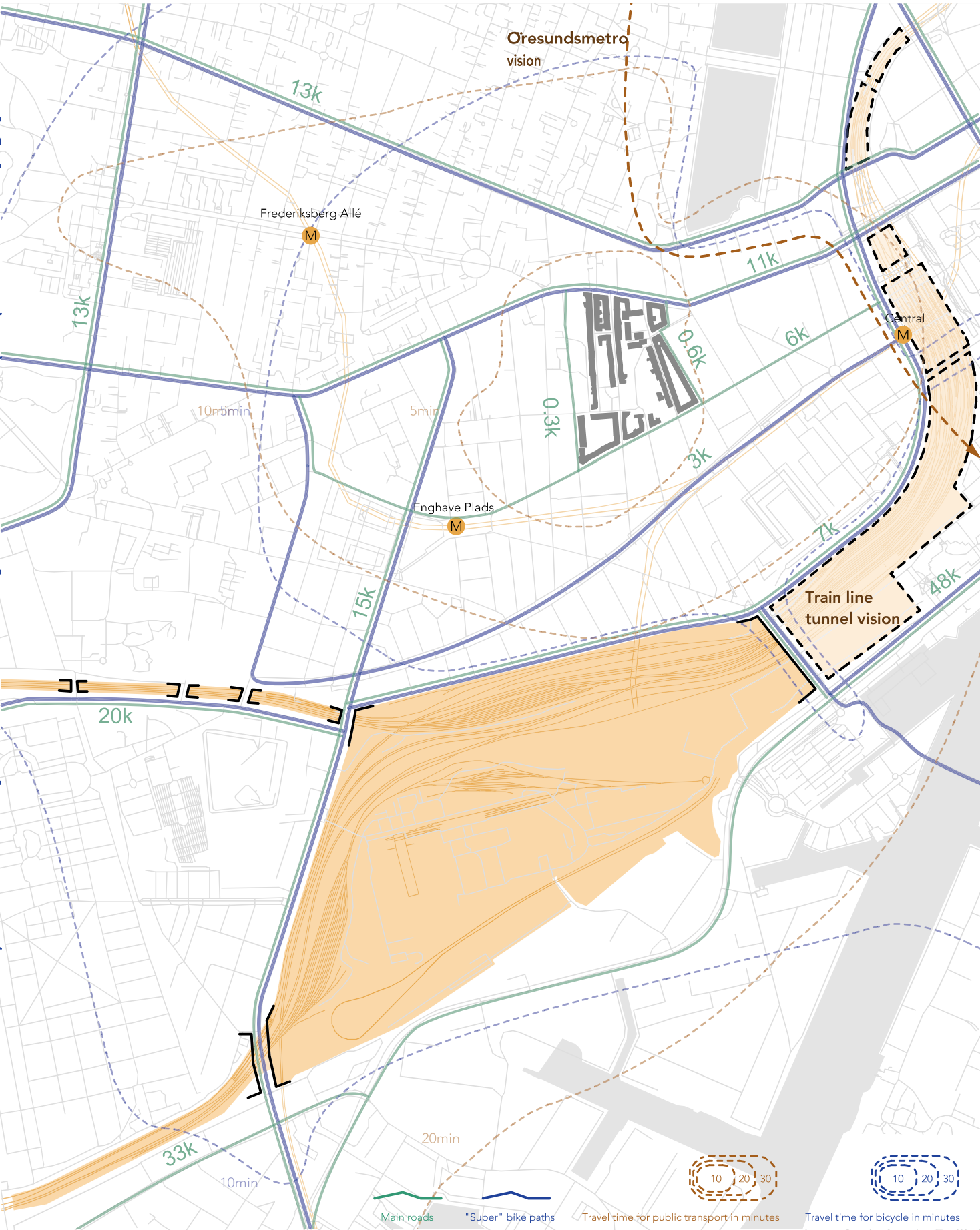
Increasing transportation and gentrification of Vesterbro
According to a Vice online article (dated 4th March 2015), Vesterbro is suffering from its recent surge of gentrification. The neighbourhood has faced a sudden increase in gentrification following a wider connectivity to the rest of Copenhagen, which meant a wealthy working population could appropriate themselves the previously-run-down district of Vesterbro. The article highlights the downside of an increased connection of an area with its wider urban context. (Vice, 2015)



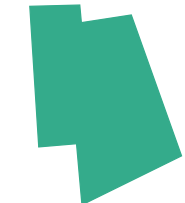
- Recommendations
- 1

A NEW METRO LINE THAT CONNECTS TO MÄLMO IN SWEDEN IS CONSIDERED BY THE MUNICIPALITIES, BE AWARE OF THE INCREASING TRAFFIC NEAR THE STATION
- 2

BE AWARE OF THE RAIL TRACKS AND THE NOISE POLLUTION THAT IT GENERATES. IN THE FUTURE THEY MIGHT PLAN ON COVERING THESE RAIL TRACKS, WHICH INCREASES ACCESSIBILITY TOWARDS THE SOUTH.

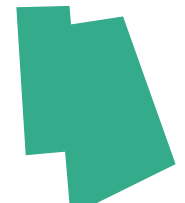


CONNECTION SITE - CITY CENTER
INDIRECT CONNECTION TO CITY CENTER



skydebanehaven

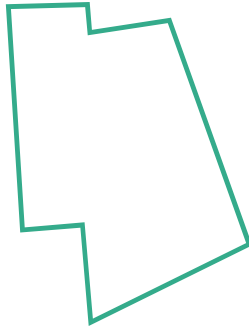
CONNECTION SITE - RAILWAY STATION
STATION OPENS TOWARDS CITY CENTER



skydebanehaven



CULLEN ANALYSIS COPENHAGEN
INVITES LOCAL PEOPLE

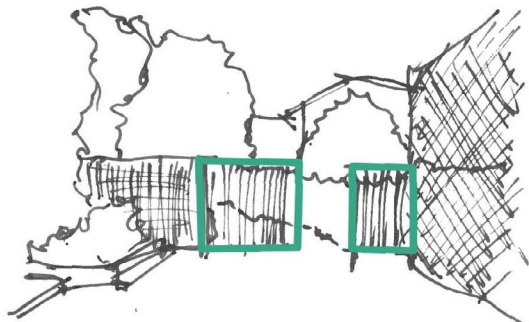


SKYDEBANEHAVEN

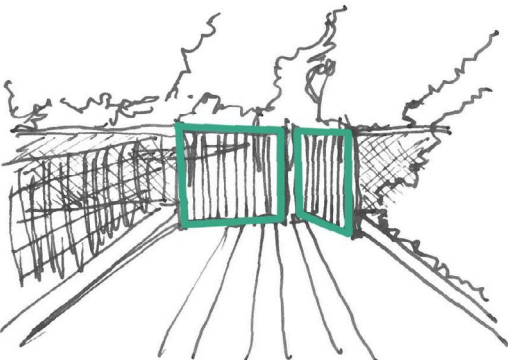
- closed character
- low permeability
- not perceivable from adjacent area



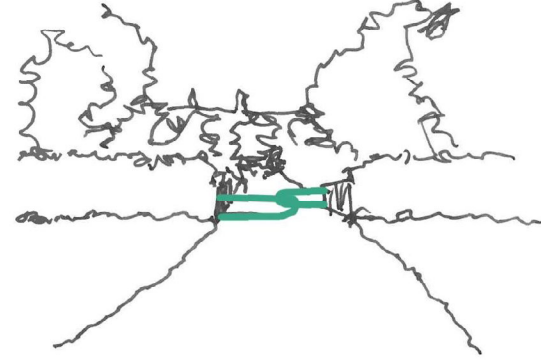
Destination 1 - Site entrance Istedgade
Yassa, F



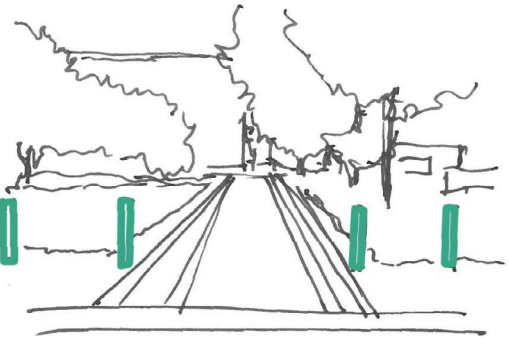
Destination 2 - Site entrance Absalonsgade
Yassa, F



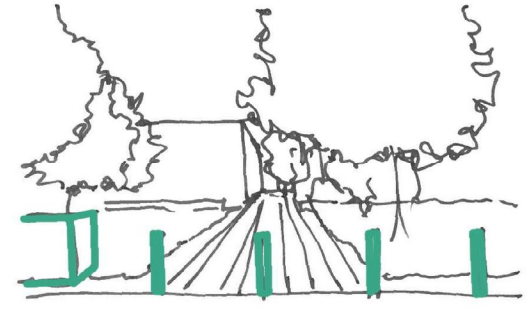
Destination 3 - West site entrance Skydebanehaven
Yassa, F



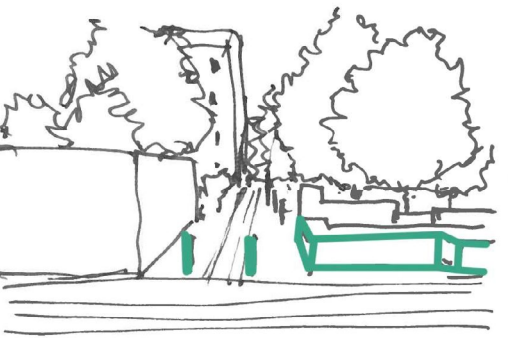
Destination 4 - North site entrance Skydebanehaven
Yassa, F



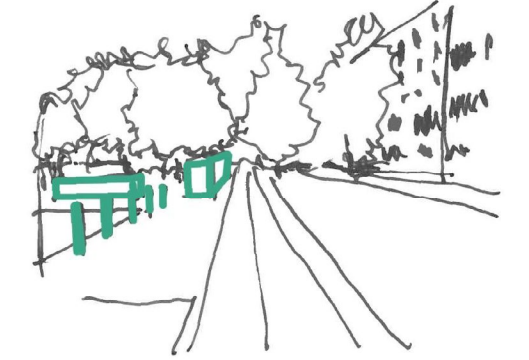
Destination 5 - South site entrance Otto Krabbes Plads
Yassa, F



Destination 6 - North site entrance Otto Krabbes Plads
Yassa, F

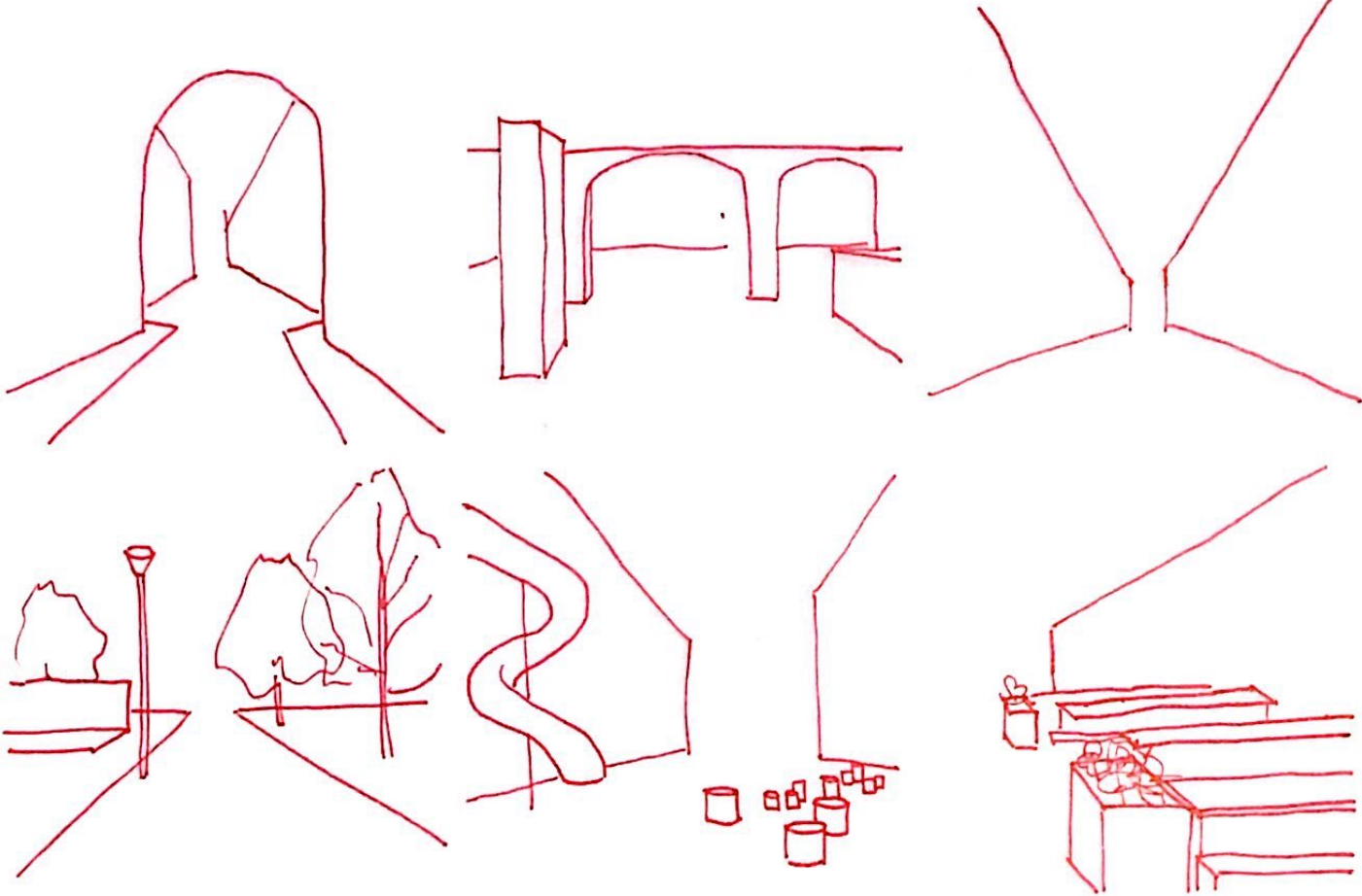


Destination 7 - Site entrance Westend
Yassa, F

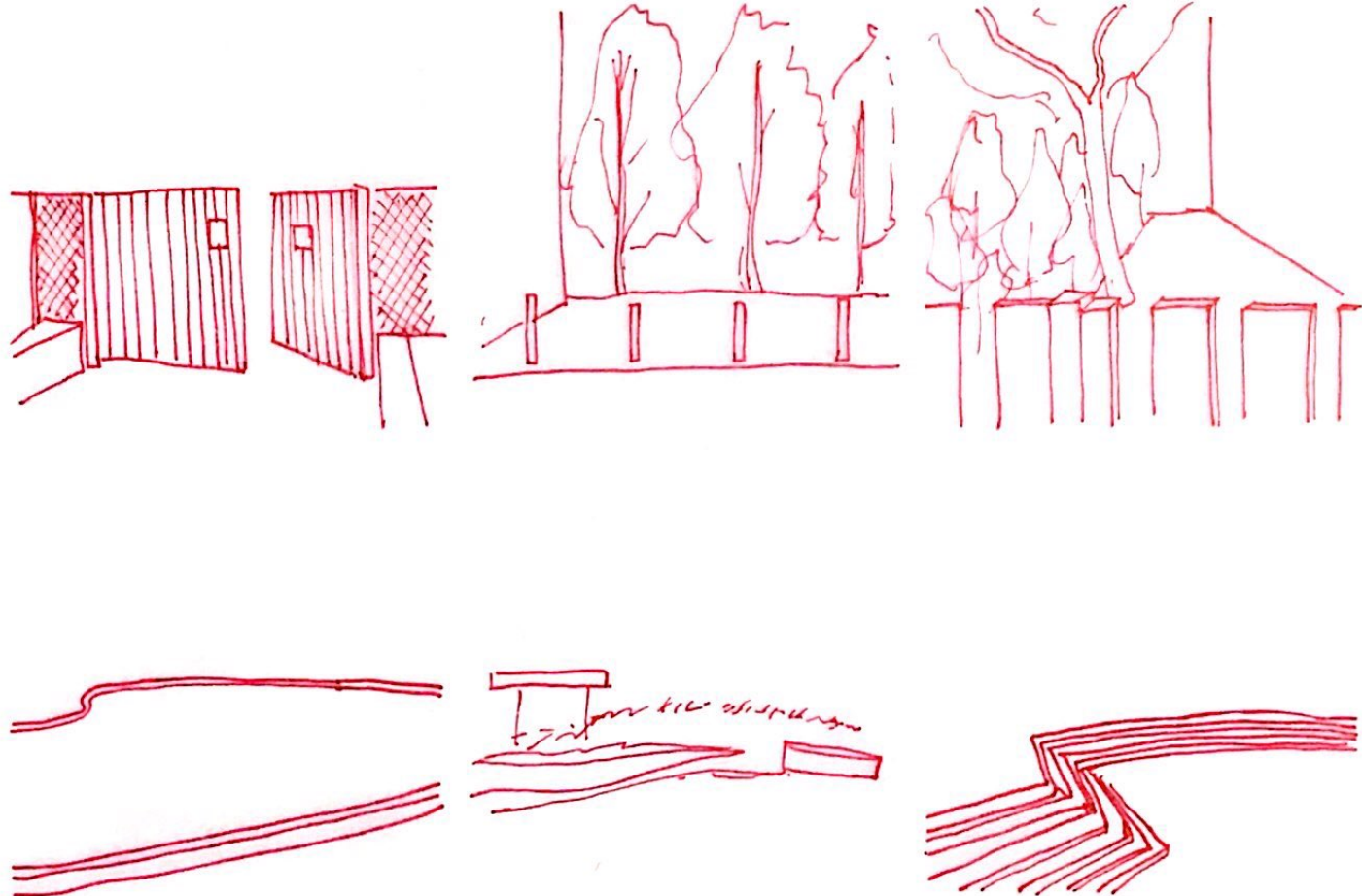


Destination 8 - Site entrance Matthaeusgade
Yassa, F

CITY INTERFACE



CITY THRESHOLD



CITY

CONNECTION

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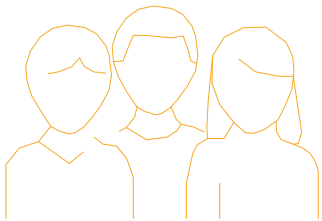
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AN EGALITARIAN SOCIETY

THE BASIC PRINCIPLE / LAW OF JANTE

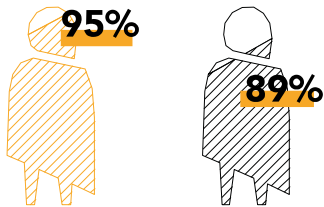


The laws of Jante create the base of the happy acceptance of being average. They prevent from social pressure and are freeing about not having to be anything. It is the foundation for flat hierarchies and equality in Danish society.

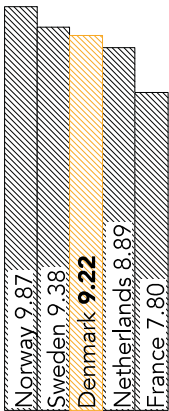
Danish society is one of the most egalitarian society in the world. Where does this come from and how does it show?

- 1. You're not to think you are anything special.
- 2. You're not to think you are as good as we are.
- 3. You're not to think you are smarter than we are.
- 4. You're not to convince yourself that you are better than we are.
- 5. You're not to think you know more than we do.
- 6. You're not to think you are more important than we are.
- 7. You're not to think you are good at anything.
- 8. You're not to laugh at us.
- 9. You're not to think anyone cares about you.
- 10. You're not to think you can teach us anything.

STRONG COMMUNITY / TRUST

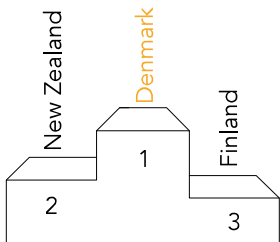


95% of Danish inhabitants think they know someone they could rely on in a time of need. The OECD average is 89%.



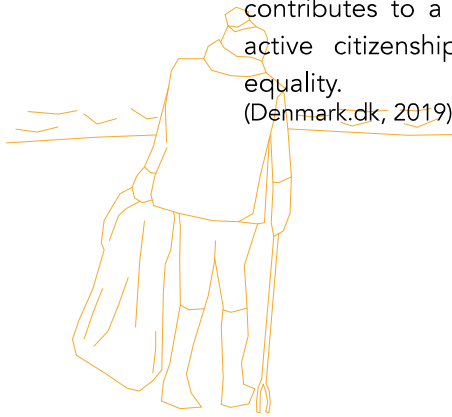
Danish society can trust in its fully developed democracy. The trust in this institution enables the extensive welfare program. It shows as full democracy in the democracy index with a score of 9.22. (Eiu.com, 2019)

Denmark is one of the less corruptive countries in the world. It ranked first place on the Corruption Perception Index 2018. (e.V., 2019)



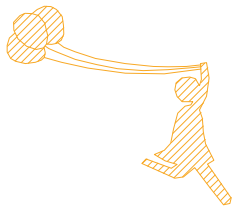
Trust is a fundamental part of Danish society, social interaction as well as business and government. Social trust as well as trust in politics, government, police and juridical system are higher in comparison to the OECD average.

41 % of Danes volunteer in their free time especially in associations. There are more than 100.000 active associations in Denmark with only 5.7 million inhabitants. This work contributes to a sense of community, active citizenship, enlightenment and equality. (Denmark.dk, 2019)



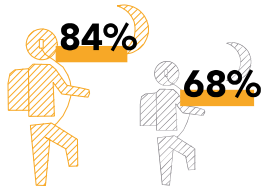
Beach Clean Up Initiative

FREEDOM OF THE INDIVIDUAL



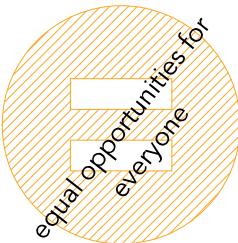
Respect, tolerance and a strong sense of mutual trust form the values that allow a wide freedom of the individual. Freedom of speech and the freedom of press is guaranteed. The law prohibits any sort of discrimination on gender, race, religious belief or sexual orientation.

SAFETY



„In Denmark, 84% of people say that they feel safe walking alone at night, much more than the OECD average of 68%. (...) According to the latest OECD data, Denmark's homicide rate is 0.6, one of the lowest rates in the OECD, where the average homicide rate is 3.7.“ (Oecdbetterlifeindex.org, 2019)

EQUAL OPPORTUNITIES



„The Danish health system is tax-funded and free for the patient. Danish schools and universities are also funded by taxes and free for students. The idea is that everyone must contribute to the community and in return, the community will help care for all.“ (Denmark.dk, 2019)

GENDER EQUALITY

Denmark has a high rate of gender equality. It ranks second in the UN development report in the gender inequality index. Parental rights enable women to unite family and job. The income inequality is lower than the OECD average with a Gini coefficient of 0.249 (OECD average 0.315). (Smidova and Klein, 2019)

About 72 % of Danish women have paid jobs outside the home, far above the OECD average of 59 %. (Denmark.dk, 2019)



Hanne Dahl, Denmarks Member of the European Parliament 2009

Denmark.dk. (2019). Associations the Danish way. [online] Available at: <https://denmark.dk/society-and-business/associations> [Accessed 16 Sep. 2019].

Denmark.dk. (2019). Denmark is often cited as one of the world's best countries to live in. [online] Available at: <https://denmark.dk/people-and-culture> [Accessed 16 Sep. 2019].

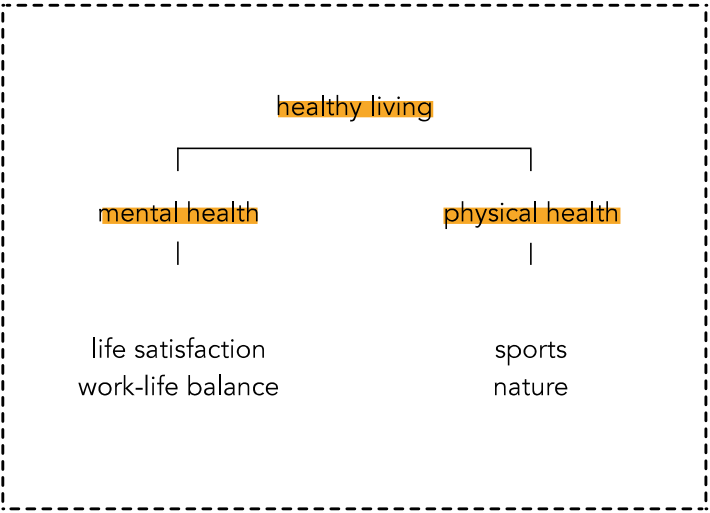
e.V., T. (2019). Corruption Perceptions Index 2018. [online] www.transparency.org/cpi2018 [Accessed 16 Sep. 2019].

Eiu.com. (2019). EIU Democracy Index 2018 - World Democracy Report. [online] Available at: <https://www.eiu.com/topic/democracy-index> [Accessed 16 Sep. 2019].

Oecdbetterlifeindex.org. (2019). OECD Better Life Index. [online] Available at: <http://www.oecdbetterlifeindex.org/topics/safety/> [Accessed 16 Sep. 2019].

Smidova, Z. and Klein, C. (2019). [online] [Oecd.org](https://www.oecd.org/denmark/Inequality-in-Denmark-through-the-looking-glass.pdf). Available at: <https://www.oecd.org/denmark/Inequality-in-Denmark-through-the-looking-glass.pdf> [Accessed 16 Sep. 2019].

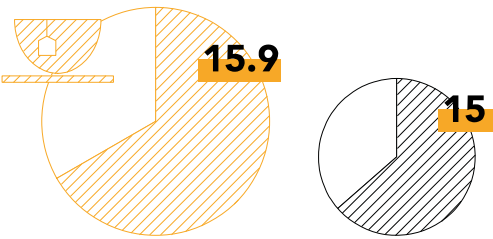
LIFESTYLE



WORK-LIFE BALANCE

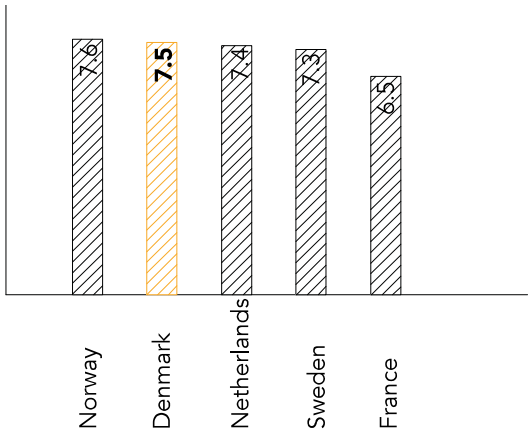


Work-life balance is a core value of Danish society. People devote more time to their free time than the OECD average socializing with friends, family, sports, hobbies and games. The official working hours are 37 hours per week and overtime is usually financially compensated. Also overtime is not well respected. By law there are 5 weeks of vacation each year and the employee gets fully paid on the first day that their child is sick. (Studyindenmark.dk, 2019)



Time devoted for leisure and personal care in a day. (Oecdbetterlifeindex.org, 2019)

LIFE SATISFACTION



Denmark is always under the top performers when it comes to life satisfaction and happiness. This contributes a lot to a mental well-being and a good social climate. At the OECD survey about life satisfaction Danes gave it a 7.6 in average in comparison to 6.5 in OECD average.

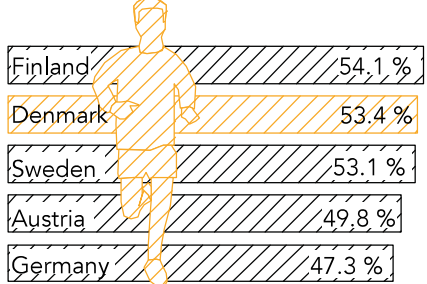
SPORTS

A big part of Danish identity is to be active in sports and outdoor activity. Proximity to nature is important. Exercise is not only important for physical health but also for social cohesiveness and democracy. Being surrounded by sea on three sides Danes are strongly connected to water and with this swimming and sailing. Handball is the Danish passion when it comes to sports. And of course it is a nation of biking.



Danish women's team has won the most olympic gold medals. (International Olympic Committee, 2019)

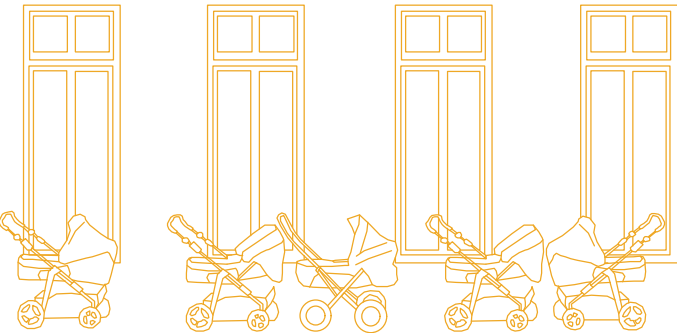
How much do Europeans exercise?



Percentage of people doing physical activities (per country / at least two and a half hours per week) (european-business.com, 2019)

FAMILY-FRIENDLY

Family-friendly lifestyle is an important aspect of Danish society. Both parents are legally allowed to leave work at a reasonable hour to pick up their children. There is a great flexibility for employees when it comes to appointments for their children.



Café window front, Copenhagen

A trustful and equal social environment forms the basis of Danish society. Work-life balance, sports, connection to nature and family are important values.

european-business.com. (2019). 05/2018 - 3. How much do Europeans exercise?. [online] Available at: <https://www.european-business.com/infographics/sport-infographics/052018-3-how-much-do-europeans-exercise/> [Accessed 17 Sep. 2019].

Studyindenmark.dk. (2019). A safe and balanced society. [online] Available at: <https://studyindenmark.dk/why-denmark/quality-of-life-1/a-safe-and-balanced-society> [Accessed 17 Sep. 2019].

International Olympic Committee. (2019). handball women - Olympic Handball. [online] Available at: <https://www.olympic.org/handball/12-team-tournament-women> [Accessed 17 Sep. 2019].

Oecdbetterlifeindex.org. (2019). OECD Better Life Index. [online] Available at: <http://www.oecdbetterlifeindex.org/topics/work-life-balance/> [Accessed 17 Sep. 2019].

Denmark.dk. (2019). Work-life balance. [online] Available at: <https://denmark.dk/society-and-business/work-life-balance> [Accessed 16 Sep. 2019].

HISTORY OF RESISTANCE - CIVIL DISOBEDIENCE

CENTER OF RESISTANCE FIGHTERS IN WW II

“You can take Rome and Paris – but Stalingrad and Istedgade will never surrender.” This statement became the slogan of resistance of Vesterbro against the Nazi Regime. It is firmly cemented in neighbourhood lore and is unfurled on a banner every liberation day. The Stjerne Radio in Vesterbro became the center of freedom fighters against the German occupiers, planning attacks. From the Stjerne Radio the BBC broadcast was played and independent newspapers were launched.

(Murmur.dk, 2019)



Stjerne Radio (Murmur.dk, 2019)

BYGGEREN STREET BATTLES 1980 NORREBRO

Spring 1980 residents of Nørrebro together with the revolutionary left fought violently for sustaining the “vores allesammens byggelegeplads” (our everyone’s construction playground) - the BYGGEREN, close to the Blågård’s Plads. In the late 1970s the social-democratic government dictated an urban renewal program, which contain the demolition of many old houses and construction of new concrete ensembles. Many low income working class families and students were pushed out of the neighbourhood. The massive dissatisfaction and numerous clashes with the authorities resulted in the street fights at the BYGGEREN from April to May 1980.

(autonom infoservice, 2019)



REBELS TRANFORMED DRUG POLICY

It all started with an idea of Michael Lodberg Olsen to help and secure drug addicts. Back then the state and city council maintained that safe injection room wasn’t legal. 2008 he started a project where drug addicts could get healthy food and safely inject in the toilets. With this less drug addicts lingered on the streets and the police was happy but the authorities stuck to their opinions and shut down the institution after 18 months. Olsen then built up a group of volunteers and started the “Fixelancen”, an old ambulance that was converted into Denmark’s first safe injection facility. After success and positive experiences fixing rooms opened in Vesterbro.

(Murmur.dk, 2019)



Michael Lodberg Olsen in front of the car (Murmur.dk, 2019)

OTTO KRABBES PLADS

Similar to the area of BYGGEREN the city administration cleaned out the square, where previously have been one storey high sheds and it was a dark and hard to observe. The planners decided to design the space with only gravel, stone and brick and some trees. The residents on the other hand wanted more urban green. They rolled out precut grass and a longer process of conflicts between the residents and the administration started. The administration took away the grass every time the inhabitants rolled it out. But in the end the Kommune followed the population’s wishes.

(Interview with 63 years old woman)



Active participation and showing commitment for the own values and wishes are common practices.

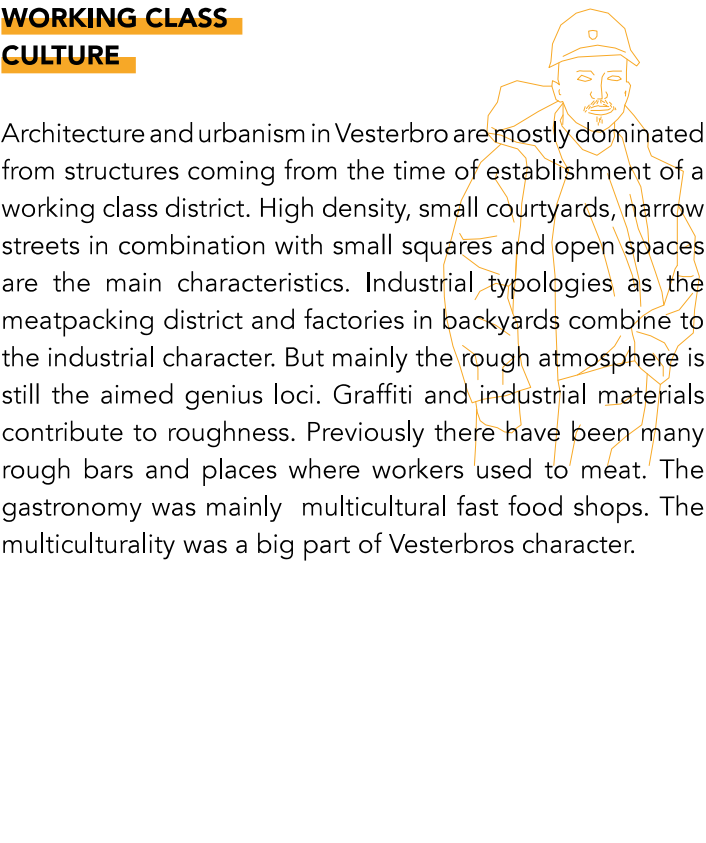
Murmur.dk. (2019). Murmur » Vesterbro, the rebel. [online] Available at: <http://murmur.dk/vesterbro-the-rebel/> [Accessed 25 Sep. 2019].

autonom infoservice. (2019). SLAGET OM BYGGEREN april / maj 1980. [online] Available at: <https://www.autonominfoservice.net/2010/04/24/slaget-om-byggeren-for-30-%C3%A5r-siden/> [Accessed 25 Sep. 2019].



WORKING CLASS CULTURE

Architecture and urbanism in Vesterbro are mostly dominated from structures coming from the time of establishment of a working class district. High density, small courtyards, narrow streets in combination with small squares and open spaces are the main characteristics. Industrial typologies as the meatpacking district and factories in backyards combine to the industrial character. But mainly the rough atmosphere is still the aimed genius loci. Graffiti and industrial materials contribute to roughness. Previously there have been many rough bars and places where workers used to meet. The gastronomy was mainly multicultural fast food shops. The multiculturalism was a big part of Vesterbros character.



raster analysis, western Vesterbro



raster analysis, Indre Vesterbro

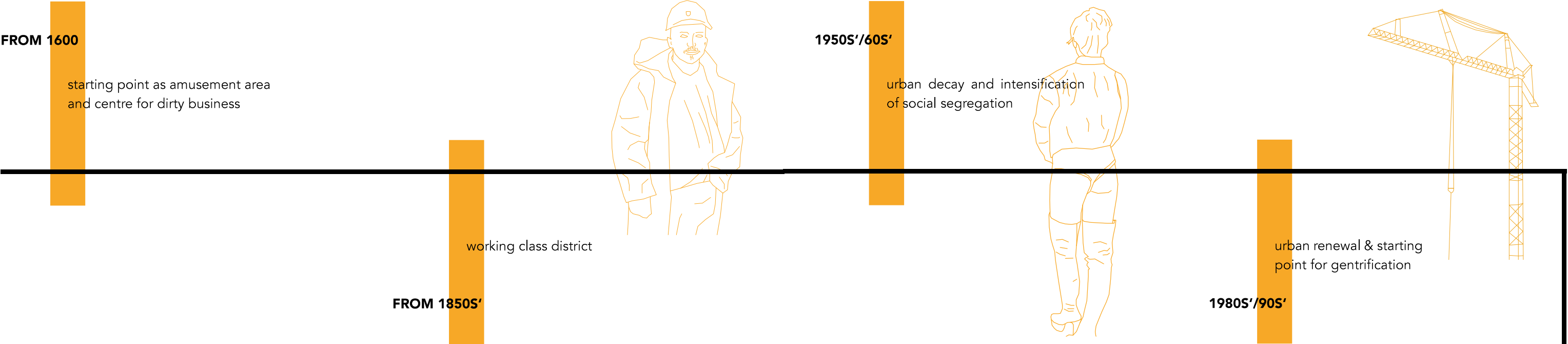
HIPSTER CULTURE / GENTRIFICATION

Many former rough areas developed into gentrified areas. Vesterbro is comparable with Williamsburg (NYC) or Kreuzberg (Berlin). The industrial charme is a wanted feature but end up mostly as purely aesthetic. Former industrial buildings get reused for Cafés and Galleries. Around the district new restaurants and bars are opening with special styles as Jazz Bars. New shops and restaurants are mostly high priced. Bicycles and strollers are often seen along the facades. Families with small kids shape the public spaces. Old worker style bars first mix up with new users and then get completely transformed. But this culture is also closely related to consumerism, which may emerge the necessity of an open public space for everyone.



Gentrification and social inequality and missing social interactions are one of the biggest social problems of the area.

HISTORICAL MILIEU DEVELOPMENT

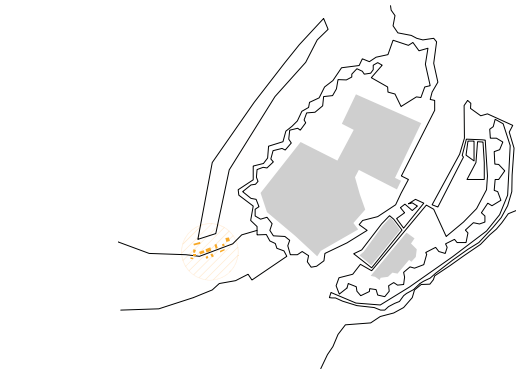


From 1600 the small area outside the western city walls along Vesterbrogade, heading towards the royal castle in Frederiksberg, developed into a sprawling amusement area with public houses, dance halls, theatres but also became the centre of dirty business of Copenhagen.
(Larsen and Hansen, 2008)

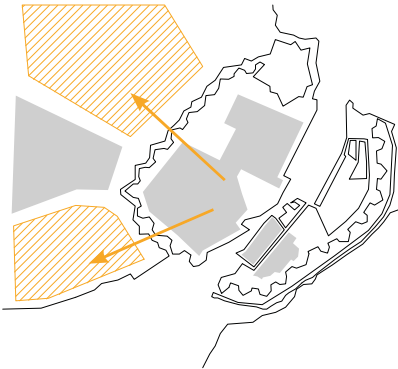
With the economic upturn in the 1840s' the inner city population of Copenhagen grew and the administration decided to open the areas around the city for new developments. Vesterbro as well as other districts (e.g. Nørrebro) were developed by private speculators for rental housing for the growing working class population and industry.
(Larsen and Hansen, 2008)

With the economical boom of the 50s' and 60s', the people that could afford it moved out to the suburbs and left Vesterbro. The district was increasingly associated with urban decay and high proportion of marginalized social groups. It was determined by high rates of unemployment, immigrants and social insecurity. It became the centre of prostitution and drug trafficking in Copenhagen.
(Larsen and Hansen, 2008)

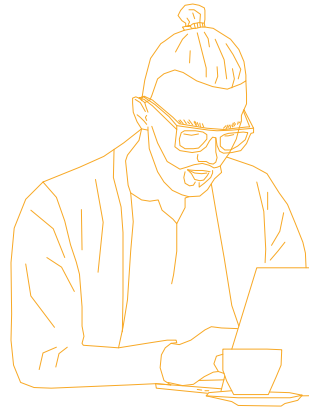
Vesterbro became field of action in the government development plans during the 80s'. In contrast to Nørrebro the renewal should incorporate mostly renovation instead of demolition and redevelopment. The government purposely planned on changing the social composition. With rising rents many poor people had to leave to areas as Sydhavnen. More and more students and artists settled down.
(Larsen and Hansen, 2008)



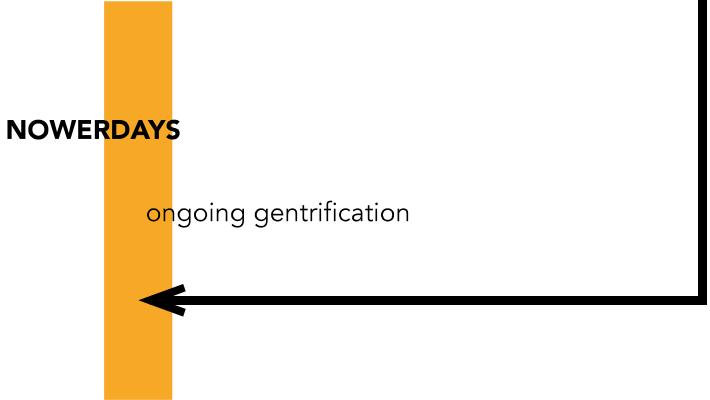
Copenhagen 1779, abstracted map



Copenhagen 1910, abstracted map



With the rising attractiveness of the central district, families, higher educated, younger and richer people settled here. Vesterbro became the centre of 'hipster' culture. The old character gets mostly vanished by new facilities and inhabitants structure.



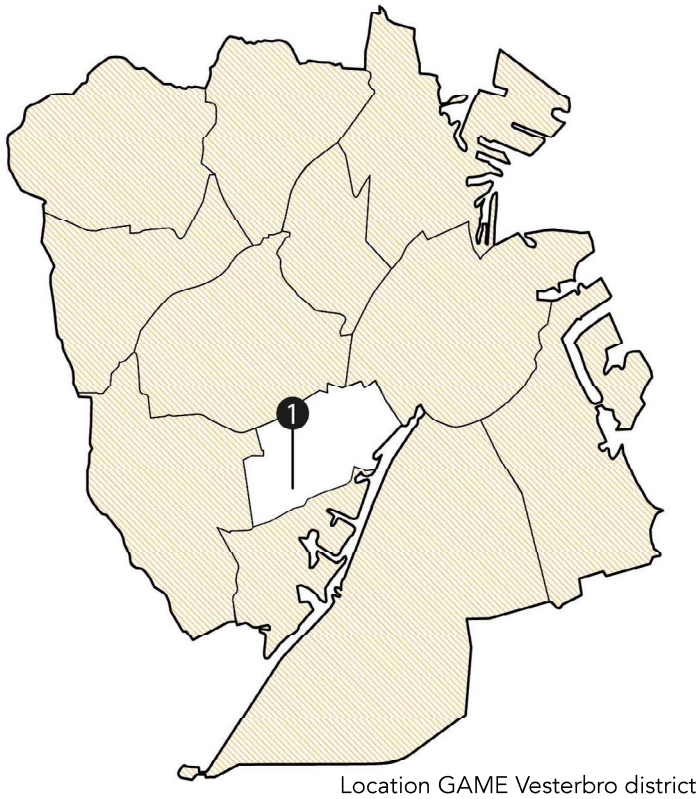
Larsen, H. and Hansen, A. (2008). Gentrification Gentle or Traumatic? Urban Renewal Policies and Socioeconomic Transformations in Copenhagen. Urban Studies Journal Limited, pp.2434-2437.

GAME

Programm: sports
Year of completion: 2010
Location: Vesterbro

MOTIVATION OF INITIATORS

Since 2002, the three founders of GAME, recognized a disturbing development of social exclusion and lack of sport facilities in 'poor' neighbourhoods in Copenhagen. The local youth were hanging on the streets causing social disturbance. GAME started to establish a network, based on voluntary activity, in order to organize sports event. At first these events were outdoors on the local soccer field in less advanced neighbourhoods. On one hand they aimed to facilitate the local youth with the possibility to have access to sport facility and on the other hand to fill the gap of cultural differences and creating lasting social change via sports. The organization educate volunteers who can train participants. In 2008 the municipality took part of the organization and provided funding for an actual building so youth could play sport despite poor weather conditions. The organization expended to other Danish cities as Aalborg, Frederiksberg, Viborg and Esbjerg with new buildings and sport zones.



Interior , Game Streetmekka (2019)

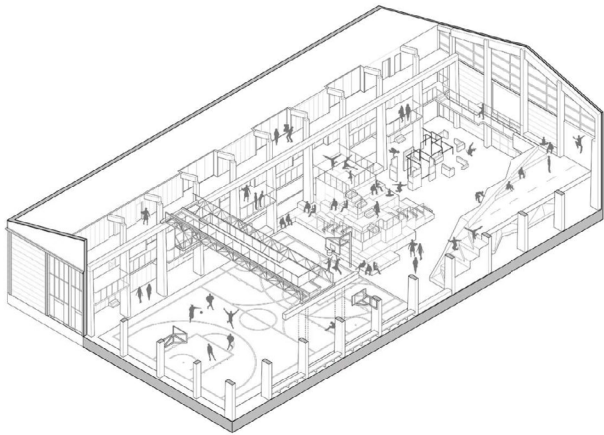


Front facade, Game Streetmekka(2019)

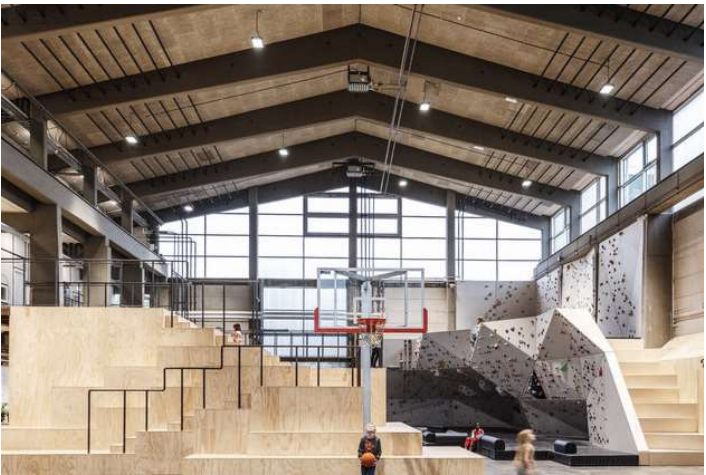
PROGRAM AND MATERIAL

An old vacant railway building, located in Vesterbro, was found appropriate for the aimed sports activities. The building has an area 2200 m2 including an indoor basketball field, a dance hall, a soccer field and some multifunctional rooms. With an indoor space available, GAME organizes every day of the week sport lessons and competitions. After the successful transformation in Copenhagen, GAME extended with new buildings. The buildings work as a large open space where different sport games act simultaneously and independent from each other. In the three cases, the open grid structure of the existing building offered the quality of flexibility considering the organization of the program.

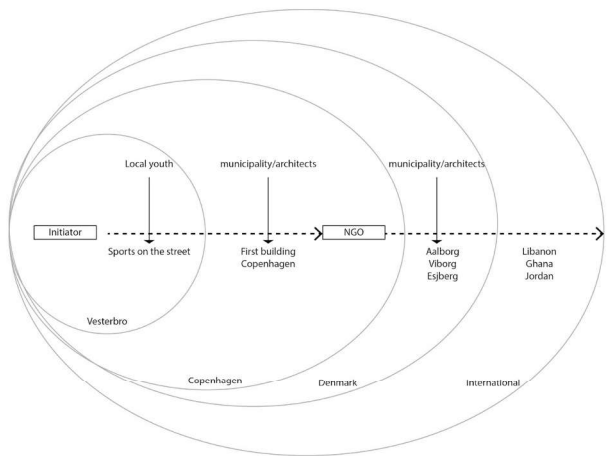
Game, 2019. Game Streetmekka. [Online]
Available at: <http://gamedenmark.org/en/game-zones/copenhagen/>
[Geopend 26 September 2019].



axonometry , Game Streetmekka(2019)



Interior , Game Streetmekka(2019)



Process diagram of development GAME organisation



expansions of the concept



expansions of the concept

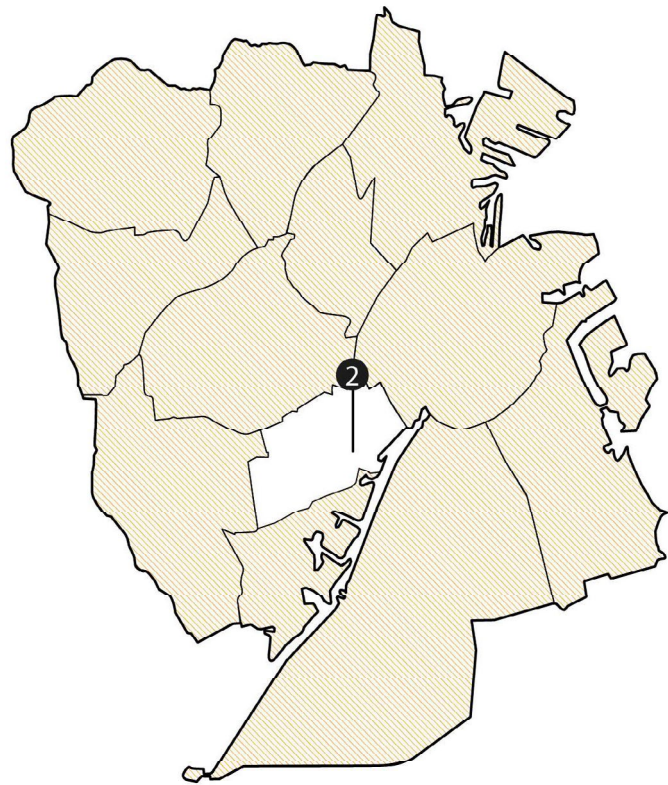
ABSALON

Programm: cafe, dinning, working, leisure
Year of completion: 2015
Location: Vesterbro

ABSALON, VESTERBRO

In 2013, the municipality of Copenhagen decided to close down six churches, since there wasn't enough budget to maintain the unused buildings. A businessman, named Lennart Lajboschitz, acquired one of the churches with the intention to transform the church into a new community house. According Lajboschitz, it is necessary to create a more social focused society, which currently is taken over by technology and phones. This at the expense of real social interaction between people.

The space of the church is designed as a large 'Livingroom' where local citizens can walk in at every moment of the day (as been tested during the excursing). In the old church saloon functions nowadays as the central space of the community house, where on daily basis communal dinners are organized. In order to attend these dinners, everyone can sign up for a dinner in the afternoon and attend in the evening. Furthermore, the space is filled with tables, table tennis, games, workspaces, books and films. The events are not only focused on the youth target groups, but also elderly and grown-ups.

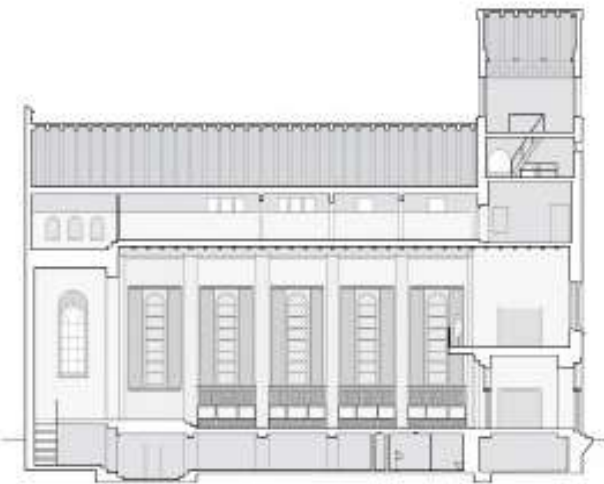


Exterior, Siggings, L. (2019)



PROGRAM AND MATERIAL

The church itself did not undergo a lot of spatial transformations, but interventions where primary about changing the atmosphere. Most of the brick walls were colored with bright colors to identify the character of the space and simultaneously create a contrast between the formality of the old church and the spontaneity of the future function. In the upper level of the church are more intimate spaces situated, overlook the main gather space of the church. The upper level contains smaller spaces for yoga classes, dance classes and talk sessions.



Section , Siggings, L. (2019)

Stoll, S., 2017. In Copenhagen, a "People's Park" Design Includes Dark Corners. [Online]
Available at: <https://nextcity.org/features/view/copenhagen-park-design-includes-dark-corners1>
[Accessed 15 September 2019].



First floor, Siggings, L. (2019)



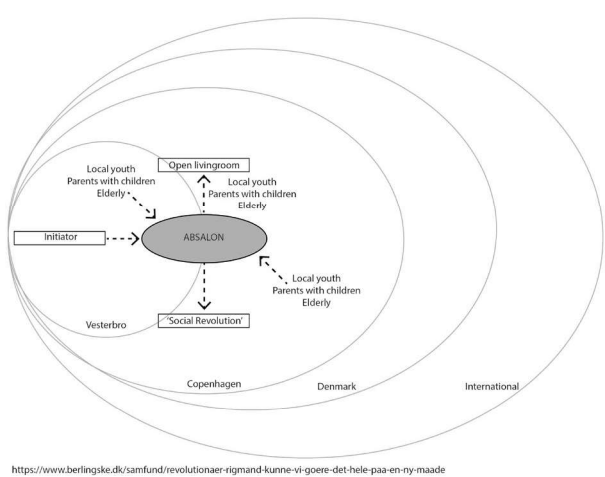
Coloured walls, Siggings, L. (2019)



Main space, Siggings, L. (2019)



Main space, Siggings, L. (2019)



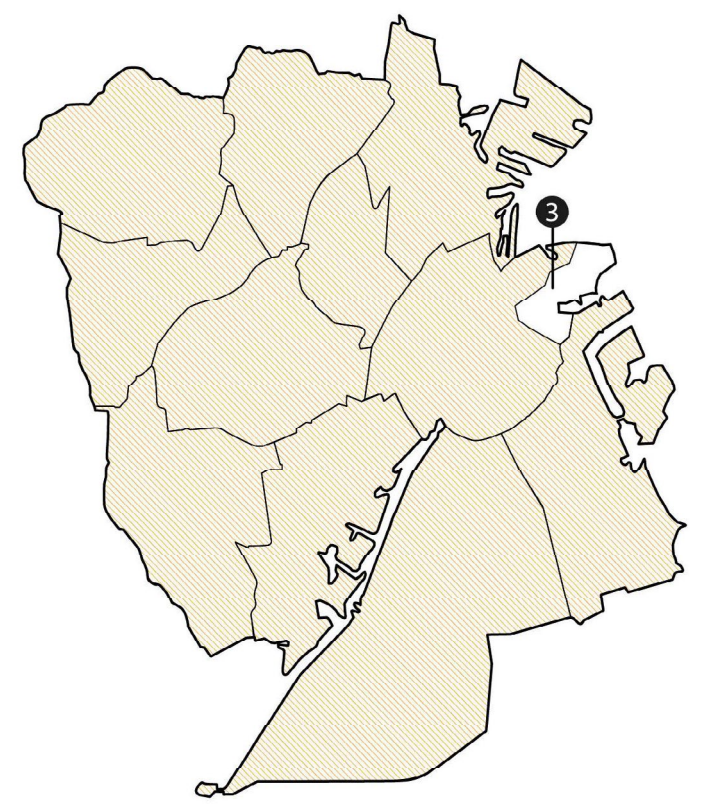
CPH VILLAGE

Programm: Student housing, public space, cafe/leisure
Year of completion: 2018
Location: Holmen

Since the last decade, students of Copenhagen experienced a rising pressure on affordable student housing accommodation within the city centre. A group of student together formed an initiative called 'CPH Village'. In order to test their fertility as a new organisation, they conducted an experiment to build small public elements with limited resources. After a successful endeavour CPH up-scaled their operation by reusing old container units to design a student house. The central aim of CPH is to 'co-create' and design your own environment, resulting in a sustainable community that provides affordable student housing.

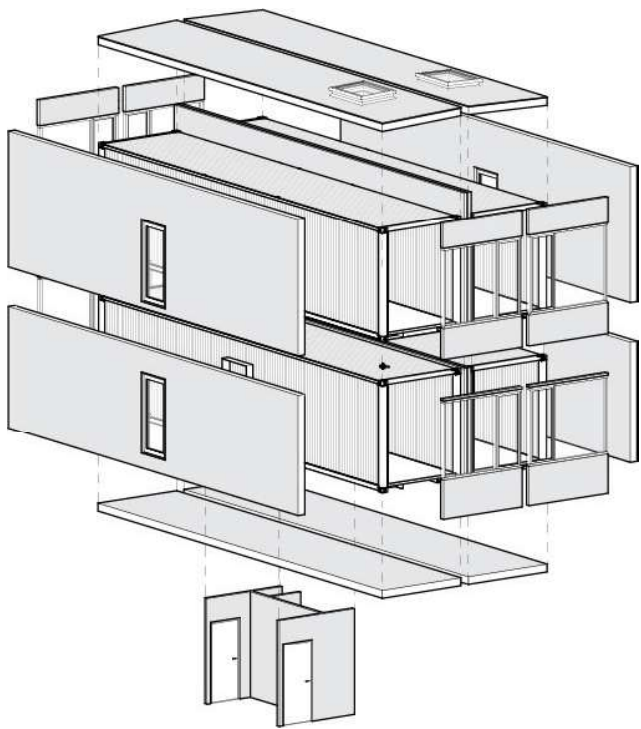
Thereafter, CPH approached an architectural design firm to establish a design for the actual new community in the neighbourhood of Holmen, an old neglected harbour area north-east of Copenhagen.

The vision of CHP encompasses a masterplan that extents to all over Copenhagen with newly planned accommodations in the old brownfields nearby Vesterbro. Eventually, they aim for the development of a housing program that consist out of 2.500 newly built student houses.



The architect proposed two rows of containers overseeing the river with public space in the middle of the lane. The lane is closed with a public accessible gathering space with a bar and meeting spaces. The student can arrange several activities and collective moments within the building. In order to provide the buildings with flexibility and movability, since the site is a temporal location, the blocks were modular constructed units. One block consist out of a reused container wrapped in an insulation layer and a basic metal façade, all constructed with demountable bolts and junctions.

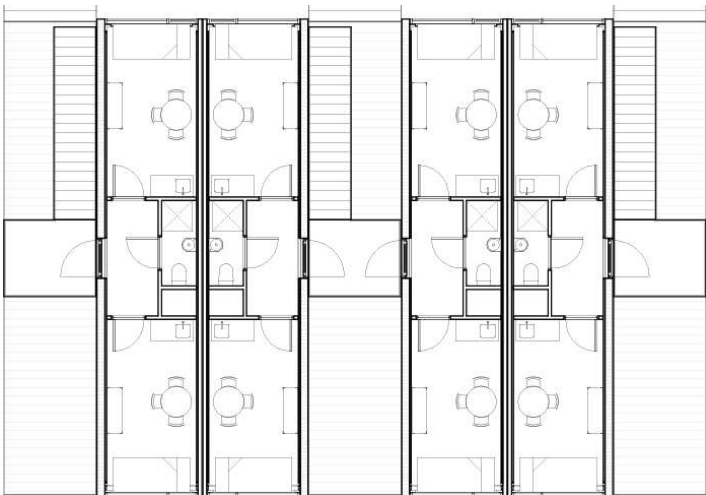
Village, C., 2019. CPH Village. [Online]
Available at: <https://cphvillage.com/>
[Accessed 15 September 2019].



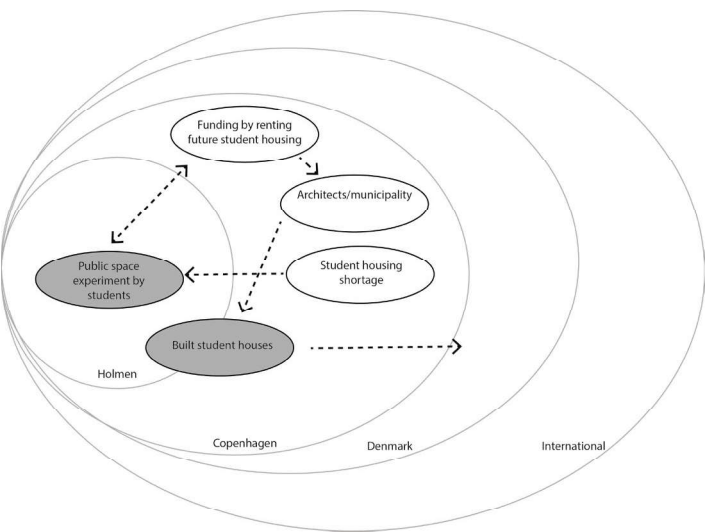
Axometry, CPH Village (2019)



Courtyard view, CPH Village (2019)



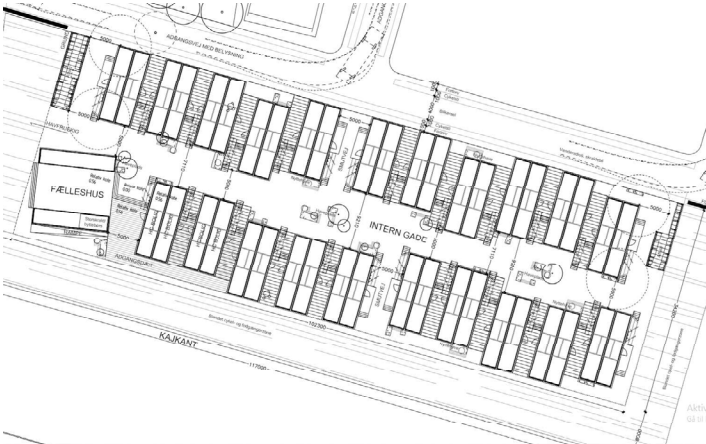
Floorplan unit, CPH Village (2019)



Gathering space, CPH Village (2019)



Future plan, CPH Village (2019)

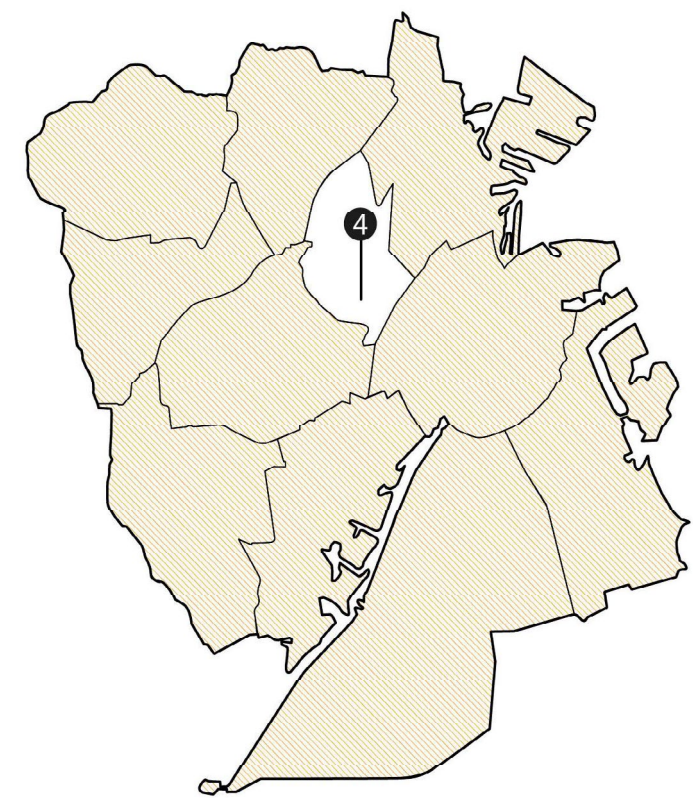


Urban floorplan, CPH Village (2019)

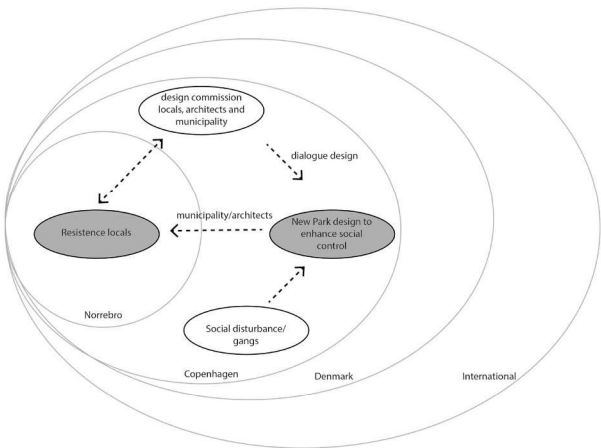
FOLKETS PARK

Program: Park design, public space
Year of completion: 2008
Location: Nørrebro

In the 1970's, Nørrebro was one the most densely populated neighbourhoods of Copenhagen, mostly inhabited by the working-class living in small apartments. In the same period, and old factory burned down, leaving empty spaces around the park, the residents took over these lots. The vacant factory next to the empty plot was occupied and turned into a community center, intended for music events, debates, parties and theatre. The municipality tried to clear out the occupied building and demolish the building for the new use of a parking lot. The locals wanted to maintain the park and due long standing resistance of the residents, the municipality decided to permit the function change. In the following decades, the neighbourhood experienced a change from the white-Danish working class to a mixture immigrants and refugees and more criminal gang were present. For a long period of time was the Fulkets Park and Huset, located in Nørrebro, a place where criminal activity.



Fulkets house park Stoll, S.(2017)

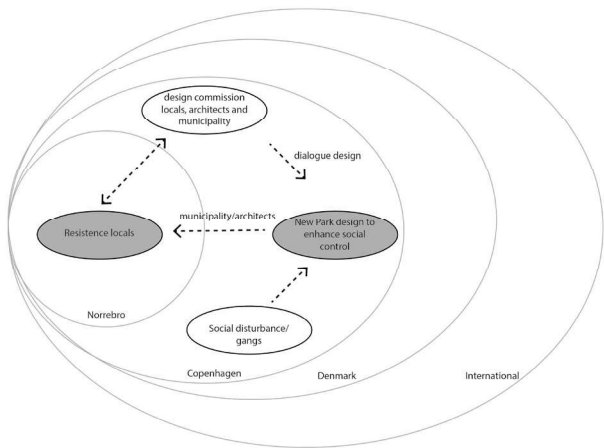
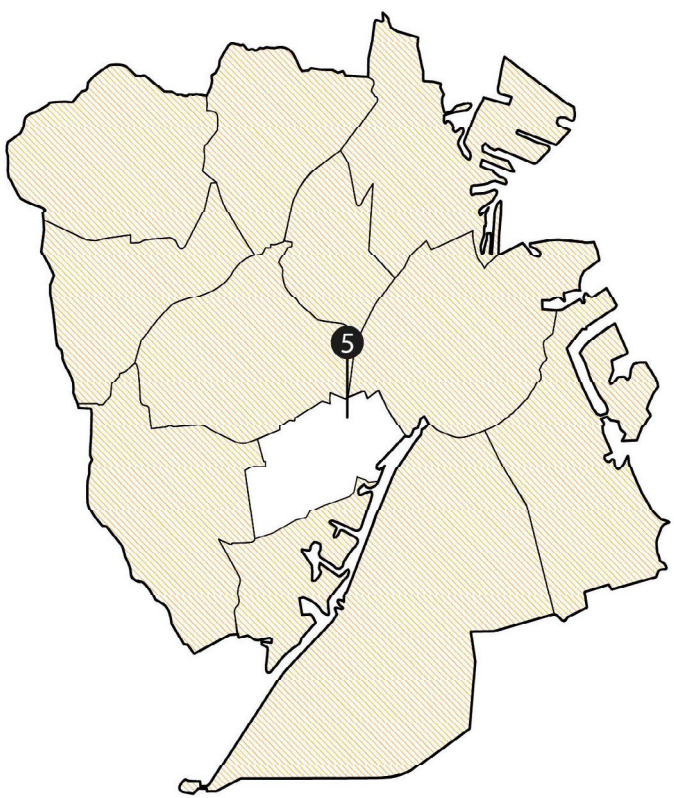


View at night Stoll, S.(2017)

UMDOMGARD

Program: Community house
Year of completion: 2008
Location: Vesterbro

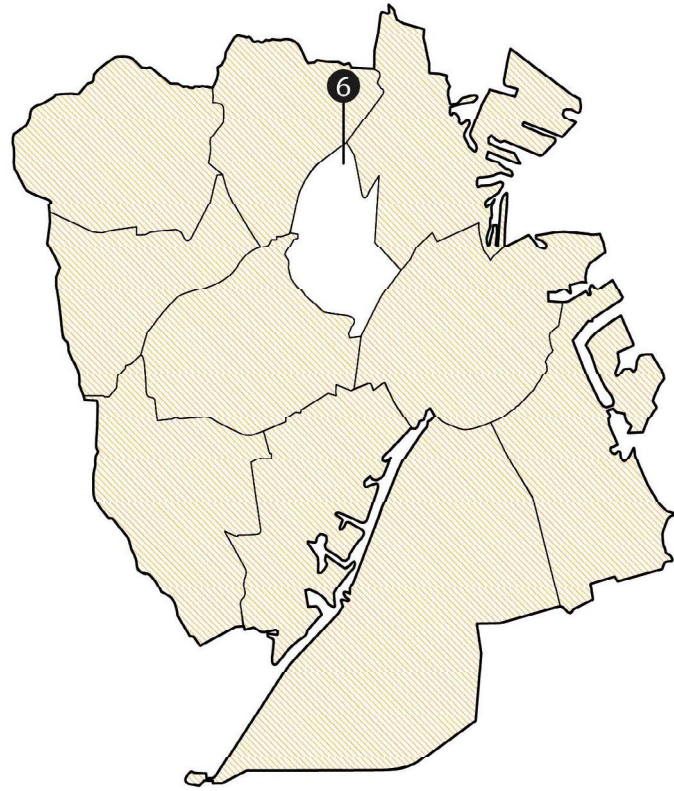
Vesterbro Ungdomgard is youth centre that focuses on after school activities. The organisations offers sport games, design activities, music lessons, sing classes, gaming and food workshops. Ungdomgards operates daily to offer each day of week day care and organise weekend trips. The vision encompasses the stimulation of local communities being formed in an early phase in children's youth. Thereby, is it important to forge connection with other people besides the ones in the classroom or immediate environment. The club is established in 1958, during the period Vesterbro was still a working class district. The youth club acted as an escape from the daily conditions where the youth could temporally forget the daily circumstances. In 2005 the club extended with an addition new building. The new building is a simple barn shaped volume formed by a wooded structure, so an open floorplan could be created. The open space is used as a theatre, a performance space and a sport hall. Currently, the youth club hosts approximately 1000 children between the age of 10 and 18 years old of which 300 permanently are subscribed to their daily activities.



OSTERGRO

Program: Roof garden
Year of completion: 2008
Location: Nørrebro

In 2014, two citizens of the neighbourhood Nørrebro launched 'Ostergro', a small rooftop garden of approximately 600 m². The garden is located at the top of an old car auction building and the whole roof is now covered with soil. According to the initiators, the aim of the small community is to create awareness about farming processes. The process of farming is alienated from an average city dweller who lacks knowledge about basic farming. They recognize the inability of urban agriculture to suffice to the economic feasibility and become self-food-sufficient. Instead, they see the community as a process of learning and thereby merging the country site more into the city. By farming, a process of celebrating cultivation is started, and more awareness of sustainability becomes more visible on a neighbourhood scale. Another aim of the initiative is to break down social barriers through urban agriculture. According to Golden (2013), urban agriculture can improve social cohesion through this medium. The urban farming concept offers besides basic farming skills also several workshops and communal dining's.



1. social cohesion: groups in Vesterbro tend to stay in their circles. Social cohesion can be improved by creating meeting space between different people that wouldn't meet other ways.

ELDERLY - KIDS | GENTRIFIER - ORIGINAL INHABITANTS | INHABITANTS - VISITORS

2. gentrification: offer a non-profit or social economy space that everyone can afford going to. Inclusiveness of all income classes has to be dealt with. This could be free-time activities for kids and adults.

3. elderly: until now elderly sort of get forgotten in the public space of Copenhagen. The new public condenser can work for their social interaction and against loneliness.

4. society: include main Danish society goals of equality, family-friendly, outdoor- and sports culture. This can be included by indoor sport facilities, family space and indoor playing activity for kids and a design that is related to natural elements.

5. bottom-up: keep in mind that there are active inhabitants that are willing to engage.

6. wishes of inhabitants: more greenery, more indoor activities for kids, a place for youth and elderly, indoor sport facilities (handball, football), adult activity (music venue)

CITY

CONNECTION

PEOPLE

POWER

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POWER

- Politics
- Economy
- Culture

1711-1712

Copenhagen was haunted by bubonic plague from which nearly one-third of the population had died

1728

Several destructive fires destroyed the city

1748

Opening of the Royal Danish Theatre at Kongens Nytorv



1750s
The Royal Copenhagen shooting society built the shooting range in Vesterbro

1746

King Frederik V reigned and planned the Frederiksstad

1801-1807

The naval battle of Copenhagen against England

1813

Denmark went bankrupt and ceded Norway to Sweden

1830-1840

The city expanded beyond the ramparts into new districts as Vesterbro - Nørrebro and Østerbro.



1847

The first railway station was built

J.C. Jacobsen founded the Carlsberg brewery in the west of Vesterbro

1857

Western city gate was demolished

1882

FLSmidth cement company was established



1883

The oldest meatpacking district (Den brune Kødby) started to develop

1912

A.P. Møller Steamship company was established

1911

The present central station was completed

1934

The meatpacking district expanded with the White Area (Den hvide Kødby)

1944

Residents took part in a strike to resist German occupation in WWII

1949

City acquired the land property after the shooting society moved out.

1969

The slum clearance law (Saneringsloven) was enacted

1988

City West Plan was scrapped

1993

The planning of "Ørestad"



2000

Øresund bridge opened to traffic



1853

The Bing & Grøndahl porcelain factory opened



1887

A screen wall was built to shield traffic on Istedgade from stray bullets

1849

Denmark became a constitutional monarchy

1892

The first power plant was built in Copenhagen



1950s

The museum of Copenhagen moved into the former building of shooting society

1991

Urban renewal of Vesterbro

1947

The Finger Plan of Copenhagen was firstly introduced

1930s

Vester office complex and Hotel Astoria were built

2019

The museum of Copenhagen moved out to new location

2005-2019

City Circle Line (M3) under construction

2000s

The meatpacking district transformed to creative cultural district

CONCLUSION

SYSTEM

In a way the top-down is chosen by the bottom-up. The political system can be chosen by the people by voting for various parties. How the country is ruled is done by making political standings where people can vote for, after the process of forming a coalition laws and policies can be made. In the process of forming a coalition the Queen of Denmark is involved. She appoints Royal Investigators, who search for a possible coalition, and if this is approved the government will be appointed by the Queen. The government is responsible, besides power, for the state's budgets and approving the state's account.

POSITION

In general the parties of Denmark are mostly left-winged even though the right-winged party Venstre had the most years of prevailing the country. However, the situation is quite different in the district of Vesterbro. The left-winged parties dominate the elections' result in this area, creating a gap between the left- and right-winged parties. The difference in these elections shows the difference between the public opinion of residents in Vesterbro versus the rest of Copenhagen.

NATIONAL POLICY

In the Danmarks Hovedstad document is noted that the government wants the capital to be good and attractive to live life, work throughout the country and to do business everywhere. The political system and top down policies have influence on the economical system of the country and at the same time on the high culture of the country. By creating more opportunities for economic changes, economics can grow which makes the country grow as well. The policy for growth of knowledge will have influence on high culture, as for universities will expand their knowledge even more.

GENTRIFICATION

In the 1960's the working class moved, due to economic growth, from vesterbro to the suburbs. Because of this an increasing number of unemployed people moved into Vesterbro. This led up to a degeneration of Vesterbro by the 1990's. This led to the start of the gentrification of Copenhagen and Vesterbro in 1990. Some material manifestations focused on high culture were built in Copenhagen. Also the municipality renovated inner Vesterbro. Because of this the unemployed and the poorer

class was forced to move out of Vesterbro. Because of this 'impuls' in Copenhagen and Vesterbro the more wealthy class, also from abroad, inhabited Vesterbro from 1990 up to 2010.

POLICIES

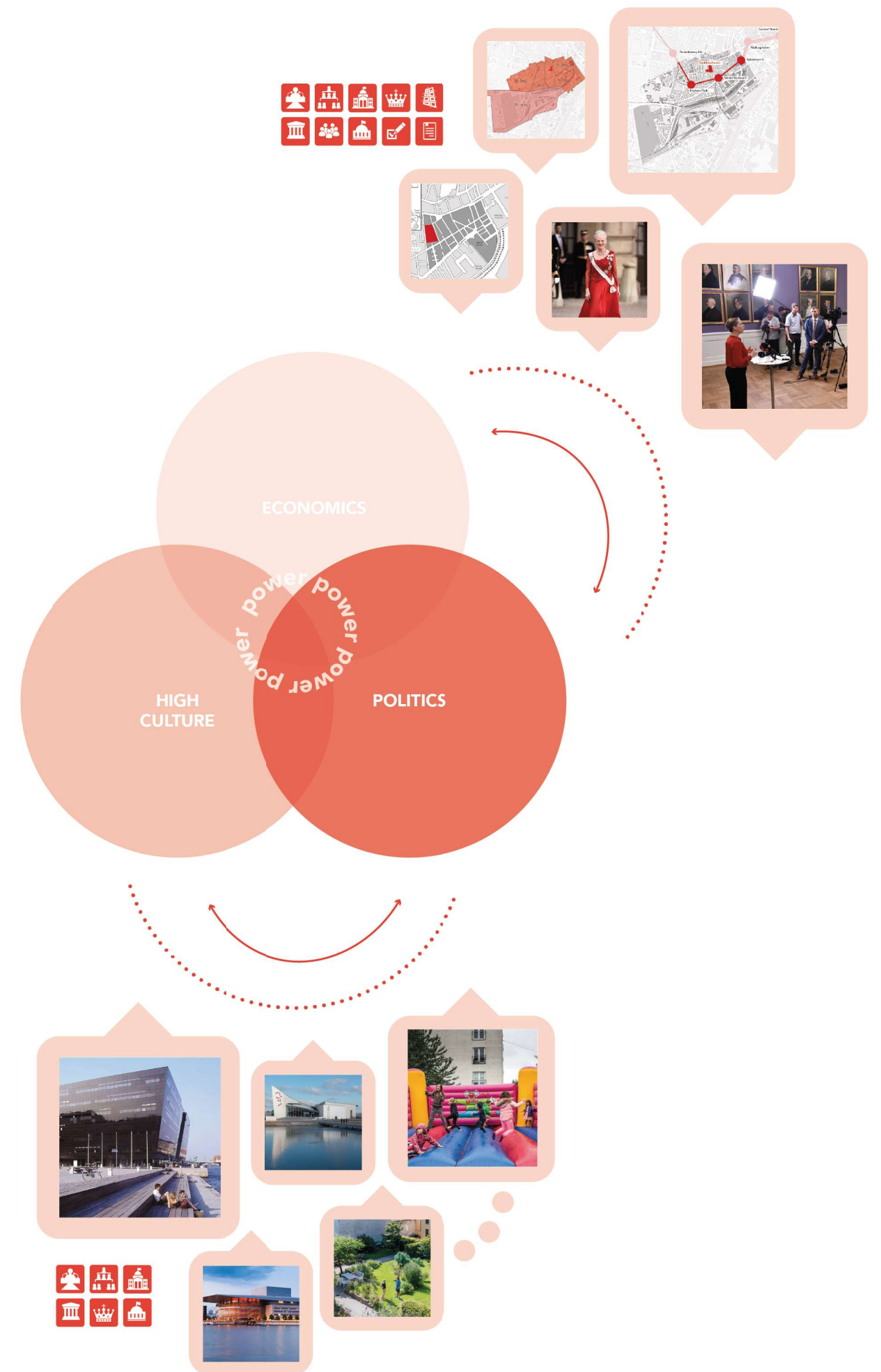
Overall the policies in Copenhagen are general for the entire city but are quite concrete in their ambitions and goals. These first real policies started since 1990 when Copenhagen decided that things had to change. Since 2007 after the impulse in the living conditions of the inhabitants of Copenhagen since the 1990's the focus shifted towards the livability of the city. This resulted in that Copenhagen would be the Eco-Metropolis by 2015. The main focus points were on the health of the inhabitants with a reduction of noise and cleaner air. In 2012 the municipality constructed an even more ambitious sustainability programme where they formulated that Copenhagen has to be carbon neutral by 2025. An in between milestone was formulated for 2015 that 20% less CO2 would be emitted than in 2005. They achieved this goal royally with a decrease in CO2 emissions of 31% in 2014.

In 2015 the Municipal plan addressed the lack of social housing in certain districts. Vesterbro is one of them with less than 20% of social housing in 4 of the 5 school districts. Upcoming years until 2025 70% of social housing constructed will be in school districts with less than 20% social housing.

Every year with support from the municipality, 7 to 8 backyards are transformed from a gray and cramped backyard into a green oasis of flowers, trees, life and community in Copenhagen.

URBAN PLANNING

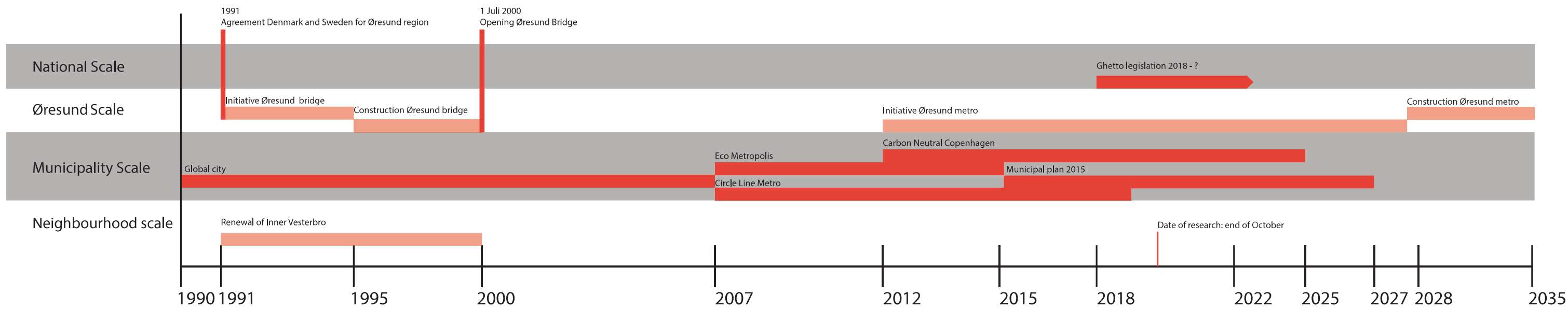
The most recent big impulse in Copenhagen regarding urban planning are the Circle line Metro. Which will cover most of the municipality of Copenhagen. This metro line also introduces two new metro stations in Vesterbro and three stations in the near proximity of Skydebanehaven. The Metro line opened on the 30th of september 2019. Another big ambitious project is the development of the first international metro line in the world connecting Copenhagen to Malmö. This will increase the capacity of Oresund commuters as well as decreasing the travel time between the two big cities Copenhagen and Malmö. For example the travel time from Vesterbro to Malmö will reduce from 45 - 60 minutes to less than 30 minutes.



OVERVIEW POLICIES

Since 1990 the municipality has undergone many actions to improve the city of Copenhagen. They started a cooperation with Sweden to form the Øresund region. Since then the city had improved greatly until 2010. Once living standars were up to a high level the municipality shifted their focus on sutainability and health. They acknowledge the problems facing climate change and sees the damage dirty air does to the population. Also they acknowledge the effect gentrification has had on the city and form policies to counteract this effect. With a policy to create a more coherent city by realising social housing in districts that now lack social housing. The ghetto legislation is also such a policy but has a more drastic approach to focus on troubled areas and actually making difference in policy if you live in these areas or not.

Overall the policies for Copenhagen have the trend towards more centralisation for the whole city and Øresund region. The challenges are desribed and goals are formulated and mostly quantifiable. This assures that afterwards goals can be reflected if they have been achieved or not.



Policies of influence on Copenhagen and Vestebro since 1990.
Igor de Kuijer

DANMARKS HOVEDSTAD (COALITION AGREEMENT FOR THE CAPITAL FOR 2030)

The government wants the capital to be good and attractive to live life, work throughout the country and to do business everywhere. Thus the city must have a good framework for creating growth and development for the benefit of Denmark.

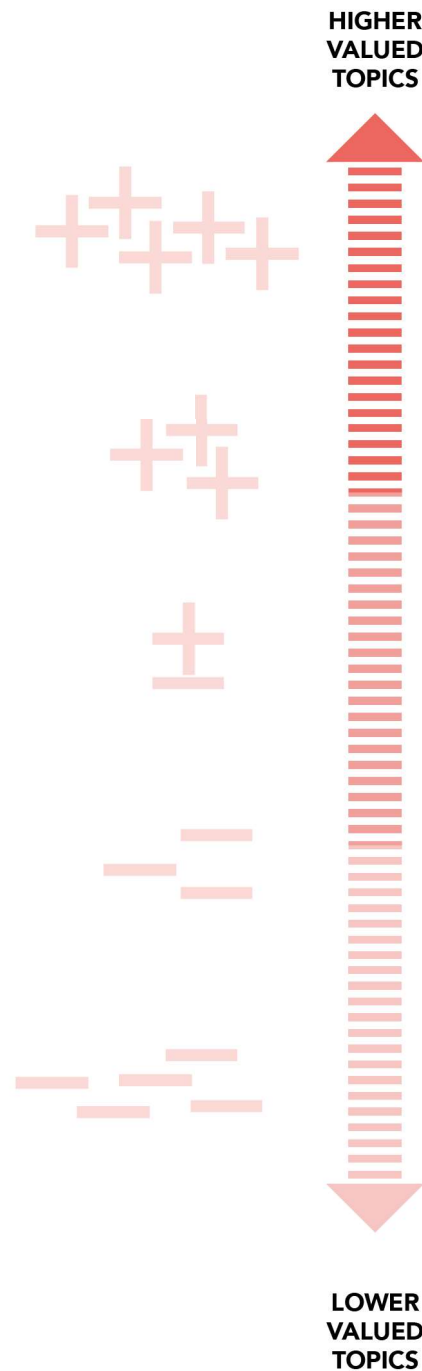
The key challenges that the government wants to work on are:

1. How do we create space for 200.000 more citizens of the metropolitan area in 2030, and where then we ensure a balance between supply and after question of housing?
2. How do we handle that more citizens and greater business activity leads to increased congestion in the metropolitan area?
3. How do we create international competition skilled environment for companies and knowledge institutions so that the capital can continue to be one of the most attractive metropolitan cities of Northern Europe at investing and doing business in?
4. How do we maintain the capital as one of the most active, attractive and green heads cities in Northern Europe that provide high quality of life to the citizens and entertaining the many visitors?

The vision is that the capital must be one of the best big cities in the North of Europe to live life, work and do business in.

The plans will be combined with the Finger plan. Which allows 34 municipalities in the capital to grow in a way that green and environmental considerations go hand in hand with development of business, housing and transport.

The four topics of 'Room for everyone', 'Growth, knowledge and companies', 'Smart and efficient mobility' and 'Active, living and green capital' is what the government wants to achieve for the capital by 2030. (Regeringen, 2019a) (Regeringen, 2019b)



ROOM FOR EVERYONE

- **Several homes in the central part of the capital**
- Establishment of a new district, Lynetteholmen, between Nordhavn and Refshaleøen
- Urban development opportunities on Northeastern through the division of the business area.
- Development of Ørestad Common Quarter
- Development of Nyholm
- Working Group for Multiple Student Housing
- **Urban development throughout the metropolitan area**
- New urban development opportunities throughout metropolitan area through a revision of finger plan
- New urban development opportunities around Roskilde Airport
- Service Check of Terms of Use for transport corridors
- New opportunity's to move allotment areas

GROWTH, KNOWLEDGE AND COMPANIES

- **Competitive conditions for growth and knowledge**
- Follow-up on government proposals growth teams
- New partnership on the common European research facility European Spallation Source (ESS)
- Establishing a metropolitan forum with focus on smart city solutions and developing new business models
- Strengthening the research environments by extra grants to IT University and Copenhagen Business School
- Attracting foreign scientists
- Good and fast mobile and broadband coverage in main city such as 5G
- **Better business climate**
- New business areas in Køge, Roskilde, Frederikssund, Hillerød, Helsingør and Taastrup
- Better opportunity for business development in three areas outside the centre city
- New areas for transport and logistics business in Vassingerød and Greve
- More efficient busses as an alternative to the car
- Experiments with new business areas at high-class BRT
- Streamlined and efficient reception of foreign labor (ICS)
- Cooperation with the municipalities for better business climate in the capital
- Abolition of the Shutting Act
- Extension of Avedøre Holme

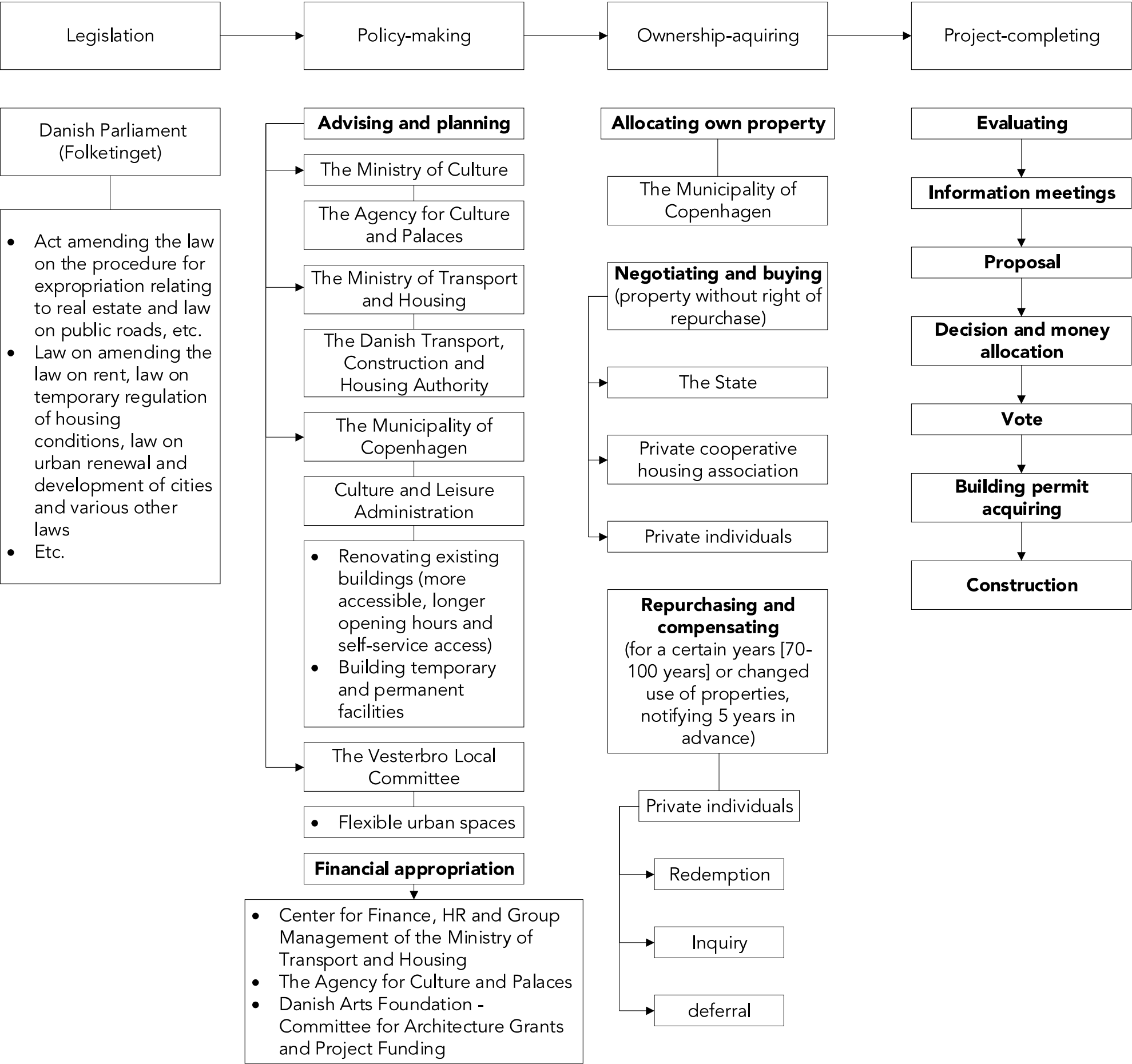
SMART AND EFFICIENT MOBILITY

- **More space on the roads**
- Eastern Ring Road (harbor tunnel) between Nordhavn and Amager
- Studies on increased capacity on and between Motor Ring 3 and Ring 4
- Initiation of planning the 5 corridors (construction of highway in the south and restriction of corridor in the north)
- Investigation of the expansion of the Amager motorway and the Øresund motorway
- Traffic congestion restriction and coordination of traffic signals
- Updated EIA Survey of Frederikssund motorway
- Presentation of overall infrastructure plan
- **Increased public transport capacity**
- Extension of the metro to Lynetteholmen
- Automation of Railroad Operation
- The capital as the test area for open data challenge for future mobility solutions
- **New organization of public transport in the capital**
- Strengthened public transport organization in the capital through the establishment of a new, joint and strong transport organization, The Capital Public Transport
- **Development of Copenhagen Airport**
- Expansion of Copenhagen Airport Station
- Better framework conditions for the development of Copenhagen airport
- Stronger accessibility with new routes from Copenhagen airport

ACTIVE, LIVING AND GREEN CAPITAL

- **Less noise and air pollution**
- Minor air pollution, greenhouse gas emissions and traffic noise
- Enabling the establishment of noise levels and green wedges along the highways
- **Climate protection**
- Storm flood protection of Copenhagen to the north via establishment of Lynetteholmen
- Establishment of a stormwater protection dialogue forum
- Working group on increased use of green wedges for climate protection
- **Nature and greenery**
- Increased recreational value in green wedges
- Development of Køge Bay Beach Park
- More than 400 acres of new green wedges
- **Urban life, culture and tourism**
- Strengthening the functioning of the capital parks like the city's green breaths
- Better planning for the future sports facilities
- Strengthening urban and urban cooperation cultural environments and architectural quality
- Overall plan for historic buildings on northern part of Nyholm
- Partnership on the development of active and living urban spaces around the cultural district on Slotsholmen at Christian castle, Thorvaldsens Museum, Det Kgl. Library etc.
- Continued strong tourism development in the capital
- Attracting sports events to the capital, including the Tour de France

PROCESS OF REALIZING A CULTURAL-RELATED PROJECT



Process of realizing a cultural-related project
Haoyuan Du

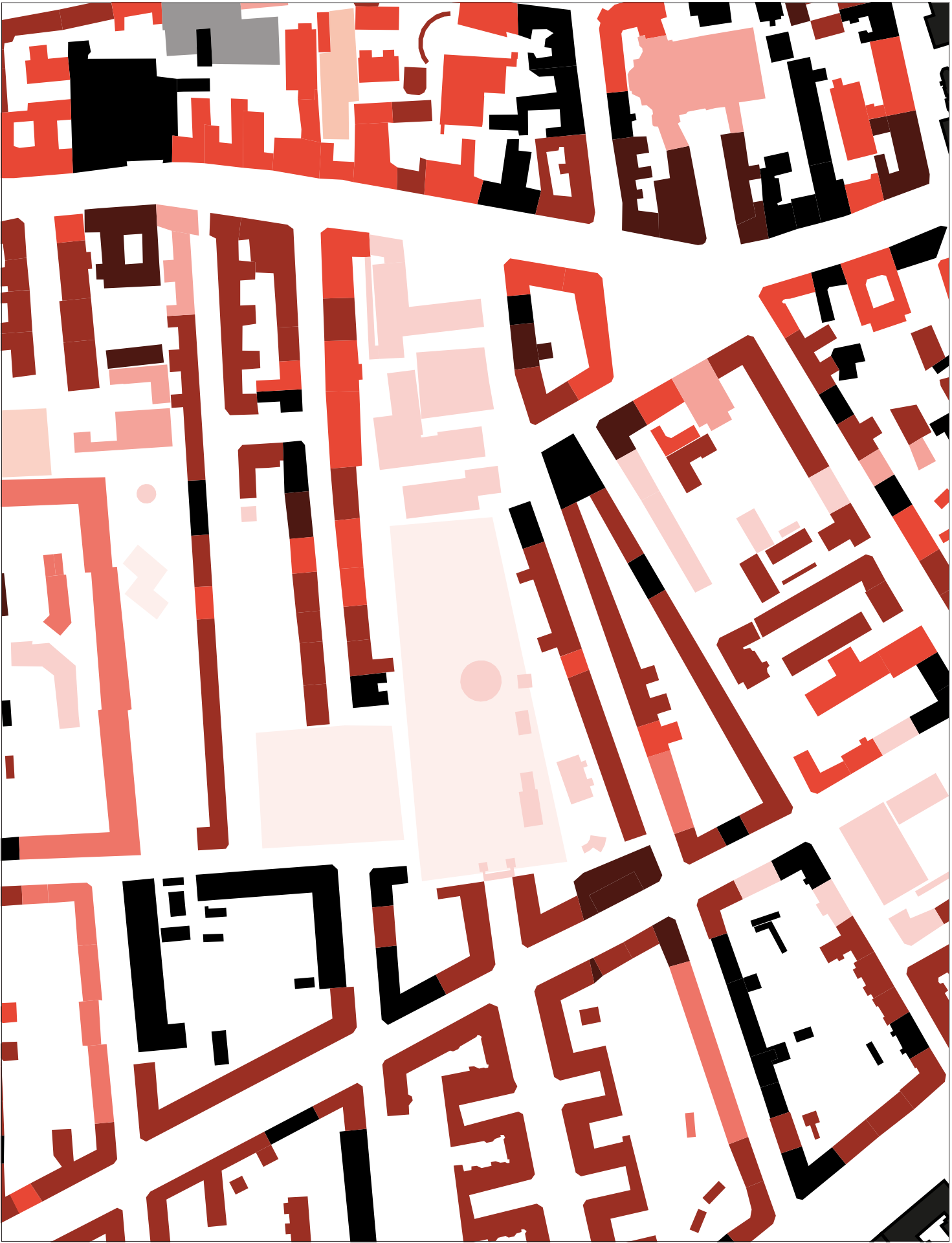
THE OWNERSHIP

The diagram on the right shows different ownerships of properties around Skydebanehaven. These owners range from municipality to individuals, and some buildings are owned by different kinds of entities, which is the most difficult situation where architects will be faced.

We have to make some changes to the current situation if we want to design a public condenser in this area, which may affect neighbors’ building environment and interests. To get locals’ support and make our proposal more feasible, we need to get a whole picture of surroundings’ ownership.

Based on the Public Information Service of Denmark, we know that there are seven different types of ownership existing around our site. In order to visualize the complexity of current situation when architects deal with different owners, we highlight those buildings with gradients of red colors: the lighter the color is, the easier the negotiation you will conduct with owners where the color refers, and vice versa.

During the upcoming design process, we had better avoid altering the properties in black too much, to improve the social coherence instead of losing it.



Different ownerships of properties around Skydebanehaven
Haoyuan Du

LIVEABLE CITY

The top-down power is intended to brand Copenhagen as one of the most liveable cities in the world. The urban development strategies shape Copenhagen as a green, healthy and creative city that facilitates both environmentally and socially sustainable economic growth. The high-welfare model of Denmark ensures the government’s expenditure on social and healthcare. Copenhagen is expected to be a functional city with an efficient infrastructure and a variety of areas, ready for industrial development. This is the basis for growth and employment. Simultaneously, good housing, culture, green and recreational areas and ambitious environmental targets are crucial to Copenhagen’s attractiveness and image and an important driver of growth.

SERVICE ECONOMY

Services accounted for the largest percentage of GDP of Denmark. Generally, Denmark has a high level of taxation and fees and Copenhagen cannot compete with foreign cities on these parameters. But given the growth ambition included in this business and growth policy, the city is striving to deliver a high quality of service to ensure that costs do not inhibit businesses’ competitive position.

Education, employment and growth go together. The qualifications of the workforce need to be improved; this is an important parameter for businesses. So it’s a clear target for the city that more youths must be able to enter into and finish a qualifying education.

SUSTAINABLE JOB MARKET

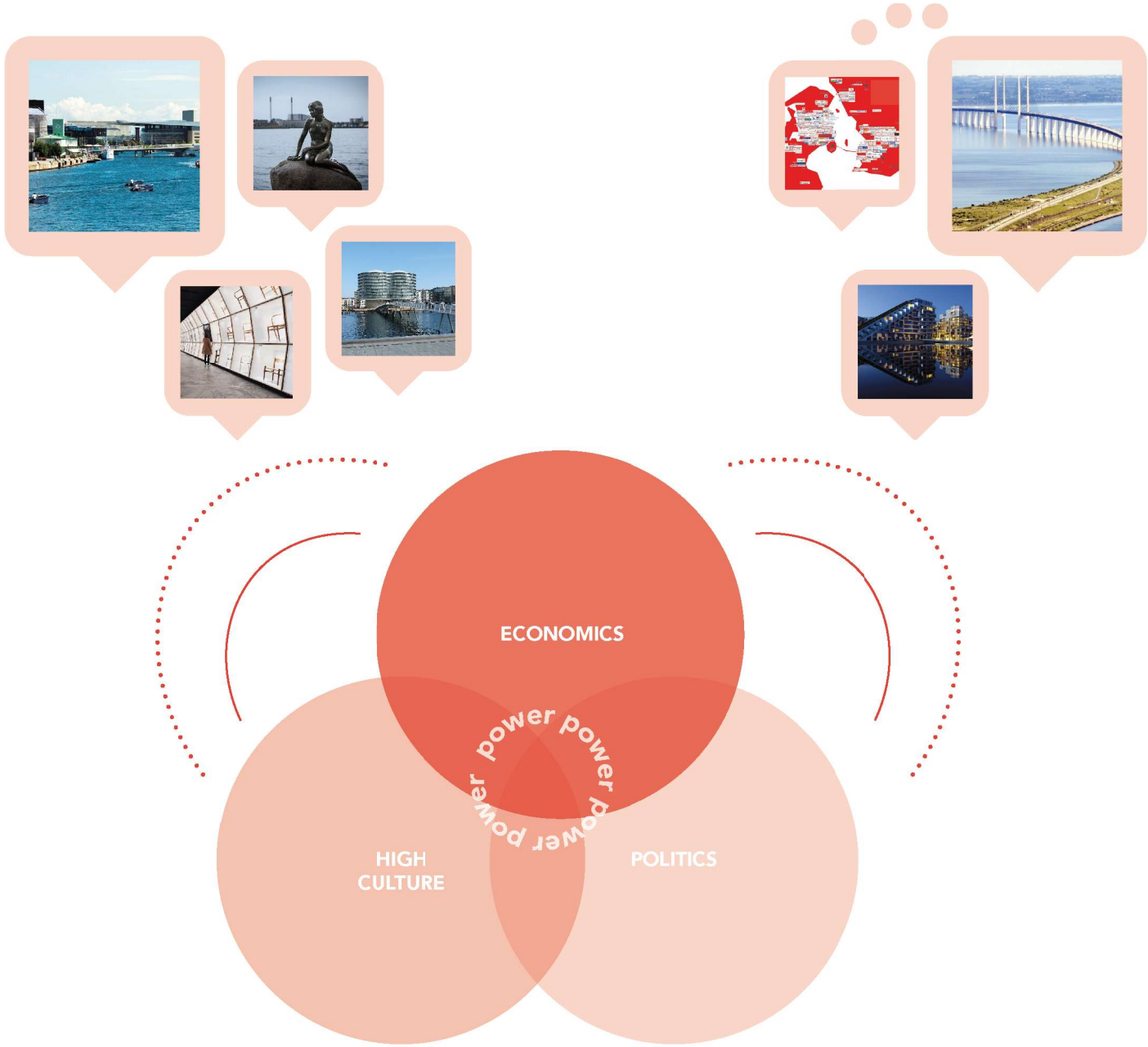
The initiative for more sustainable labour market requires to strengthen the City of Copenhagen’s collaboration with businesses, industrial associations, local housing organisations, volunteer organisations, etc., about creating more private job training and apprenticeships. Also, the government supports the businesses and organisations in realising the potential in hiring and developing a diverse staff to help minimising the unemployment among ethnic minority residents and special needs residents. The City of Copenhagen wishes to be a core partner and customer for socio-economic businesses.

PARTNERSHIP ON INNOVATION

Innovation is a core issue for creating growth and jobs. But the businesses in the capital area are lagging behind in regards to innovation, seen from a European perspective. Businesses, public institutions and knowledge institutions must get better at working together and making use of the good conditions for innovation already in place. The City of Copenhagen wishes to focus especially on the positions of strength we have within cleantech, health- and welfare technology and in the creative cluster.

THE GREATER COPENHAGEN

Since the construction of the Øresund bridge and the collaboration of the Swedish Skåne area and Danish Høstede, the Greater Copenhagen has become a global competitor in several industries. The mobility and accessibility of the Greater Copenhagen area is increasing. This radical approach of Danish government to centralize the economy in the capital area by combining the knowledge and labour force of both areas brought the city back on a global international scale. In combination with big export industry and the several university it developed into life-science Hub for Europe/Scandinavia. These governmental strategies together with the influences of the so-called Medicon Valley have a major impact on the approach of gentrification in the area.

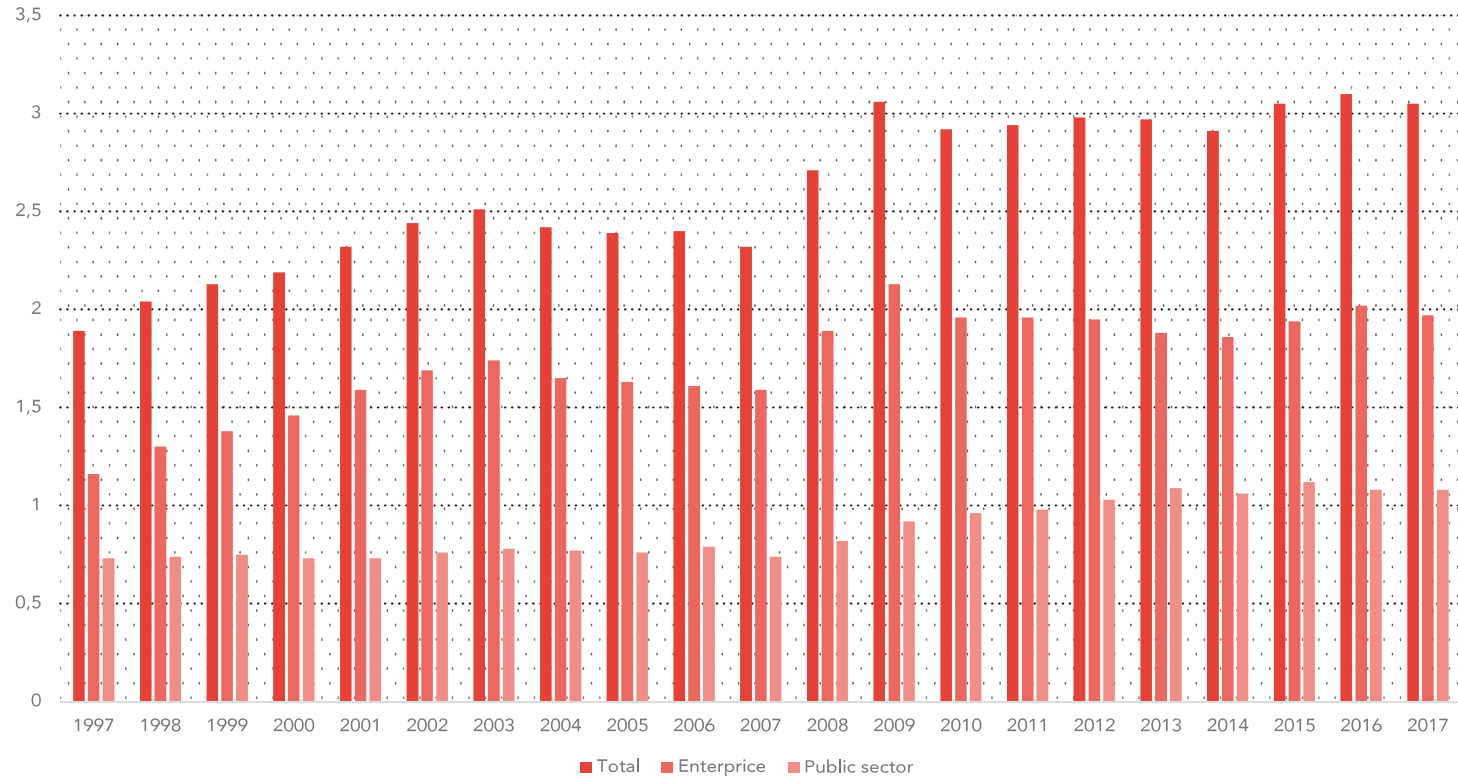


MEDICON VALLEY REGION

Copenhagen forms an integral part of Medicon Valley, one of Europe’s strongest life science clusters forming a dynamic, collaborative environment rich in innovation and knowledge sharing. Medicon Valley companies excel in research within disease areas such as cancer, diabetes, inflammation and neuroscience. It spans the Greater Copenhagen area in Denmark and the Skåne region of southern Sweden. Since the mid-1990s, a fast-paced development has been taking place, and today Medicon Valley comprises a dense cluster of universities, hospitals and companies within life science, biotech, medtech and pharma, many of which are R&D based.

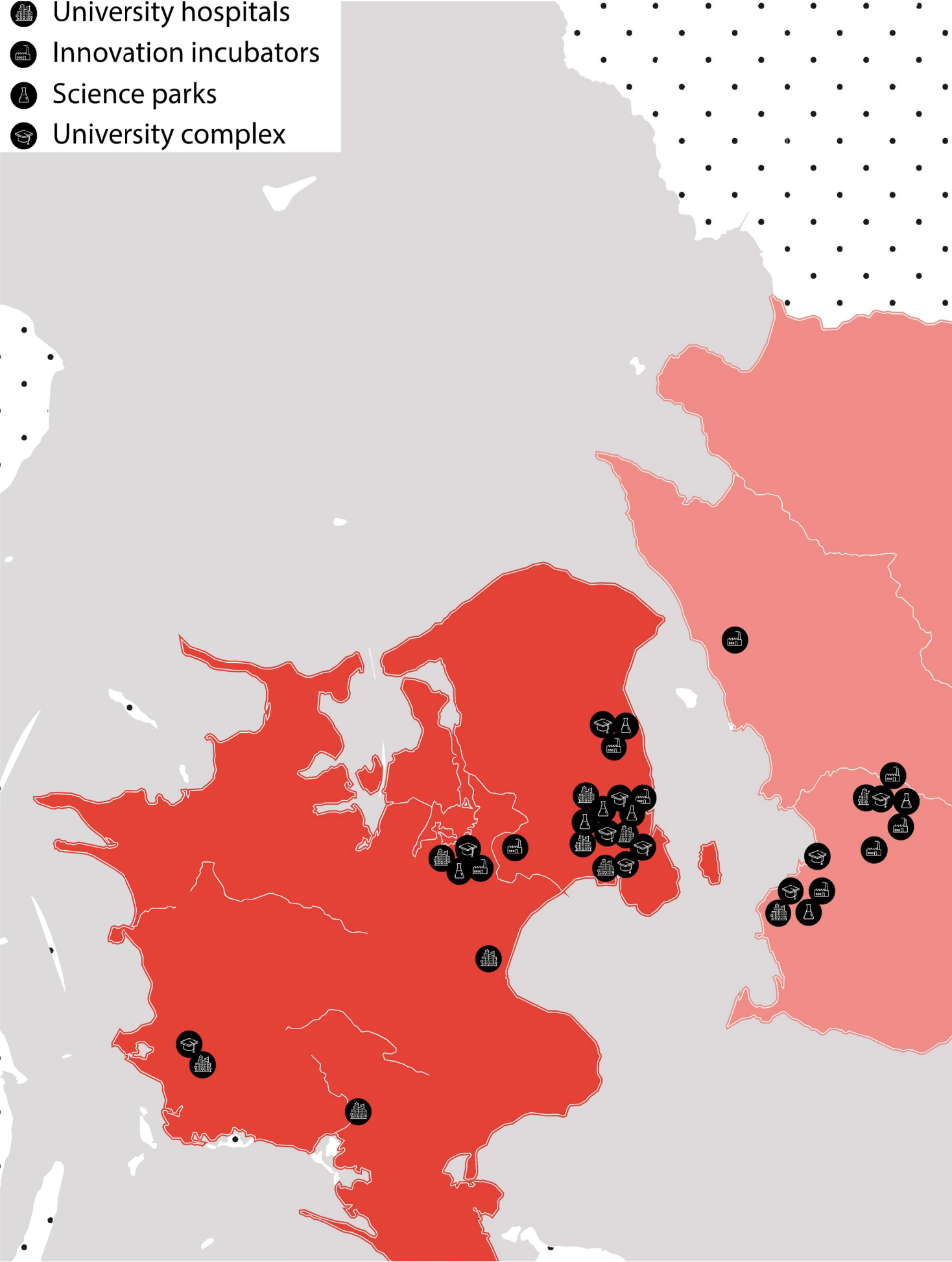
MEDICON VALLEY FACTS

- 21.000 km2
- Approx. 3,5 million inhabitants
- Approx. 40.000 employees in the private life science sector
- 12 universities, 5 of which supply life science related educations – all part of the Øresund University
- 32 hospitals, of which 11 are university hospitals
- 45.000 life science students
- Approx 14.000 researchers and 6.00 Phd students
- Approx. 80 (red) biotech companies
- 20 pharma companies + 200 international pharma companies affiliated with medicon
- 100 medtech companies + 170 international medtech companies affiliated with medicon
- 7 science parks with a significant focus on life science
- 6 incubators, of which 3 have a significant focus on life science
- Approx. 80 contract research organizations and contract manufacturing organizations

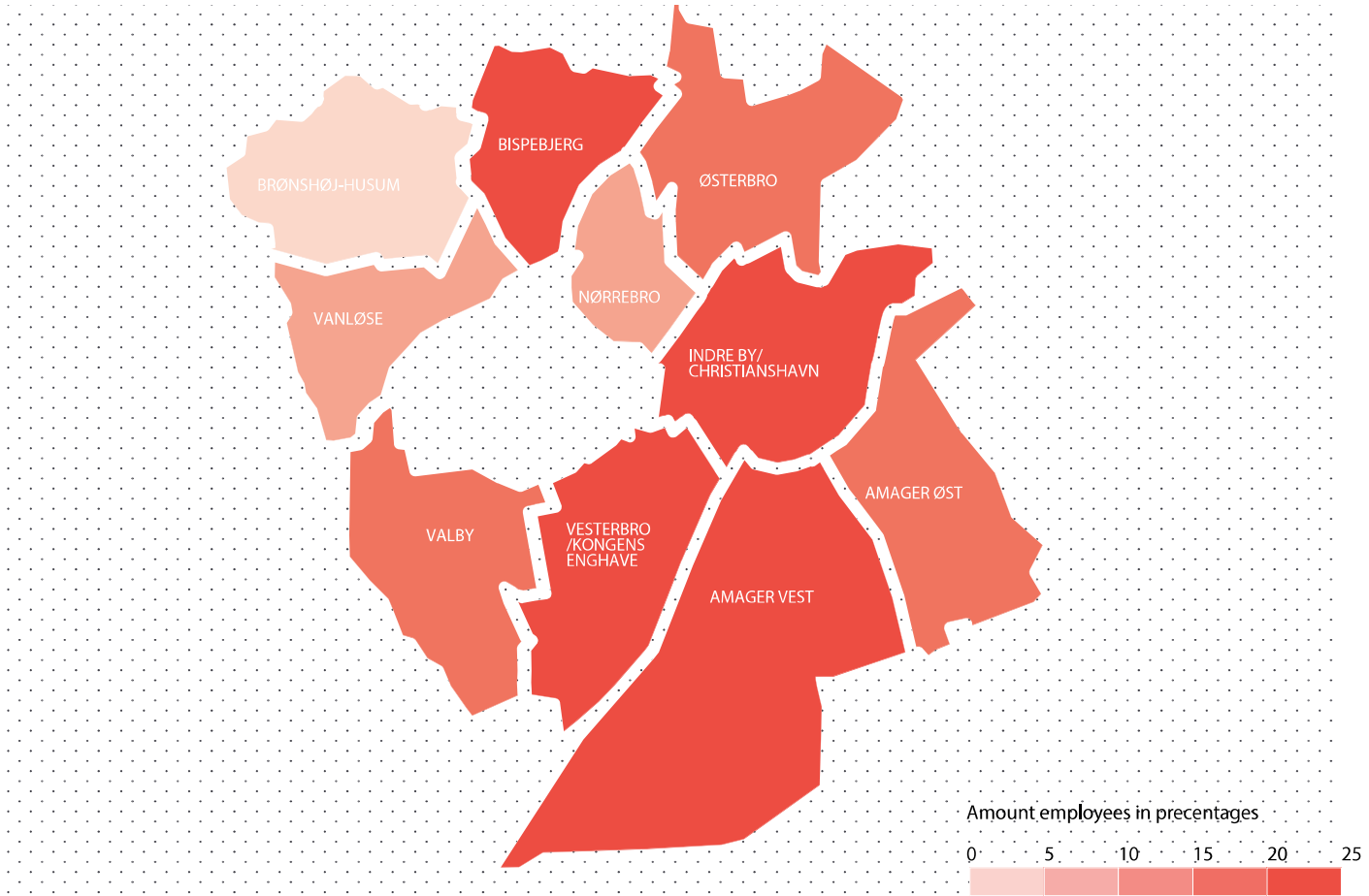


Casper, Research and Development costs in per cent of GDP
<https://www.dst.dk>

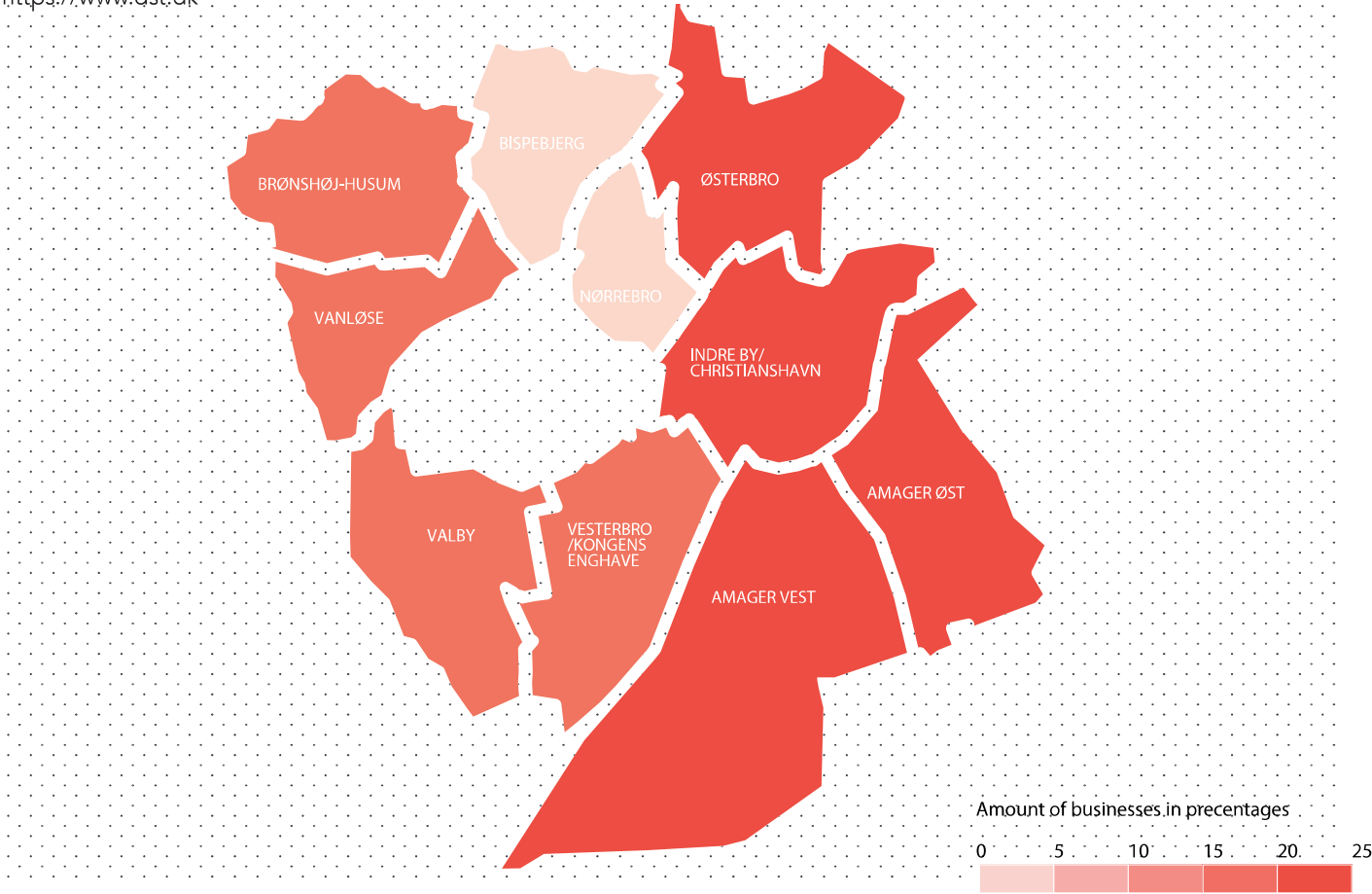
- University hospitals
- Innovation incubators
- Science parks
- University complex



Casper, Medicon valley R&D facilities
<http://mva.org/>



Casper, labourforce density per district Copenhagen
<https://www.dst.dk>



Casper, Enterprise density per district Copenhagen
<https://www.dst.dk>

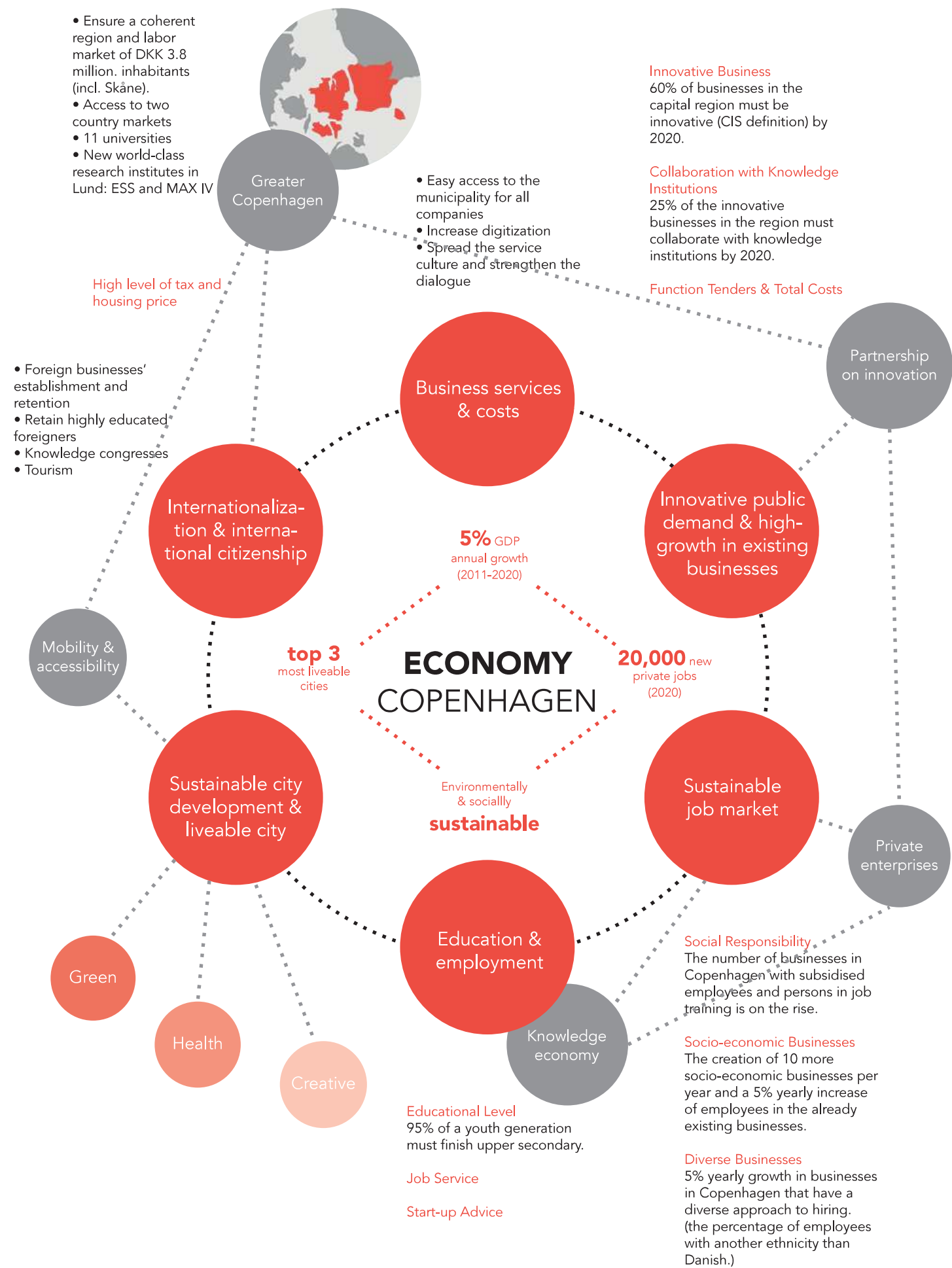
ENTERPRISES AND EMPLOYEES

The enterprises and combined with that the employees are mostly vested in the east of Copenhagen. Knowledge-

based services and wholesale and retail trade are the most common enterprises, while the public administration and defence have the most employees.



Casper, Enterprise (left) and employees (right) statistics
<https://www.dst.dk>



Economic initiatives of the city of Copenhagen
The city of Copenhagen's business and growth policy 2015-2020

FACTS ABOUT THE BUSINESSES

1. 90% of businesses in the City of Copenhagen have less than 10 employees representing around 1/10 of employment and revenues.
2. The relatively few larger businesses with more than 250 employees contribute with 70% of the revenue in Copenhagen and 55% of the employment.
3. Copenhagen has many businesses (compared to the rest of the country) within the service industry, finance, culture, NGO's and public administration. To a certain degree also within the hotel- and restaurant sector, transport and communication.
4. Copenhagen has fewer businesses (compared to the rest of the country) within manufacturing, construction and wholesale.
5. Within the last ten years Copenhagen has experienced growth within business services, the hotel- & restaurant sector, finance and IT. In reverse, there has been a decrease in jobs within the industry and construction sectors.

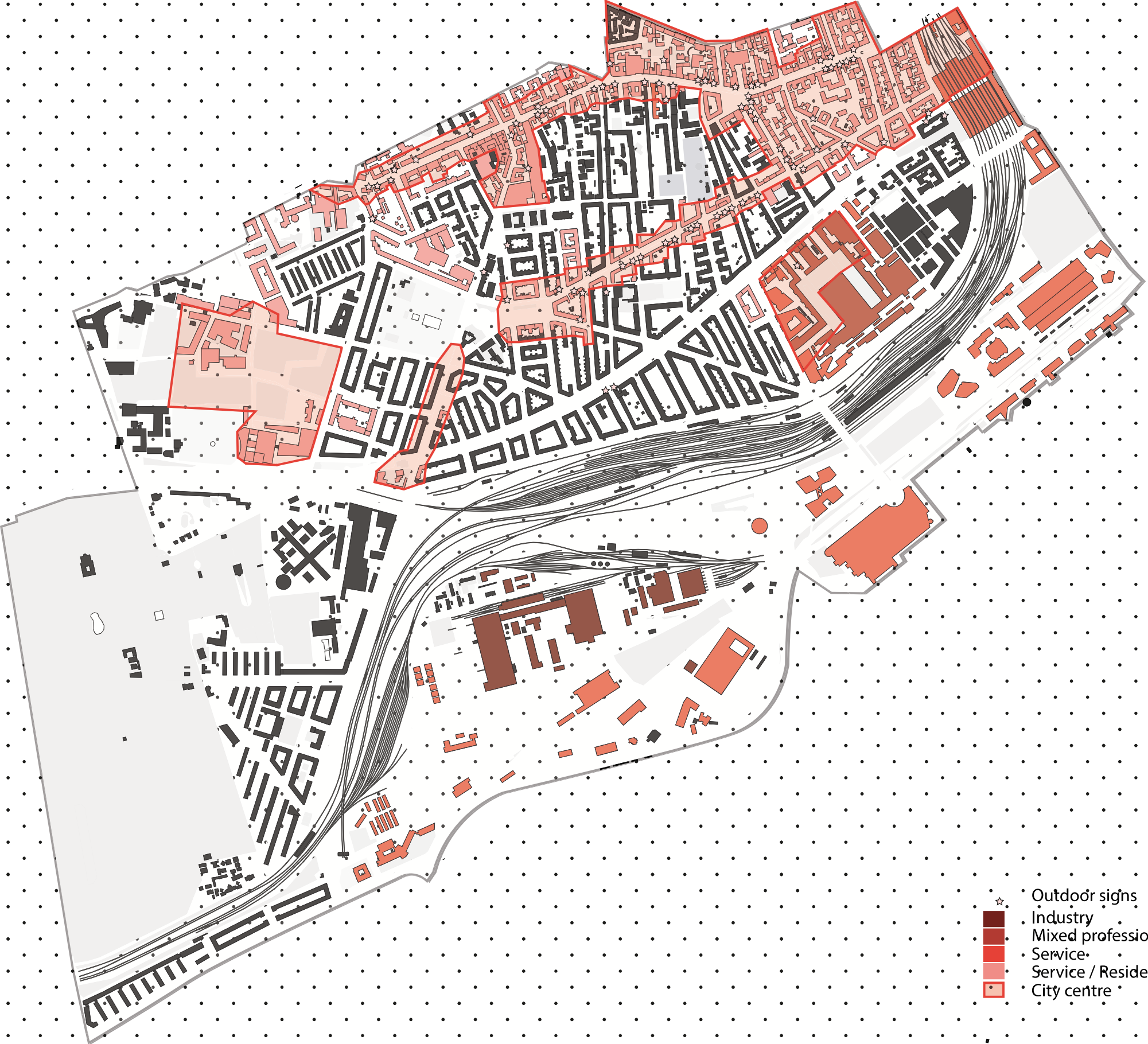
	GREEN	HEALTH	CREATIVE
• Employed	approx. 80,000 in the region, 600 businesses	approx. 21,000 (health-tech)	75,000 (private)
• Strengths	Energy, water, data, waste, urban development, strong brand: research & education	Tele-health, rehabilitation, diagnostics, research and education	Software development, games/web, advertising, media and cultural content.
• Action	Ambitious climate goals Collaboration with CLEAN, tests in the city, big-data tenders, C40-collaboration, OPI's and innovative purchasing.	Ambitious health targets Collaboration with CHC, test laboratories, big data, innovation competitions, attract financing, OPI's, innovative purchasing and global partner cities.	Digital solutions for residents and culture and furthering of commercial sustainability Collaboration with Copenhagen Solution Lab, etc. Innovative purchasing and attraction of finance.

Economic vision of the city of Copenhagen
The city of Copenhagen's business and growth policy 2015-2020

THE ECONOMY OF VESTERBRO

The area Vesterbro is well known for its gritty and dark history of narcotics and crime has transformed from a working class district into one of the most hipster neighbourhoods on earth (Copenhagenbydesign). Thereby creating a somewhat strange blend of Michelin-starred restaurants adjacent to sex shops.

While situated next to the central train station of Copenhagen, Vesterbro together with the meatpacking district in Kodbyen became an extension of the city centre. The neighbourhood has become home to creative services and the restaurant/food industry.



PLAYGROUNDS IN COPENHAGEN

The manned playgrounds started from a voluntary group aiming to serve the children in the poor districts in copenhagen. In 1939, the three first playground teachers began to organize ball games and song games in Enghaveparken. The proposal scheme won great endorsement and in 1947 the staff increased to 18. Later the organization was taken over by the municipality of copenhagen. Nowadays the City of Copenhagen has over 125 playgrounds spread throughout the city. 26 of the playgrounds are staffed by educational staff. There are 8 in Vesterbro and 2 of them are staffed. At the manned playgrounds children can ride go-karts and small bikes, make snow breads, play games, get homework help, make jewelry, grow vegetables and more. The playgrounds also host a lot of events throughout the year such as fall parties, festivals, Christmas parties and activities during school holidays.

SKYDEBANEHAVEN

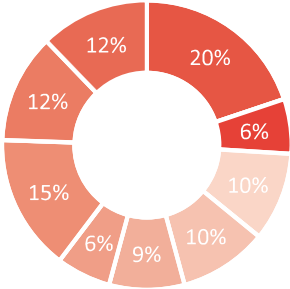
Currently two staff working in the Skydebanehaven in charge of safety guard, lending entertainment and sport facilities, and daily management of the park. The park is still open during the night. The entertainment facilities are kept inside the house. Cycling, smoking and pets are prohibited within the park. In summer holiday (from June 1 to September 1) the circular pool in the center of playground will be filled in water. In winter, children could enjoy themselves with the only toboggan run in Vesterbro. There are a variety of indoor recreations such as pool table, table tennis, table football, board games and television in the playhouse, which is popular during bad weather condition.

VESTERBRO

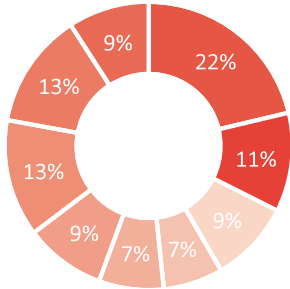
Vesterbro area has witnessed significant changes over past decades. The migrants take up around half of the population. Recently a great number of high income family moved into Vesterbro. They tend to have more time to accompany their children playing. The government does not have concrete future plan for the district as the government budget is dependent on the successive party. Citizen rarely have chance to participate in the city planning and consulting.

(Based on the interview with the staff in Skydebanehaven on Sep 23, 2019)

Playgrounds in Copenhagen by district

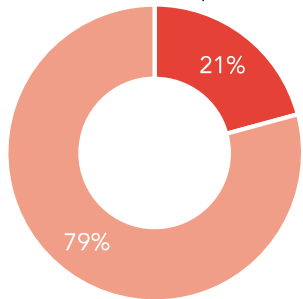


Population of Copenhagen by district

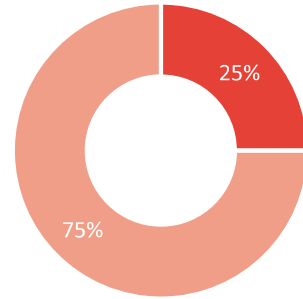


- Amager
- Valby
- Brønshøj-Husum
- Nørrebro
- Indre By
- Vesterbro/Kgs. Enghave
- Vanløse
- Bispebjerg
- Østerbro

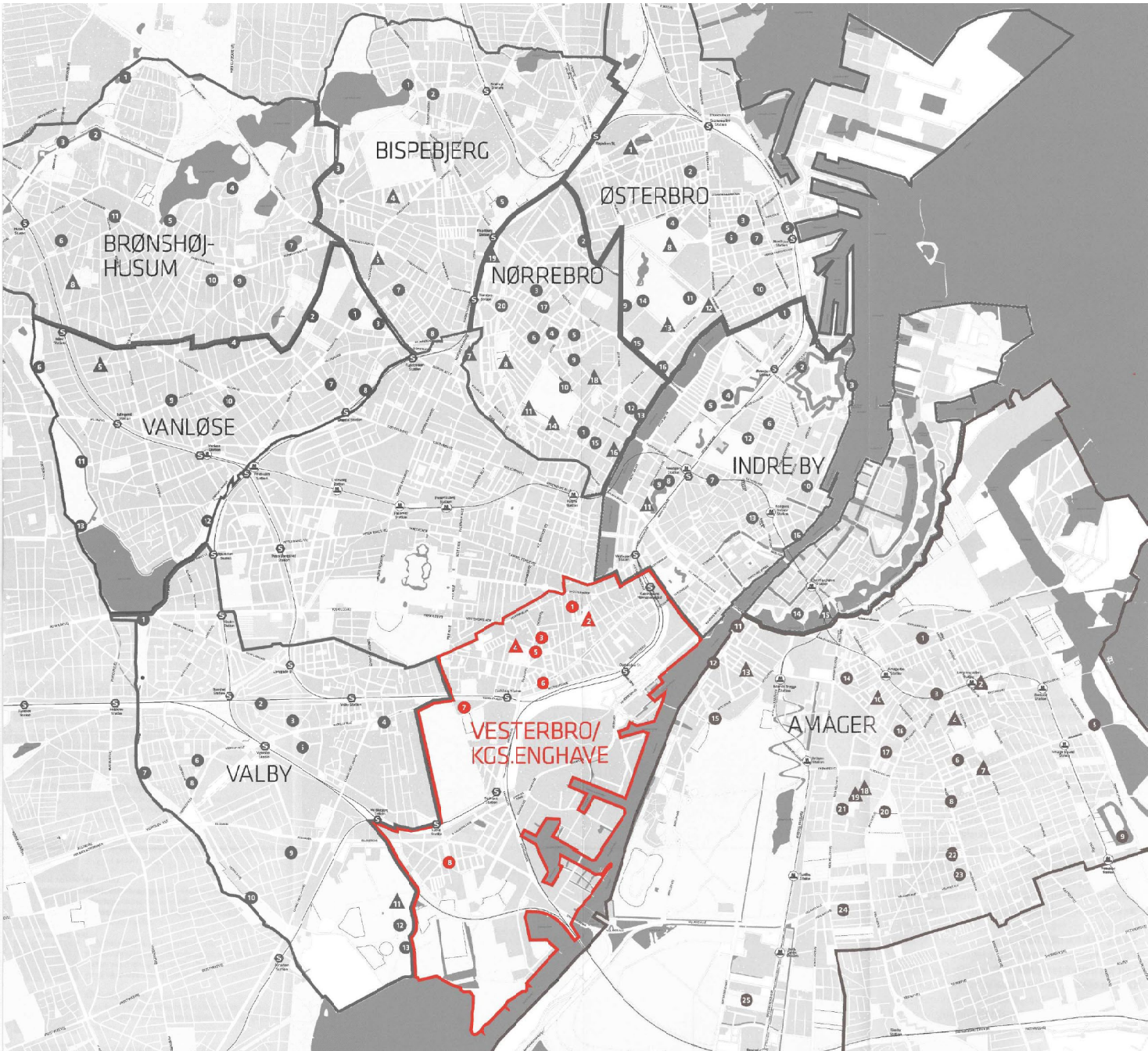
Playgrounds in Copenhagen



Playgrounds in Vesterbro



- playground with activity house and educational staff
- playground without staff



Map of playgrounds in Copenhagen
The city of Copenhagen

- Saxoparken (0-16 years old)**
Small play islands sprinkled across Saxo Park with swings, pail bucket bars, large ball cage, lizard park and climbing frame. Neighbor to Vesterbro Nature Workshop.
- Skydbanehaven - Absalonsgade (0-16 years old)**
Staffed playground with large parrot, 2 roller coasters, cable car, a nature area with Native American corner, mushroom pool, climbing pyramid, ball cages etc.
- Broagergade - Broager Legegde (0-8 years old)**
Fenced play area with a large play castle, where you can slide, crawl and crawl.
- Enghaveparken - Ejderstedsgade 1 (0-16 years old)**
Large and lively manned playground with cable car, high climbing pyramid, swings, carousels and a climbing castle with hoist.
- Enghave Plads (from 6 years old)**
Activity place with large skating rink made by local skate experts. Large ball cage hidden behind low circular hedge and high sling plant fence.
- Sonder Boulevard - off Bodilsgade (3-10 years old)**
Playground designed as "The good ship Trinidad", which has been destroyed, and in the "sea" floats, raft of raft climb on tree trunks - everything to crawl.
- Rektorparken - at Vestre Cemetery Allé (0-8 years old)**
Screened playground with seesaw, roller coaster, sandpit, fitness equipment and jungle path among the trees.
- Sjælør Boulevard - at Mozartsve (2-16 years old)**
Playground for small and large children. With climbing castle, ball cage and swings etc.

PUBLIC BUILDINGS



1 DAYCARE CENTER

Garvergården 1 Integreret Institution

It is an institution located in the heart of Vesterbro and on two landmarks Matthæusgade 3 and Oehlenschlägersgade 21A. There are a nursery and a kindergarten providing food arrangement on both locations.

2 SOCIAL SERVICE UNIT

Borgercenter Voksne - Enheden for Sociale Ydelser

The Social Services Unit processes applications for special financial aid and has an open citizen reception. In the Social Services Unit citizens can get advice and guidance on finances, housing and acute social issues. Citizens can also be guided further in the Social Administration or other efforts in the City of Copenhagen.

3 CRISIS CENTER

Krisecentret Garvergården

It is a self-owned institution that offers shelters for women, men, with and without children, as well as whole families, with an operating agreement with the City of Copenhagen. The crisis center is part of the Center for Depressed Adults and Families in Copenhagen's Social Administration.

4 SOCIO-ECONOMIC STORES

Settlementet Saxogaard

The settlement is located at Dybbølsgade 41, runs social economy shops in Saxogade - the social trade street. The settlement was founded in 1911. Here, volunteer academics moved into the borough and taught the locals. Today, Vesterbro is a very different neighborhood and the Settlement is therefore a citywide offering for vulnerable adults who have fallen through the welfare community's safety net. On the other hand, the Settlement actively involves the citizens of the district in a diverse community. It aims to work for social and cultural equality in society and bridge the gap between different communities and individuals.

5 YOUTH CENTER

Vesterbro Ungdomsgård

Vesterbro Ungdomsgård is an attractive leisure service that supports children and young people focusing on well-being, learning, community and democratic education. The center offers various everyday activities as well as Friday events and weekend trips. Absalonsgade 8 is the main house and is spread over its 3 floors here of life and activities in every room. Eskildsgade 7 is a smaller oasis and a more manageable offering - still with a high level of activity. All children and young people in the leisure club have free movement in the two offers and thus can choose for themselves based on the desire and interests of the day. Absalonsgade 10, on the other hand, is a special offer for age 6-7.

POLICY OF MUNICIPALITY
COURTYARD TRANSFORMATION

With **support from the municipality** of Copenhagen, local courtyard is transformed from a gray, cramped backyard into a green oasis of flowers, trees, life and community. The Municipality insists that all Copenhageners must have the opportunity to live near a green area, because greenery is good for both body and soul, and it provides high quality of life for everyone. The Copenhagen courtyard tranformation plan makes Copenhagen greener and more resilient to climate change. They are also the place where people place their bikes and sort their garbage. In order to make the most of the relatively small space, the City of Copenhagen are using **urban renewal resources** to transform backyards, which may either be small, dominated by asphalt or are decaying. By **teaming up with the neighbors** and **getting a common outdoor area**, they create a better and more **inviting** environment for the residents, where there is room for both greenery, climate change, bicycles and waste management. In the courtyards, neighbors meet across age and culture, which is why the courtyards can **provide a framework for new communities**. The gardens have a really important function as a meeting point between the Copenhageners.

Every year, 7 to 8 backyards are transformed into green courtyards in Copenhagen. The **municipality** and the **state pay for the establishment** of the gardens, while the **owners** and **residents** are responsible for the future **maintenance** of the patio and its **fixtures**. About 400 potential backyards currently can be transformed into green, common courtyards. It usuWally takes **2.5-3 years** from the first information meeting to the new patio is done. The **construction period** takes approx. **4-6 months** and during that period residents cannot use the backyard.



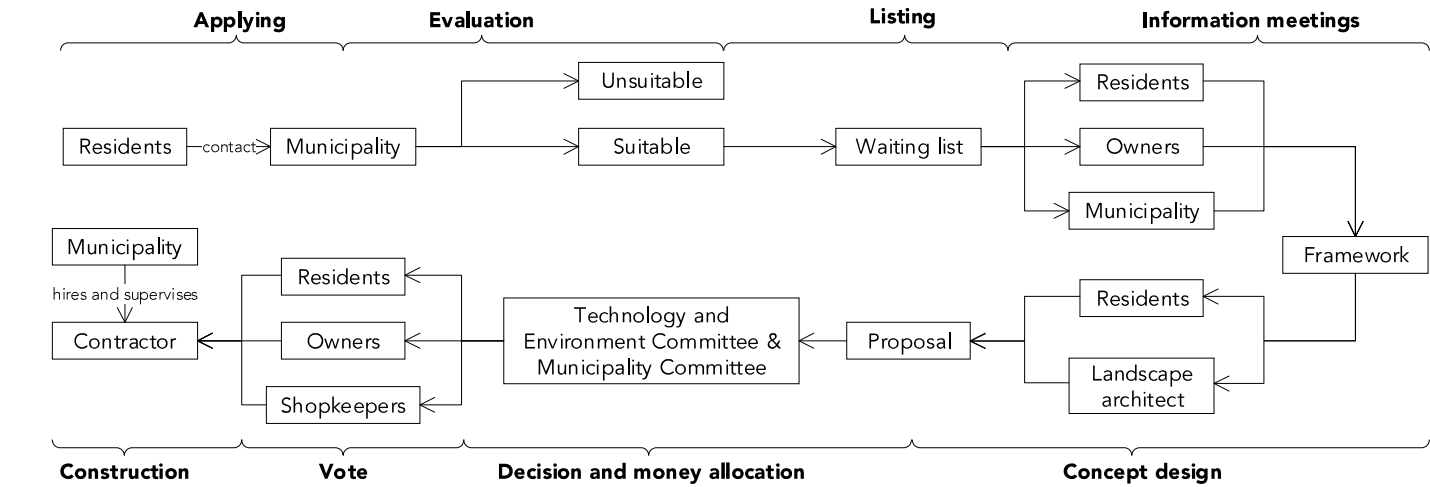
PLAN OF DISTRICT AND NEIGHBORHOOD
RECREATIONAL AREAS AND PUBLIC KITCHEN

Vesterbro is the area in Copenhagen that has the **fewest areas of green space** per square meter. It is also the area in Copenhagen which has the **fewest sports facilities**, like ball courts, sports halls, swimming pools and other sports facilities. There is also **a lack of green recreational areas** for children and adults' play, movement, performances and other activities. The older part of Vesterbro is fully developed and the two suburbs, Carlsberg and Enghave Brygge, **add thousands of new inhabitants**, and make the situation worse. The port areas will probably come into play and the two large gardens in Carlsberg City will be publicly available as well as plans for a recreational area at Enghave Brygge and a sports hall in Kødbyen, but this is still **far from the need** for green areas, recreational facilities and sports facilities. The **schools and leisure institutions** also **make new demands**. There is a need to think of new blue and green recreation areas in the district plan.

Vesterbro Local Committee will also work to create an overview of the **possibilities for cheap meals** in the district for families with fewer funds, and coordinate existing offers and create new collaborations for public kitchens.

It is obvious that **inequality** is rising in the community. The Local Committee is aware of several examples from housing associations in Vesterbro, where residents are **no longer able to pay rent** and are therefore **terminated**. The distribution of gross income groups in the neighborhoods tells about the need. Vesterbro Local Committee would therefore like to help **identify the possibilities for cheap meals** in the district. Specifically, the local committee will identify the need for public kitchens and try to **create new opportunities for them**.

There are already a variety of public kitchens and other food offerings for vulnerable citizens, but **also for citizens with average and higher gross incomes**.



Process of courtyard transformation
Haoyuan Du



BYHAVEN 2200

Byhaven 2200 is an **open community garden**, located in the middle of Nørrebroparken, near Stefansgade in Copenhagen. An important aim of the project is to show alternative ways to use and relate to public spaces such as parks and green areas in the city. The goals are to:

- Create awareness about environmental problems and promote **sustainable solutions**.
- **Learn by doing**, to grow local food products and other useful resources such as medicinal plants.
- Improve the social relations in the neighbourhood and aim towards **strong community bonds**.

The annual cultivars are agreed seasonally by all the interested participants. The garden products are eaten at **common meals on location**, shared between the volunteers, or enjoyed by 'anonymous' users who pick a little here and there. There is many activities happening in Byhaven, from small self organise workshops, gift circles, and birthdays to official arrangements and festivals.

In the association there are 5 working groups (gardening, building, communication, events and bee keeping). Communication between volunteers occurs through our Facebook group, by mail, face to face in the garden, and at meetings at other locations.

During the garden season working days there is two garden responsible people and a varying group of **volunteers**, in the high season days it can get to 20 people that can cover all the daily tasks, receive some relevant garden inputs and have a chance to get to know each other.

During the winter season, they keep on gathering in study groups to **share the knowledge, garden skills**, work on developing the design and improve the multifunctional relationships in the garden.



TRÆSTUBBEN

An old public toilet in Saxo Park has been converted into a nature workshop and a demonstration building for sustainable construction. In 2010 it was rewarded with Sustainability Award of Copenhagen.

Before redevelopment, it is a municipal toilet building that has been locked for 15 years because it had become a hotspot for drug abuse. After redevelopment, it turned to a **local urban platform for environmental & nature dissemination** to daycare centers, schools and Vesterbro citizens.

TRÆSTUBBEN was initiated in 2007 by Green Vesterbro (Grøn Vesterbro), the local Agenda 21 center, in collaboration with local institutions and neighbours. For the funding Realdania supported the remake of the old toilet house into a nature and environment workshop. And Friluftsrådet covered half of the expenses for a nature interpreter at place for until 2016 three times a three years period. The organisation has an agreement with the city of CPH park administration that owns the place.

As a result of the workshop centre, **new crossover networks** take form. Different user groups interact and help to maintain the workshop and garden: pensioners, unemployed people, local krolf players, different ethnicities collaborate keeping the place.

Around 2500 kindergarten and primary school children from the local schools have yearly, since the opening in 2008, directly taken part in the nature and environment sessions.

The main tasks in **education for sustainable transitions** are: the aspect of taking action locally — preparing for the future to come — prepare the awareness for transition. That might be small steps, like the production of herb tea bags with children. Or changing the structure of a roof with seagrass. That may also be **initiatives** like Flowering City or Vesterbro Christmas, where **small productions** suddenly can evolve new local traditions.

HIGH CULTURE AND ECONOMICS

There has been a shift in the relationship between high culture and economics over the past centuries. Where higher culture was previously seen as only for the upper class, nowadays it has been introduced in the lives of many Danes, whether it is through broadcasting, the built environment, clothing or education. The image of high culture has broadened its reach to touch the lives of all. Institutions have opened their doors to the public, making the high culture (of Denmark) available for all to see. But it is not only through museums, operas, theatres that one can experience Danish culture. Danish Modern design, amongst many things, has been a prime example of how a country can thrive after a war that could have destroyed all.

HIGH CULTURE AND POLITICS

Politics have for a long time influenced the higher culture of Denmark, but until 1800 there had been a serious lack of any specific Danish high culture, since most culture such as fine arts was requested from abroad. It was only after the establishment of the Danish Academy of Fine Arts that Danish art(ists) started to thrive. As a result of student-becomes-teacher at the Academy (with here and there influences from abroad), there is a fine graduality in the evolution of Danish art. As fine arts had always been a portrayal of wealth and establishment, the buildings and institutions that were - and still are - home to them are also a portrayal of that wealth. Hence, the architecture (and the built environment) becomes not only the message but also to medium for the higher culture of Copenhagen.

It was when Copenhagen was at its lowest in the past decades that the harbour development was a keynote on the governmental agenda. As part of this, cultural icons were positioned along the newly developed harbourfront.

THE DOWNSIDE OF HIGH CULTURE

On a more negative note, the introduction of houses for high culture leads to (at first) invisible gaps in the social systems in an area. But as time passes, these neighbourhoods often become more and more attractive resulting in shifts within the local housing market with gentrification as a result. So while it is interesting that politics aim for a broadening the reach of a specific 'high' culture (with economic growths as a result) there is also a big downside to cultural icons entering the area.

WE NEED MACHINES!

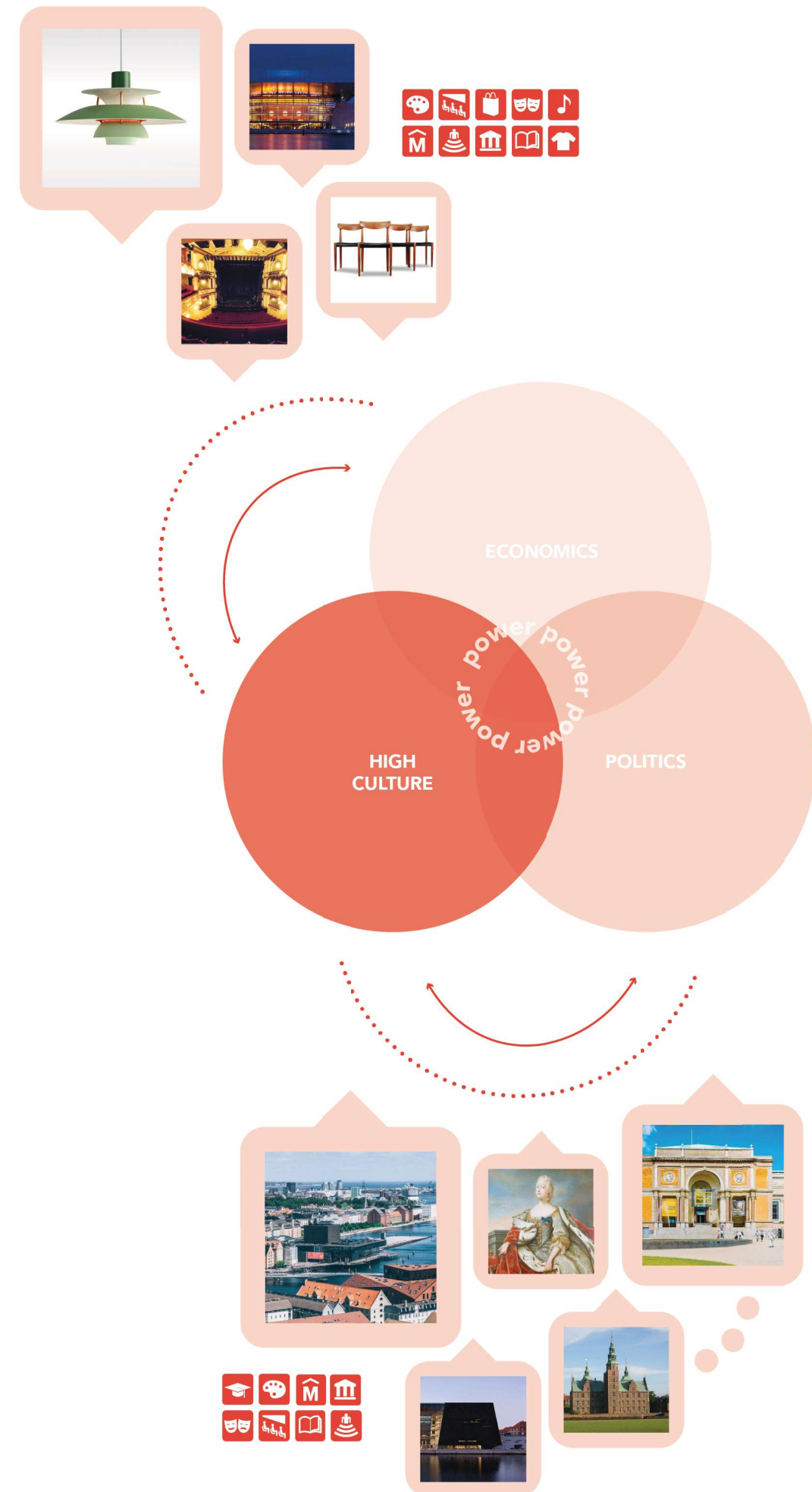
Contemporary artists, at the turn of the twentieth century, went against the exuberance and naturalism of Western European design with a more restrained and abstract aesthetic (Goss, 2004). Decorations made place for linear and geometric forms - derived from nature; think of Jugendstil and Art Nouveau. Overseas, in Great Britain, the arts and crafts flourished. But as well executed handcraftsmanship, there was a need for machinery to get involved into the process of design. Not many years later, the Avant Garde drew on the importance of this handcraftsmanship and applied the more organic lines of Jugendstil and Art Nouveau strictly geometrical and linear ways of representation. Here, the Société des Artistes Décorateurs, became an important player in terms of design and production through its annual exhibitions at Salon d'Automne: flourishing after WWI, Art Deco became a renowned style, freed from the past (Goss, 2004). Not soon after, around the 1930s, the geometric forms and plain undecorated surfaces of the International Modernist movement, with examples such as Le Corbusier didn't fit the Zeitgeist of the Great Depression.

HIGH CULTURE FREED FROM TRADITION: NEW MATERIALS AND MASS PRODUCTION

The immense effect of WWII on society brought forward a pressing need for affordability on every scale. Rebuilding society asked for inexpensive housing and furnishing that would fit the new optimism of a new promised future (Goss, 2010). On a household scale, informal and adaptable living became the most important design factors. The conventional approaches of symbolic items of status made place for new materials combined with technologies. Conceptual and sculptural design was combined with low pricing and made the demand for mass production. Scandinavia became one of the biggest players in the game of manufacturing high quality and inexpensive design for post WWII consumer society with their values to traditional beauty of materials combined with advanced technology (Goss, 2004).

THE THIN LINE BETWEEN HIGH AND LOW CULTURE

The dichotomy between High and Low culture might once have been greatly visible- as the 'high' was elite and the 'low' was pop (read popular culture). It feels outdated and wrong to draw such a distinctive line within culture, because it is not about high/good or low/bad. Over time, high culture has become available and accessible for all: it is part of everyday culture. All culture, low or high, draw interest from anyone, elite or general public. And we see this not only as cultural institutions have opened their doors, but also as the digital age became the gateway access to culture such as art, movies or literature.



High culture
Jorren Verheesen



HIGH CULTURE ICONS IN THE HARBOUR

Part of the post-industrial revitalization of the harbourfront of Copenhagen was positioning buildings such as the Royal Danish Playground, the Royal Danish Opera, the Royal Danish Library, and the Danish Architecture Centre to make for attractive cultural attractions.

Harbour development: building cultural value by positioning cultural icons along the river
Jorren Verheesen

HIGH CULTURE IN VESTERBRO

Still recovering from being the seedy area of Copenhagen, Vesterbro is 'thriving' under gentrification with more and more (predominantly small-sized) cultural attractions popping up. Where the area was known for its bad reputation only 15 years ago, it is now one of the top destinations for both locals and travellers.



High culture in Vesterbro
Jorren Verheesen

HIGH CULTURE AND THE ARISTOCRACY

Before accessible to the general public, high culture was seen as the objects of high cultural value that identify the lives of an upper class. Until fairly recently, high culture strongly contrasted the popular culture of general public.

EDUCATION AND GOVERNMENT SUBSIDIES

At the beginning of the 19th century, government saw the importance to make high culture accessible to a wider audience than just the bourgeoisie. They did so by opening museums and concert halls to the general public. Furthermore, topics such as fine arts, music, film or literature became part of university education. Hence, high culture is, until this day, a subject of study throughout academia.

2ND INDUSTRIAL REVOLUTION

It wasn't until early 20th century that (furniture) design saw an uplift in Scandinavia. Where the first industrial revolution did not reach these northern countries, the second one did. As a result, handcrafting remained in place far longer than anywhere in Europe (Nagle, 2016). But when the industrial revolution hit, many Danish designers went on with manufacturing on an industrial scale.

Influenced by Bauhaus and drawing further on craftsmanship, functionalism and simplicity, danish modern becomes simple yet functional and clean yet bold (Furniture and Industrial Design, 2008). Apart from that, Danish modern, as part of Scandinavian design, puts the natural world as significant influence.

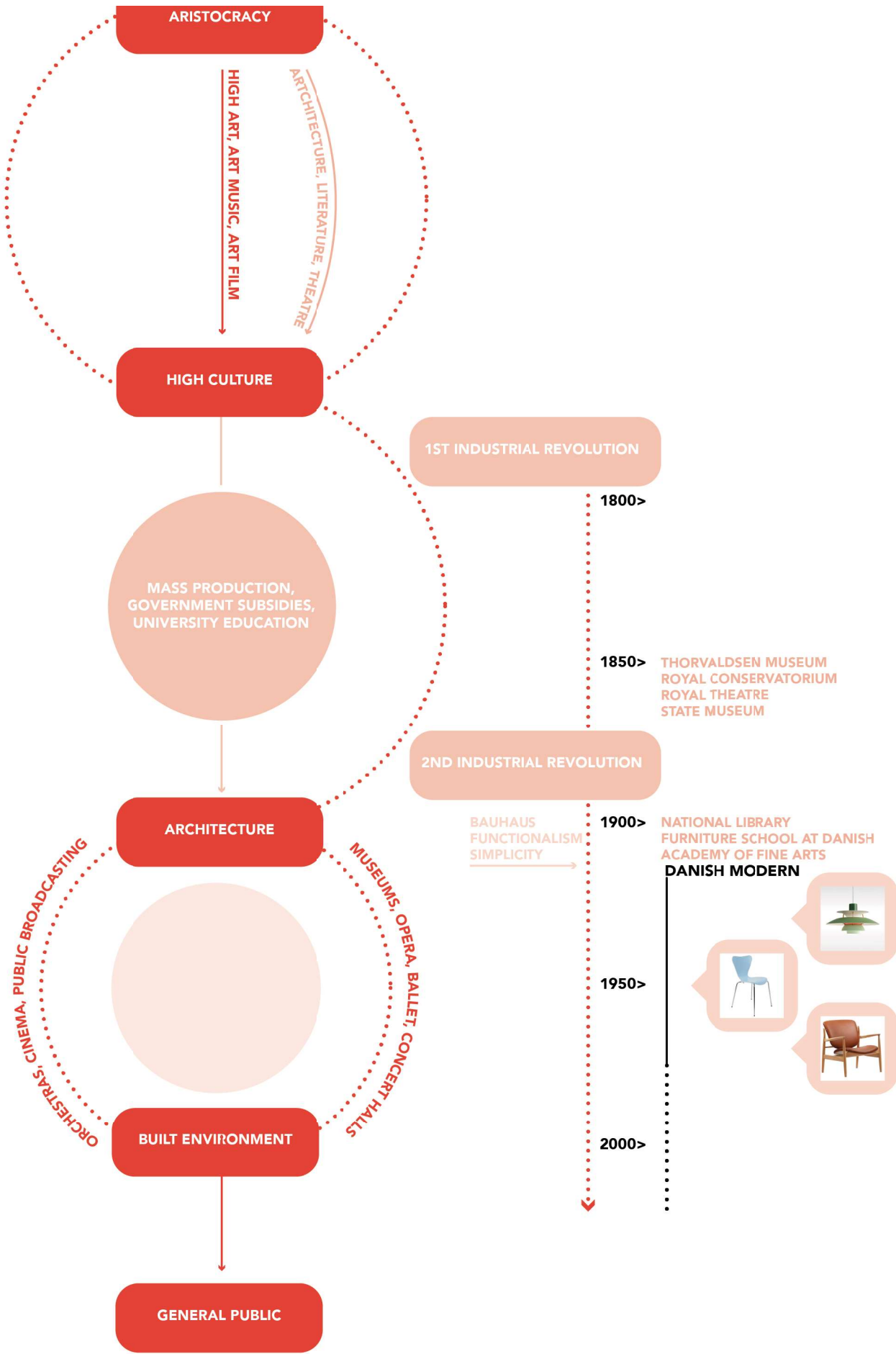
HIGH CULTURE AND THE GENERAL PUBLIC

Architecture has become both message and medium for the portray of high culture. It is through buildings and institutions that high culture is made available for the general public. This is not only made possible through the introduction of high culture into academia but also because of government support to make high culture available to the general public.

Another factor that weighs in the introduction of high culture into the life of the general public is the scale of danish design. Post WWII conditions in Denmark made for a perfect environment that allowed mass manufacturing to thrive and enter the homes of the mass.



High culture in the Household: Designer Furniture for All
Jorren Verheesen



High culture: from aristocracy to general public
Jorren Verheesen

CONCLUSION

ECONOMICS

In terms of economics, the general interest of the municipality of is the position Copenhagen within the metropolitan area of Greater Copenhagen with its connections to Malmo, Sweden. Within this lies the focus on connecting the city of Copenhagen a mediator between mainland Europe and Scandinavia. To accomplish this, the government sees the need to improve the quality of infrastructural connections, started with the Oresund bridge. It is here that Copenhagen is a strong force within the lifescience district that is Medicon valley.

With this focus on developing green industries that suit the lifescience district around Copenhagen, the municipality strives to work towards their goal of Copenhagen as a sustainable city. Other than that, there is also a great focus on Copenhagen as a neighbourhood city, where underlying districts work together in order to improve economic stimuli. With an aim on developing not only these (green) industries, but also improving job opportunities in healthcare and the creative industry, the municipality strives to become a force to be reckoned with globally. Part of this plan is also to improve the quantity and quality of educational opportunities in these fields of work. Here, the cooperation between businesses, government, and institutions is not just a play of power but a partnership that leads to great succes for all. Furthermore, the city of Copenhagen is also focussing greatly on the city as a tourist retreat. With the a classical city centre, the well designed waterfront its many cultural attractions in the centre, the city aims to be on the global radar as an attractive city for all.

POLITICS

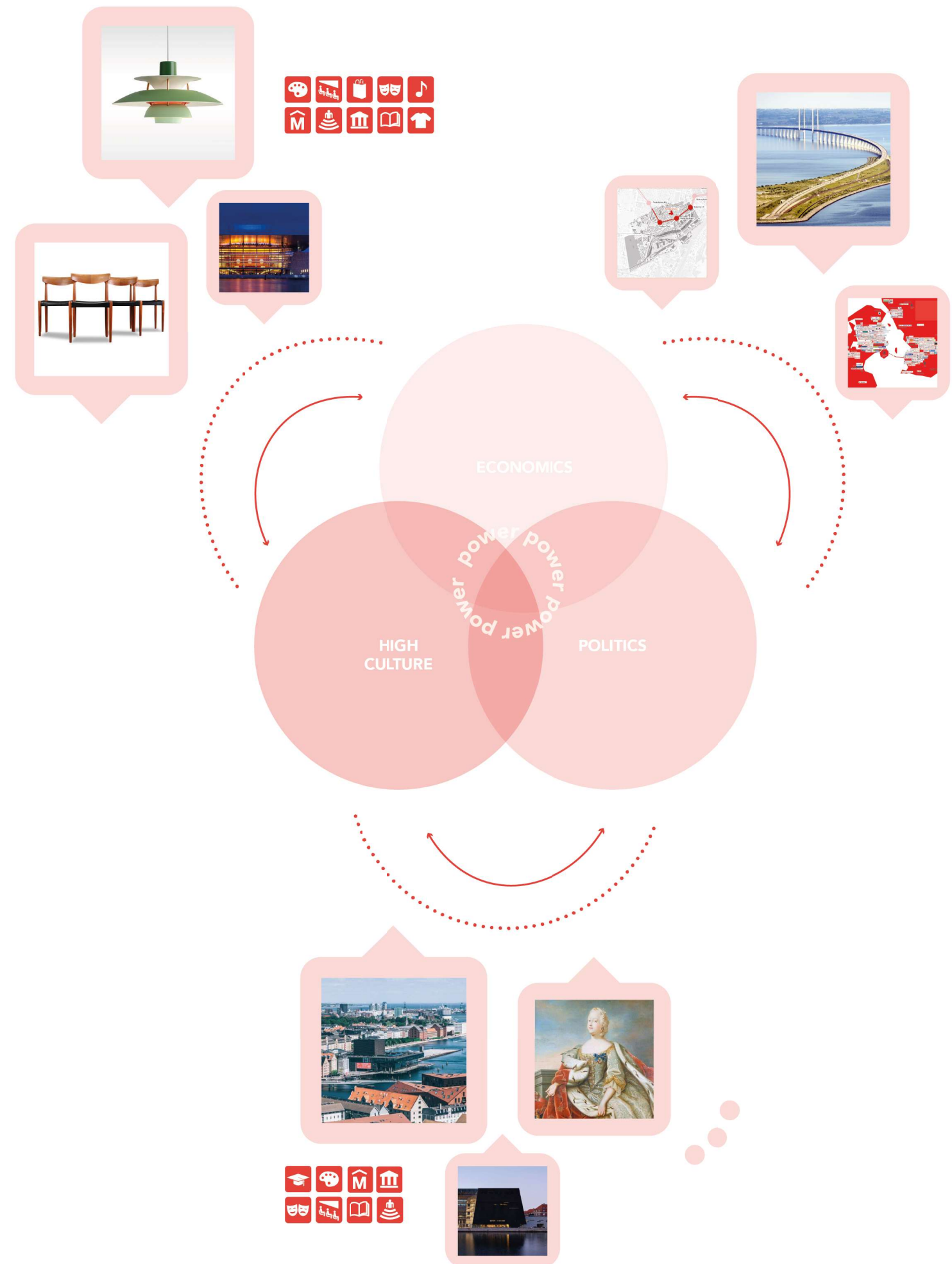
Vesterbro is affected on different scales by governing bodies. Vesterbro is affected by the national government, the Öresund region and the municipality. In Copenhagen, since it is the only big city in Denmark, the national policy is significantly influenced by Copenhagen. The municipality and the national government are elected by the people. A difference can be seen in the voting behaviour, in Vesterbro the vote was focused on the left whereas the national government is more right-winged. Therefore the national government's influence on Vesterbro is minimal. The policy of the municipality of Copenhagen are very general but are nonetheless very concrete. In Copenhagen the city has since the 1990's actively made policy to improve the city. The first 15 years we're focused on improving living standards and improve the city centre. This lead to a big form of gentrification

in the Vesterbro area. Since then the municipalities focus shifted more to a coherent city and thus counteracting this extreme form of gentrification in some areas and forcing social housing into these neighbourhoods. Since living standards became sufficient the focus shifted to a healthy and sustainable environment for all Copenhageners. This lead to the city deciding it should invest in clean air and a reduction of noise in the city. After a while they made the ambitious plan to be carbon neutral in 2025 in which they look likely to succeed. Along with this is the new investments in the infrastructure connecting Vesterbro to more neighbourhoods in the city of Copenhagen. Eventually the metro will also connect Copenhagen and Malmö directly and thus improving the position of Vesterbro in the Öresund region as well. So Vesterbro is becoming better connected and is welcoming social housing in the area.

HIGH CULTURE

With important artists such as Asger Jorn, Ejler Bille, Wilhelm Freddie, Egil Jacobsen, one could say that the Danish culture would very much enriched with great sense of high culture. That is, if one posits high culture as something that it once was, just for the elite. Nowadays, through the (digital) architecture that is all around, high culture has merged with popular culture, accessible to all. But not to all is this a direct influence. It is mainly with the influence of Danish Design where 'higher' culture reached into the homes of many: lightweight, technologically advanced and massproduced household items that showcase the natural beauty of its materials. Even though Copenhagen is a city filled with cultural insitutions such as the Statens Museum for Kunst, the Danish Architecture Centre or the Royal Opera, most of them are positioned in and around the city centre. But that does not mean there is no activity of high culture in Vesterbro: filled with (contemporary) art galleries, dance schools and theatre organisations, the creative scene is flourishing - which is mainly caused by Vesterbro once being a developing area for the poor and the creative.

As the idea of high culture has changed over time and high culture opened it's door to the public, they have also become common demeanors for transformation of an area. The effect of introducing public functions (of high culture) such as cinemas, theatres, libraries or museums has shown to be of great effect on an area (Belanger, H., 2008). But as this has already happened on an large scale, looking at the Copenhagen waterfront and its cultural icons, it is the question whether the area of Vesterbro is in need for another one.



CASE STUDY

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RUSAKOV WORKER’S CLUB

YEAR	1927-1929
ARCHITECT	Konstantin Melnikov
CLIENT	The Union of Municipal Workers
PROGRAMME	Theatre/ Auditorium/ Cafe
AREA	2672 m²
LOCATION	Ulitsa Stromynka 6, Moscow, Russia

The Rusakov Workers’ Club, a notable example of Constructivist architecture, was commissioned by the Union of utility providers for workers of the Sokolniki Tram Depot and Repair Shops (now – SVARZ Factory) architect Konstantin Melnikov. The House of Culture was constructed in 1927-28 and named in memory of the participant of the revolutionary movement and one of the leaders of the Bolshevik Party organization in Sokolniki Ivan Rusakov (1877-1921), in his honor also a tram depot, a street and an embankment in Moscow were named.

The club is built on a fan-shaped plan, with three cantilevered concrete seating areas rising above the base. According to original Melnikov’s plan each of these volumes could be used as a separate auditorium and combined. At the rear of the building there were more conventional offices. The only visible materials used in its construction are concrete, brick and glass. The function of the building is to some extent expressed in the exterior, which Melnikov described as a “tensed muscle”.

In 1987, the club was recognized a monument of Soviet architecture.

In 1996, the club was handed over to Roman Viktyuk Theatre.

In the 1998 the building was included into World Monuments Watch by the World Monuments Fund and received from a grant of 20 thousand dollars for its renovation.

In 2005, the Russian Central Bank released 10 000 memorial silver coins equivalent of 3 Rubles dedicated to Rusakov Workers’ Club.

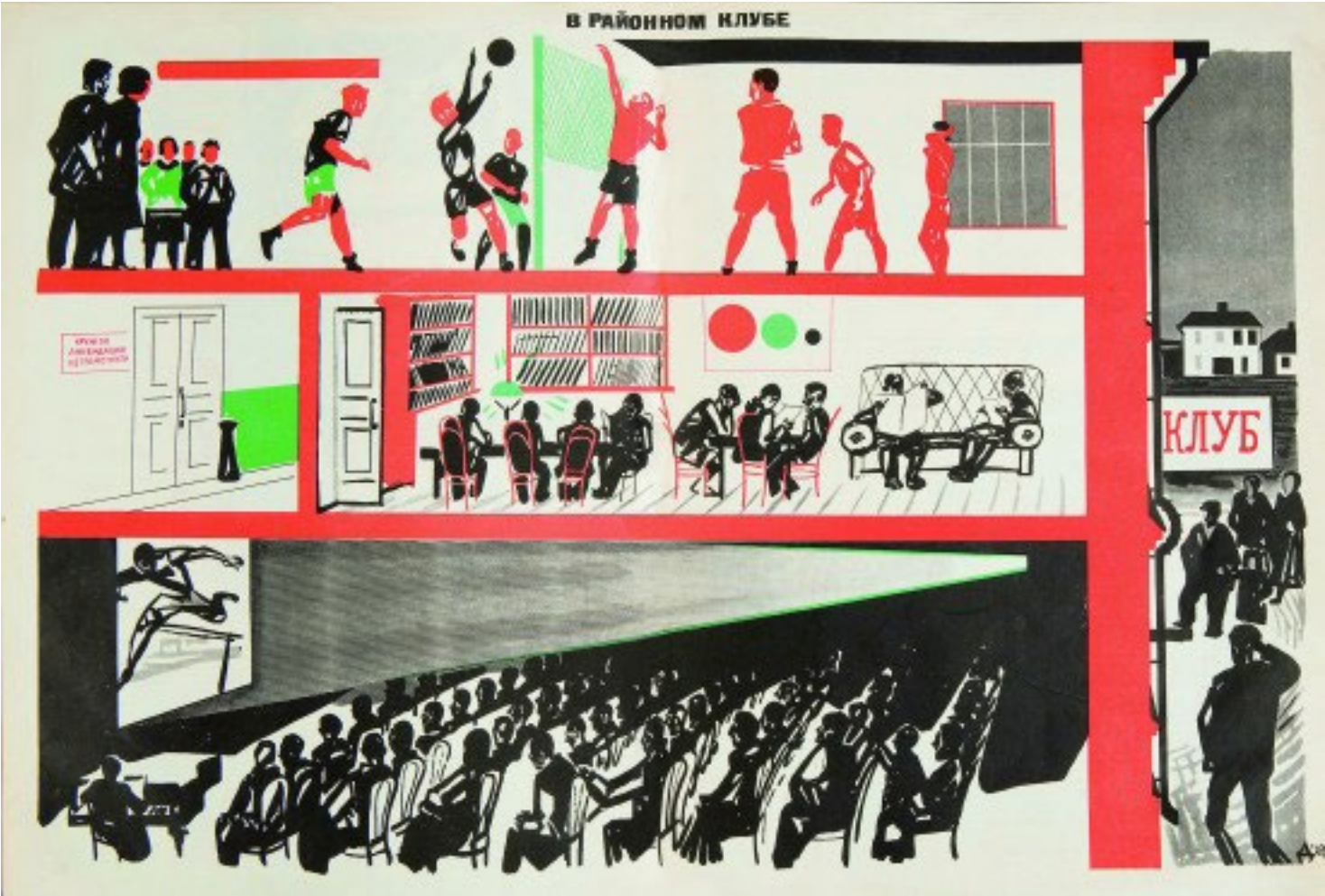
In July 2012, a competition to carry out repair work in the Club was announced; the reconstruction project should have included an adaptation of the building facilities for “artistic activities”. At the end of 2012 the renovation of the Club began.

Rusakov Workers Club reopened as Roman Viktyuk Theatre on 28 October 2016.



House of Culture named after I.M. Rusakov, 1929
Uploaded by Mihalych. <https://pastvu.com/p/2475>

RUSAKOV WORKER'S CLUB



V rayonnom klube [At the local club], illustration for Bezbozhnik u stanka [Atheist and themachine], No. 3
Alexander Deyneka, 1927

CLUB AS A 'SOCIAL CONDENSER'

The idea of the *Social Condenser*—promoted by Soviet Constructivist architects during the late 1920s—is arguably the most powerful architectural concept produced in the Soviet Union in response to the earth-shattering events of October 1917.

The *Social Condenser* was a proposal for a new type of architecture that would serve as a tool for the construction of radical new kinds of human communities without old hierarchies of class and gender.

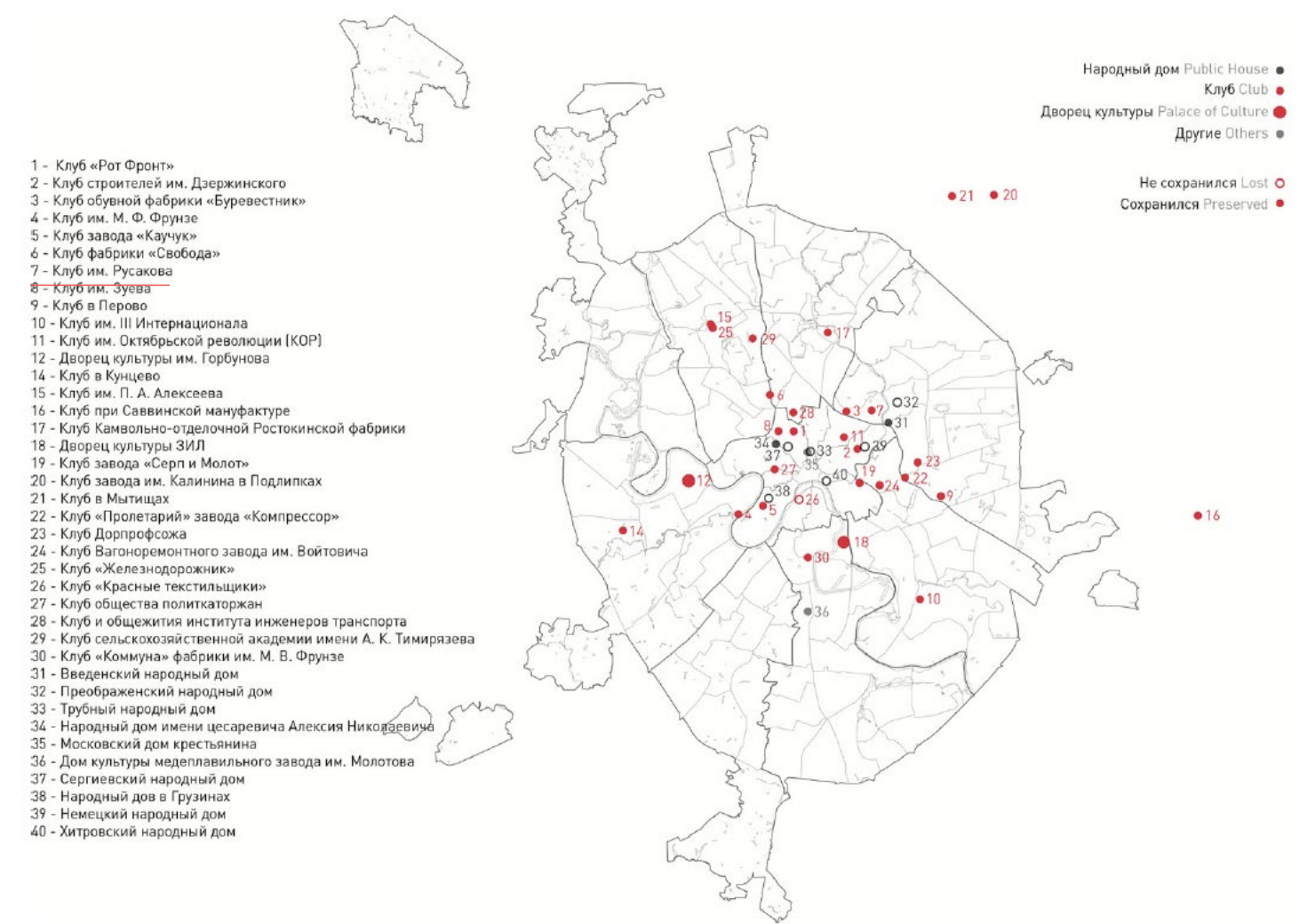
Subject to standardised programmes, clubs functioned simultaneously as communal living rooms, performance spaces, adult education and daycare centres, and sports facilities. These showrooms for *noviy byt* served as amplifiers for political propaganda and provided platforms for experimentation with new theatrical art forms. Ultimately, these so-called 'social condensers' were a part of a larger social engineering project and facilitated the forging of a *noviy sovetskiy chelovek* [a new Soviet man].

CLUB AS 'THE CHURCH OF NEW CULT'

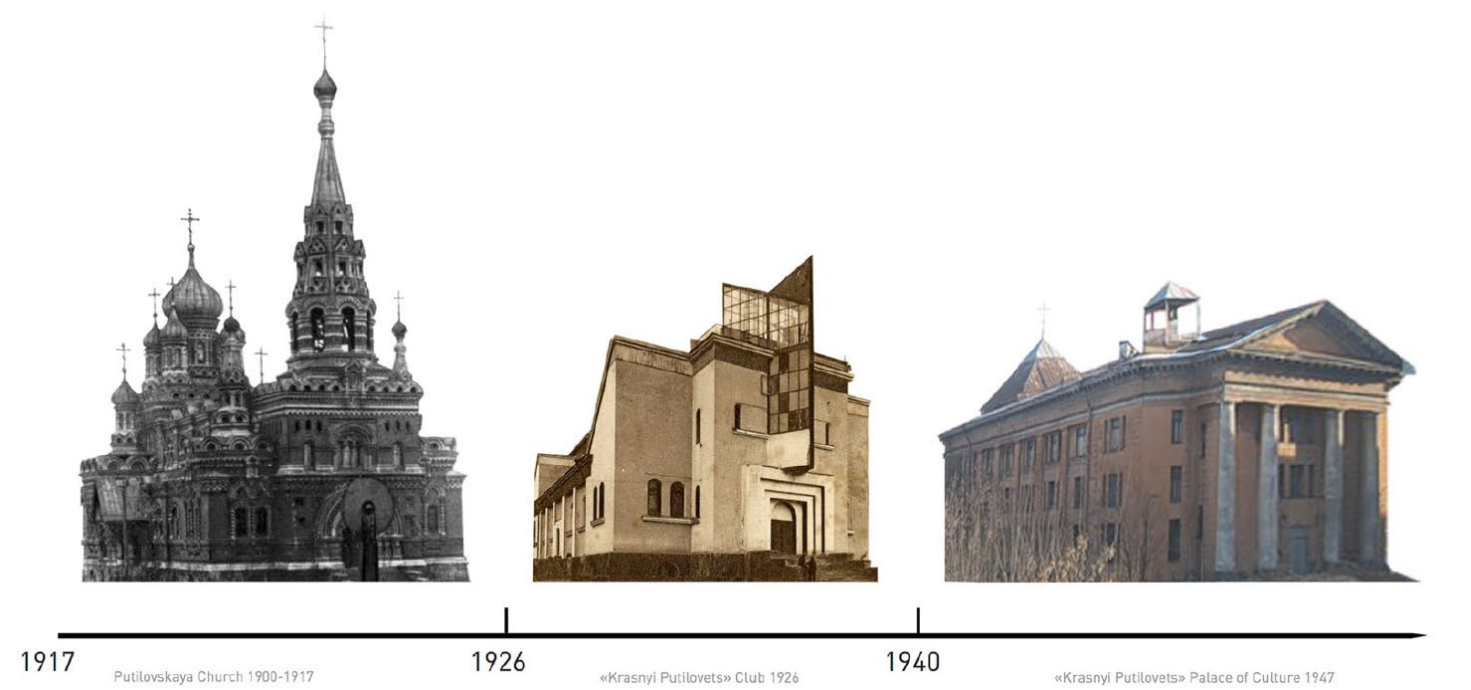
Just as communist demonstrations replaced religious processions, workers' clubs were conceived as antidotes to religious institutions. In the case of the Putilovets factory workers' club in Petrograd, the existing church building was repurposed to house the new function by chopping off architectural fragments such as the dome and cross.

Lenin's death in January, 1924, marked another phase in the development of workers' club typology. This dual vision for the workers' club as a place for individual respite, on the one hand, and collective activities, on the other, manifested a dichotomy inherent in the club mission and in the challenges its architecture faced.

The shift towards memorialisation was reflected in the size of the clubs, which began to transform from the scale of a 'second home' to palatial grandeur. The architectural competitions conducted in the period 1924–1925 constituted an important platform for developing the typology of the workers' clubs and palaces of culture.



Site map of workers' clubs, palaces of culture and people' houses in Moscow
Anna Bokov, Arseniy Afonin, Olga Krukovskaya, Kirill Lebedev



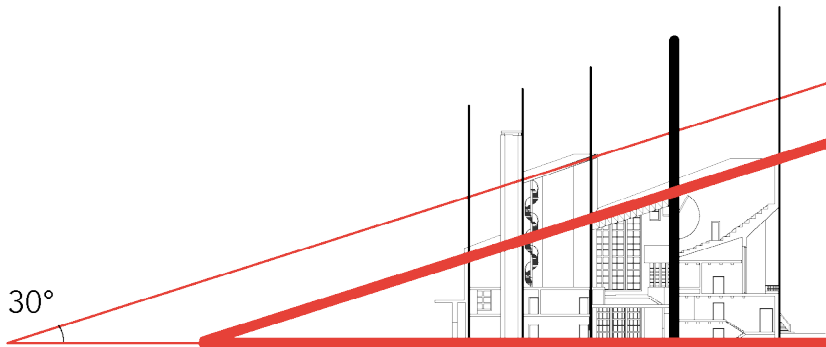
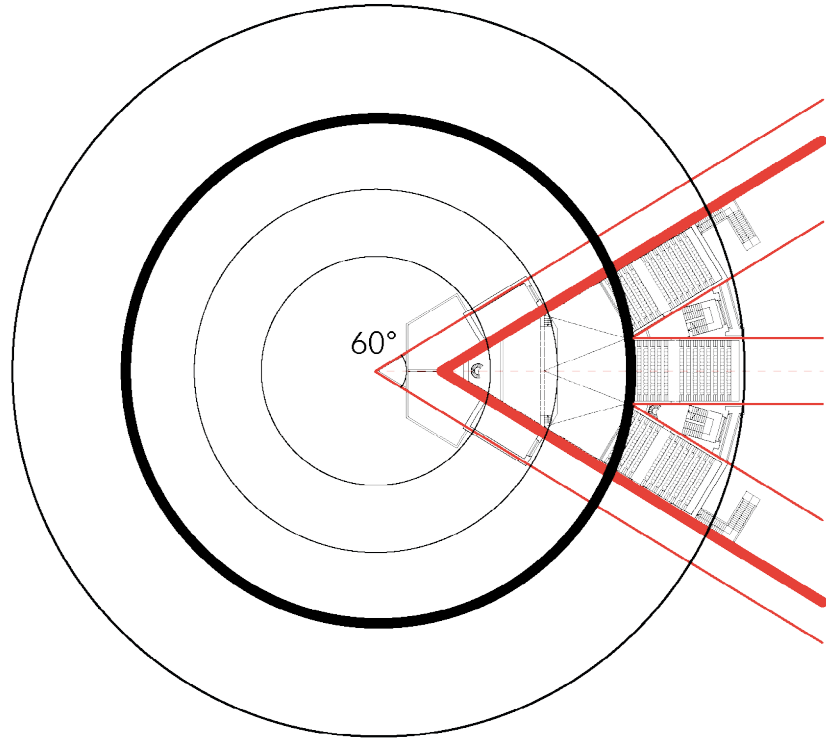
Timeline of the transformation of the Red Putilovets church into a workers' club and a palace of culture
Anna Bokov; Arseniy Afonin, Olga Krukovskaya, Kirill Lebedev

RUSAKOV WORKER'S CLUB

INSTRUMENT OF PROPAGANDA



Poster for promoting books and education, Moscow, 1923
Alexander Rodchenko, Varvara Stepanova



Geometry of composition
Haiqi Deng

2011



Labour Union

RUSAKOV CLUB
of the Communal Union

school of
Communism



1968



1930



1929



Labour Union

RUSAKOV CLUB
of the Communal Union

school of
Communism

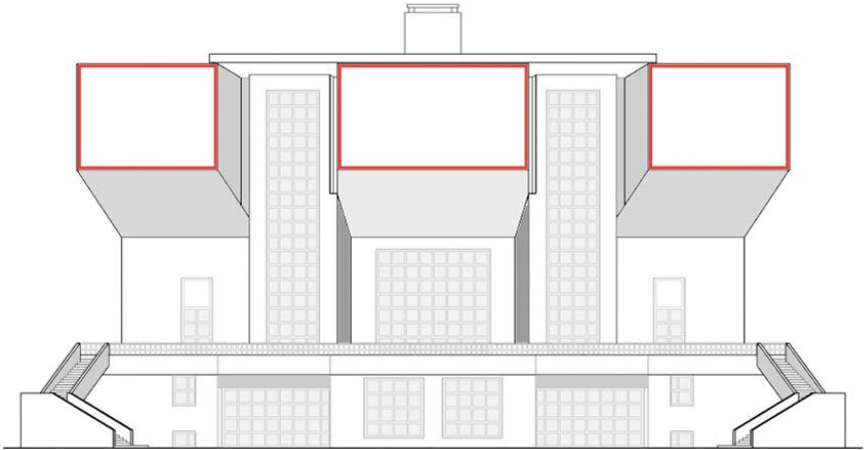
1927



POWER OF
PROLETARIATS

CLUB
of the Communal
Worker Union

INDUSTRY
CREATIVITY

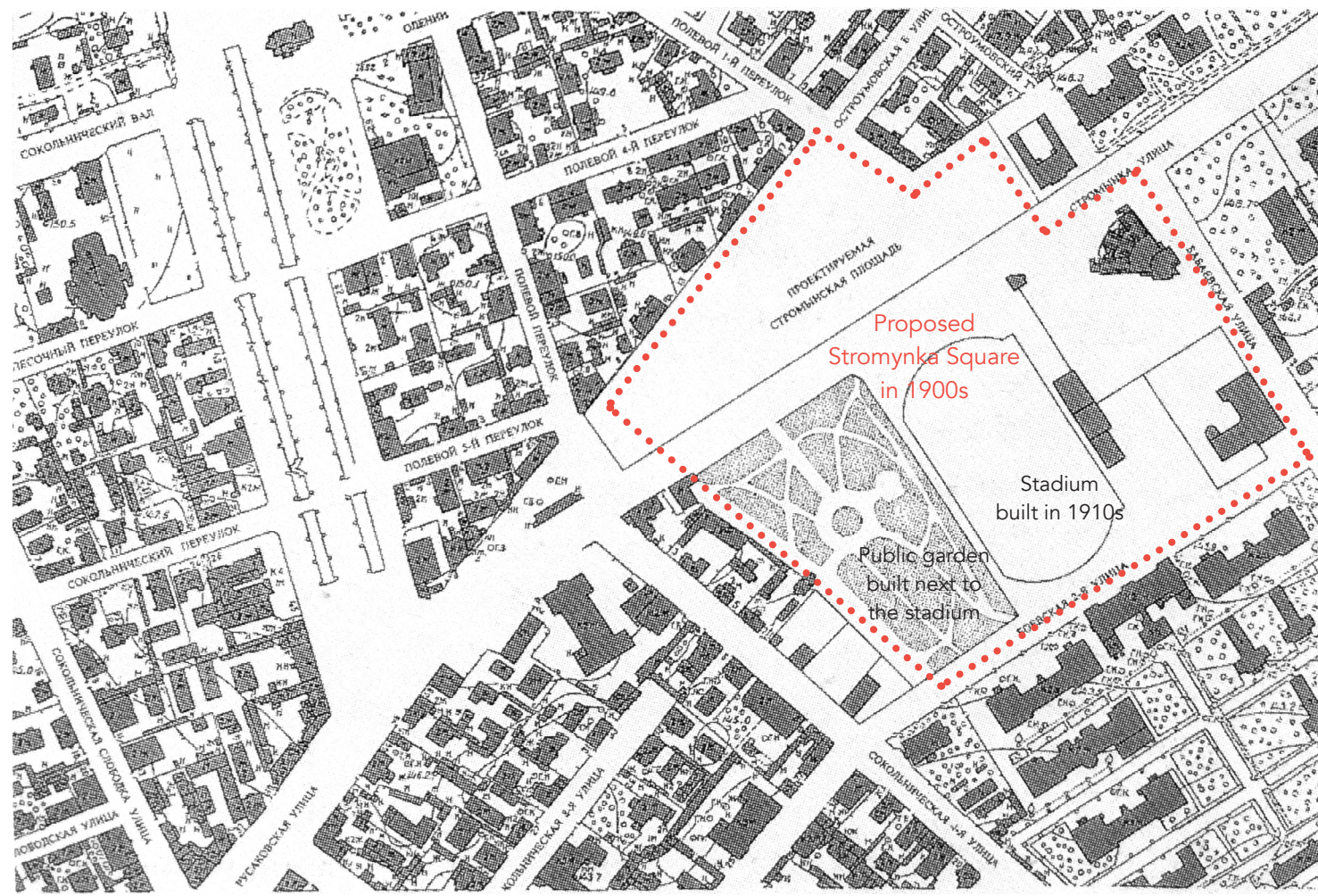


Lettering design on the front facade in 1927- 2019
Haiqi Deng

■ RUSAKOV WORKER'S CLUB



Urban context of the Rusakov worker's club, 1:20000
Haiqi Deng



Historic map, 1929
Ju. Volcok, E. Nikulina

URBAN CONTEXT

The building of the Rusakov club was situated in a historical region of Moscow -Sokol'niki. The plan of the park represents a fan of alleys whose radii spread out from a central round area. It turned out that the observation tower and the club were axially oriented almost exactly towards the centre of the circle.

In the end of nineteenth century the city authorities decided to preserve some unbuilt field as two city squares on the both sides of Stromynka street. Here some large hospitals were built. However, the square never came into being. in the 1910s a part of the territory was given over for use as a football field, and was gradually turned into a small open stadium. Later, a public garden was laid out next to the stadium.

Nevertheless, the Rusakov club building continues to play an important role today for its actively influences the organisation of the surrounding space.



View from the north

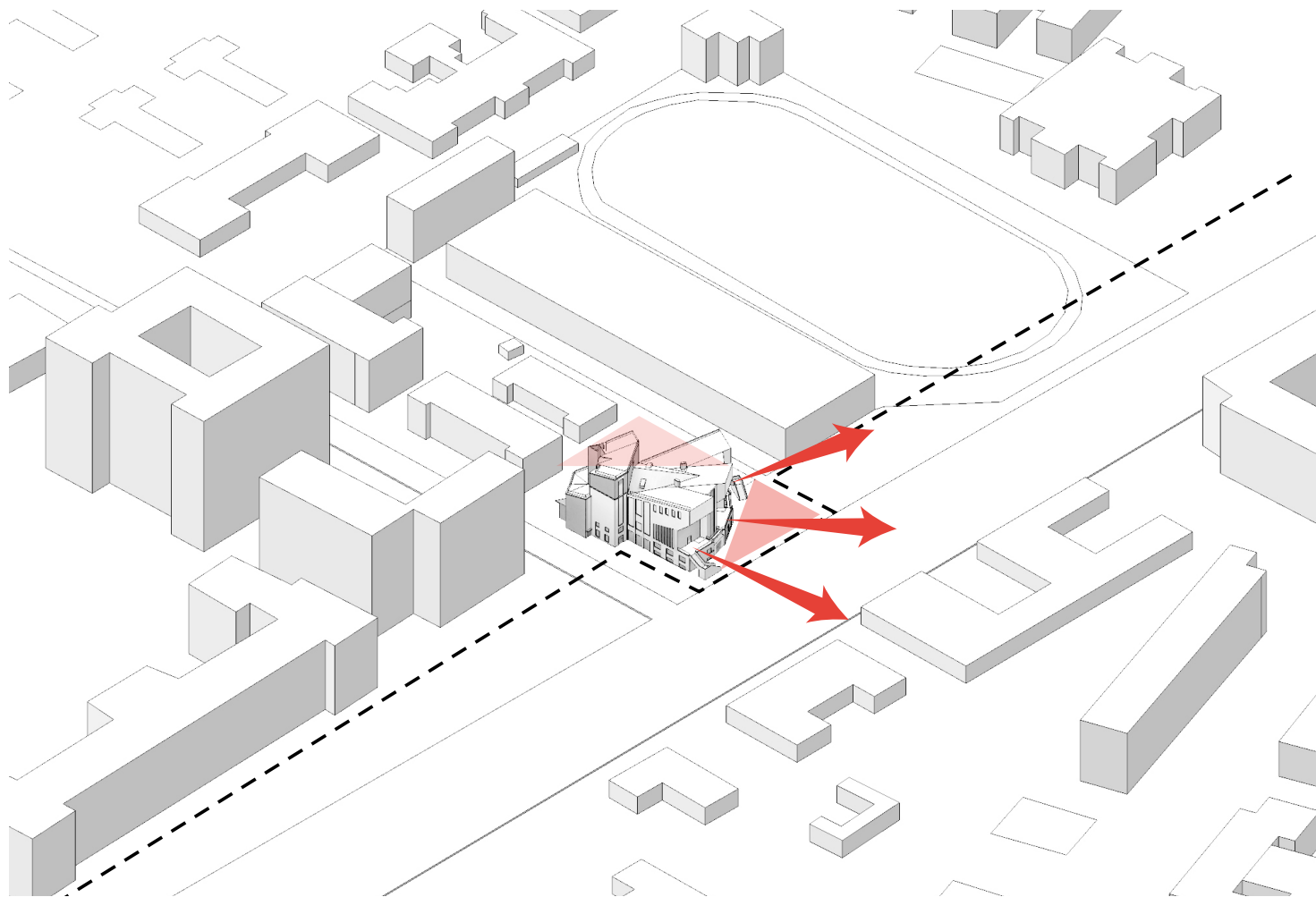


Students of Moscow State University at the stadium near the Rusakov worker's club, 1952

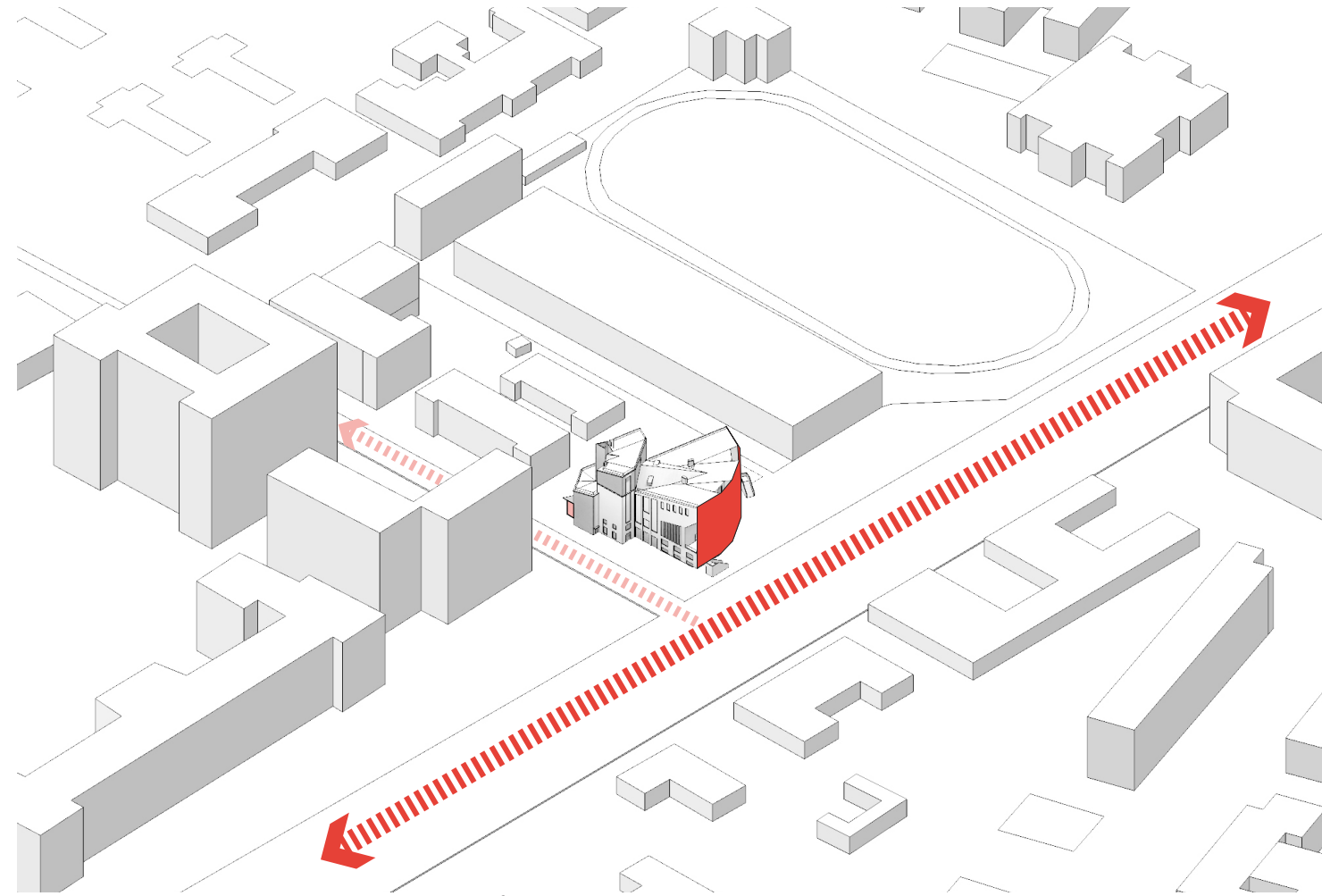


Situation plan
Haiqi Deng

RUSAKOV WORKER'S CLUB



Expression of the sitting and shape in urban context
Haiqi Deng



Relation between urban accessibility and building facades
Haiqi Deng

MONUMENTALITY

The sitting and the unique fan-shaped form of the Rusakov workers' club conveyed as a monument or landmark within the cubic city fabric.

When approaching along the Stromynka street, the building distinctively stands out from the urban surroundings. The form was designed for the defiant expression of Russian political power and dominance. With its exaggerated sharp edges and concrete forms jutting defiantly outward, the exterior was intended to evince muscular sentiments of strength and boldness, as well as indicate the function.

The sitting of the building formed a triangle open public space in the front as well as a private one at the back. The three continuous terraces at the first floor extend the view to the distance, enhancing the publicness of the front facade.



Massive cantilevers
Denis Esakov



Terrace at the first floor
Denis Esakov

FRONT AND REAR

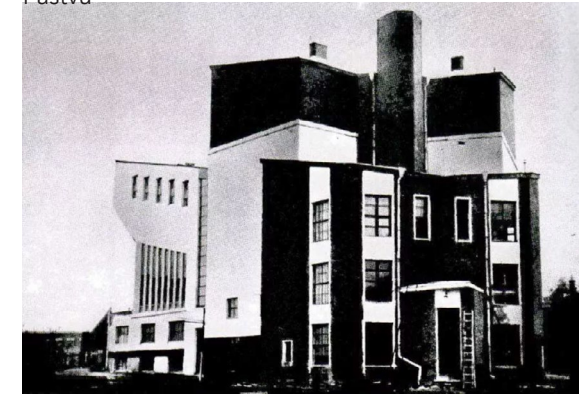
Corresponding to the accessibility of the site, the architect applied completely different design language on the front and rear.

The front facade, with its bold concrete shapes and structure and complete with modern construction technology and amenities, showcased a new, modern, powerful Russia that could provide for its people, and compete with its western counterparts. The use of modern materials such as glass and concrete further exemplifying the Soviet's interests in the forces of industrialization.

In contrast, the rear of the building looks more humble to fit into the neighborhood scale. The rear facade is composed of a stacking of similar volumes in brick, taking on the appearance of a construction in height with a smaller architectonic subdivision, alluding to the design of the facades in Russian wooden architecture.



View of front facade
Pastvu

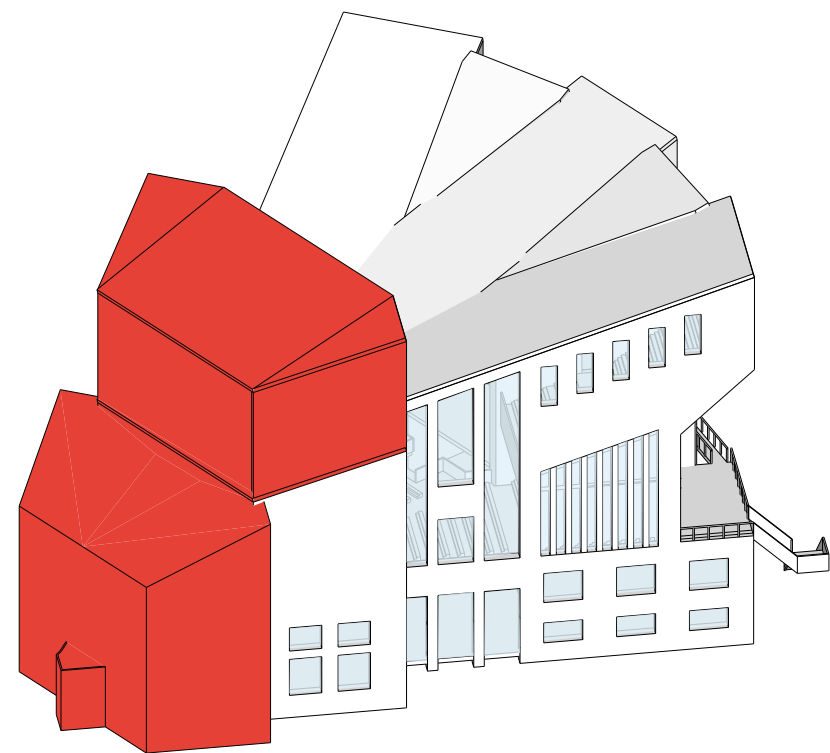


View of rear facade
Pastvu

RUSAKOV WORKER'S CLUB

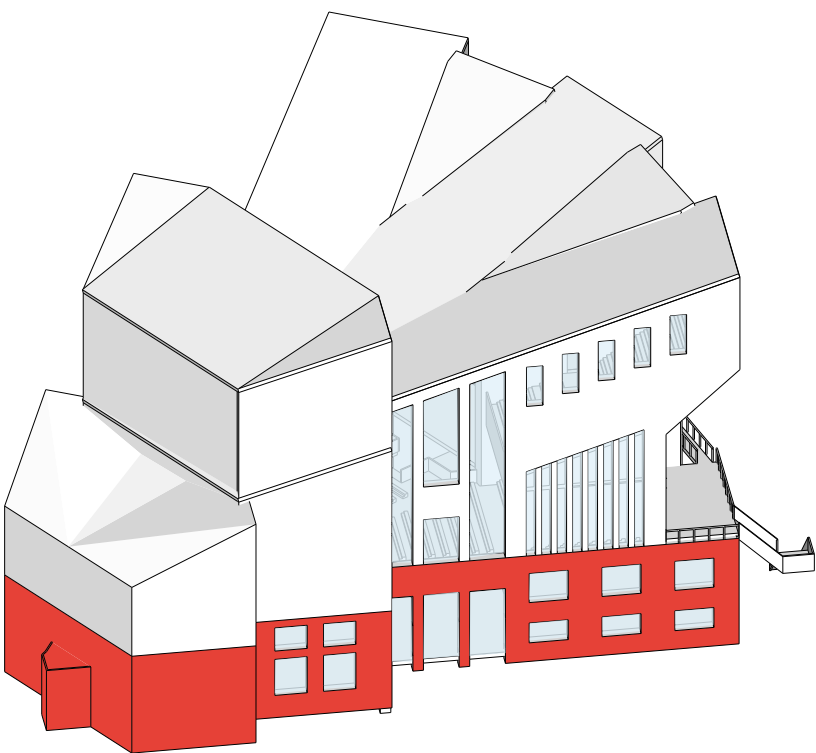
MAIN PROGRAMME RUSAKOV WORKER'S CLUB

The building has roughly 2 different programmes. One programme is the theater and the other programme is the multifunctional programme. The building is also divided in the public programme and the private programme. The division is made in a vertical way and in a horizontal way. There is a horizontal division between the theater programme in the upper volume and the multifunctional programme in the plinth. Then there is the vertical division between the public programme in the north-west volume and the private programme in the south-east volume.



Private Programme Public Programme

Public and private programme in Rusakov Worker's Club
Igor de Kuijer

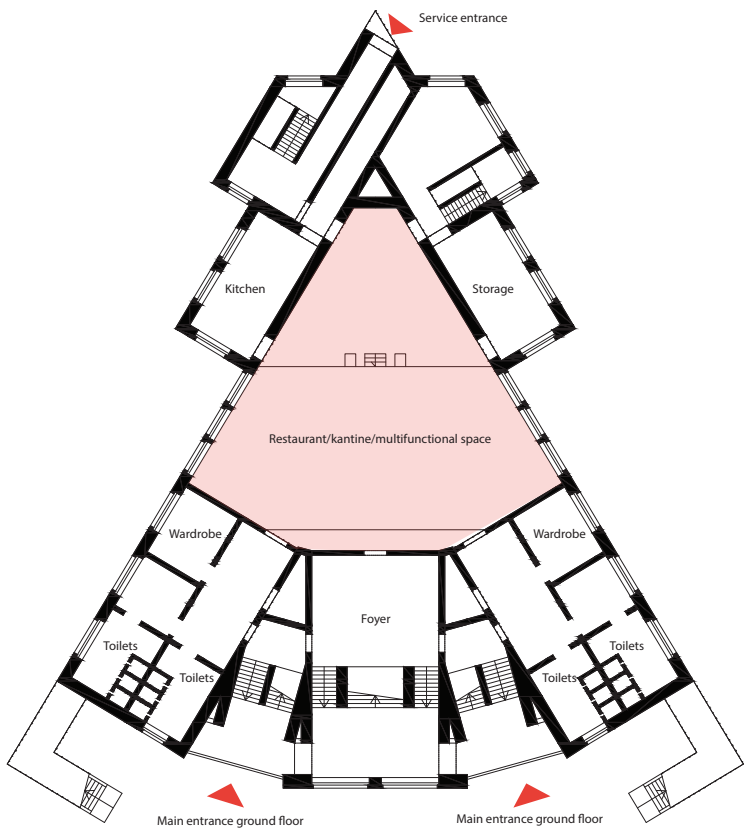


Multifunctional Plinth Theater

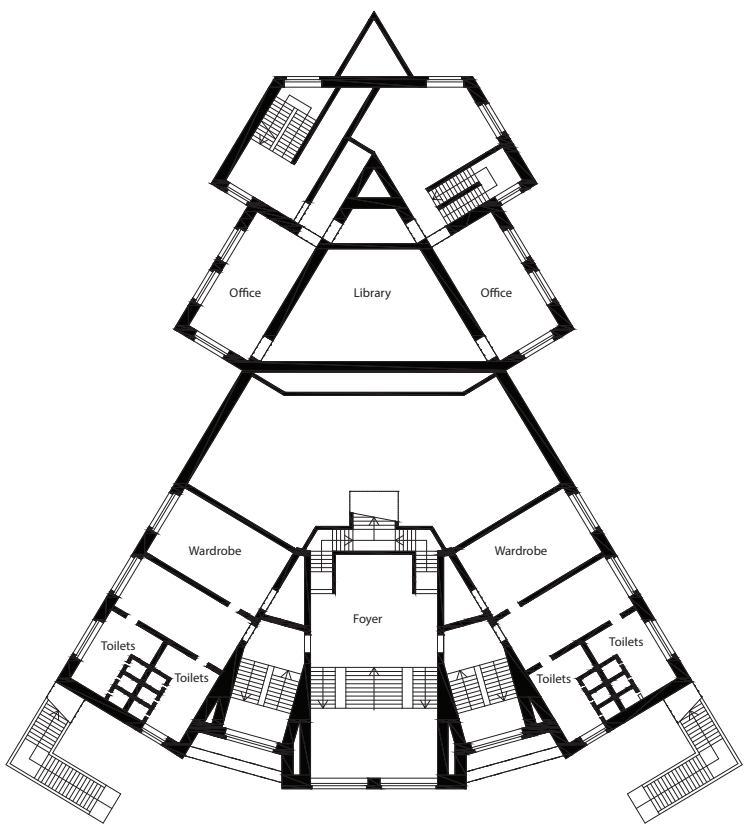
Theater programme and multifunctional plinth
Igor de Kuijer

RUSAKOV WORKER'S CLUB

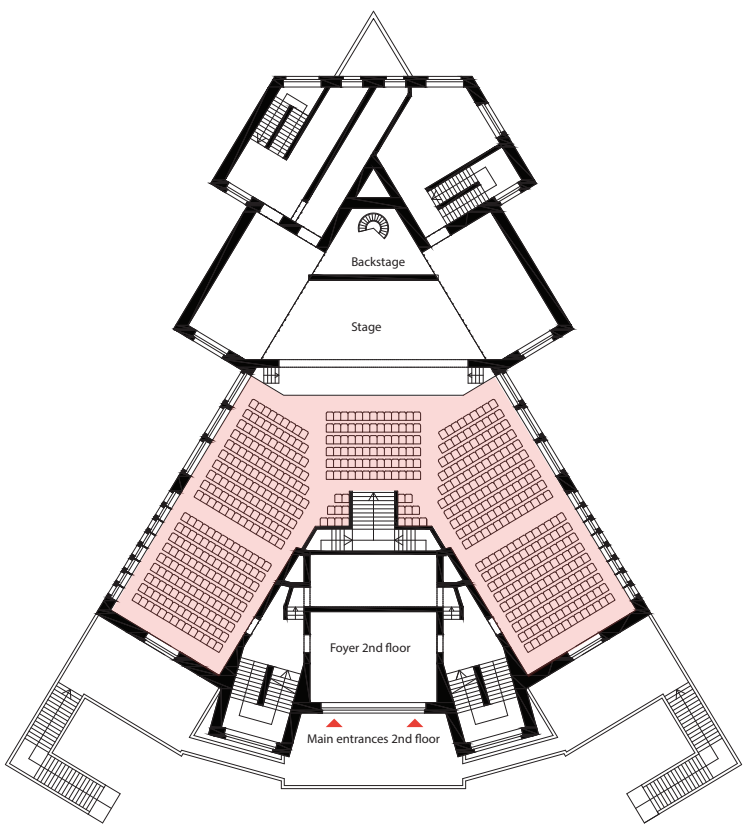
FLOOR PLANS



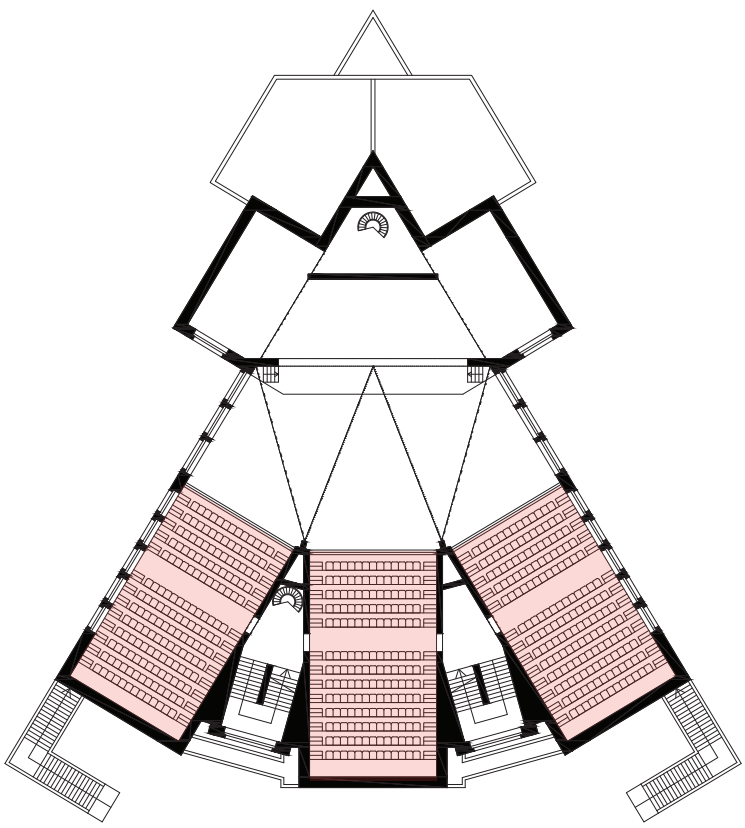
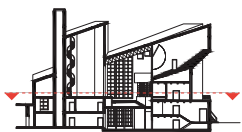
Ground floor 1:500
Igor de Kuiper



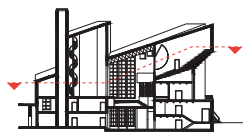
1st floor 1:500
Igor de Kuiper



2nd floor 1:500
Igor de Kuiper



3rd floor 1:500
Igor de Kuiper



THE PLINTH

The plinth has one main room on the ground floor, positioned in the centre of the floor plan. This room is connected to all other programmes situated on the ground floor. The room can be used as a kantine/restaurant, a sports room or any other programme that requires a big open space. The room's ceiling is higher than the other rooms on the ground floor.

The first floor is almost a copy of the ground floor. however the facilities on this floor are mainly in service of the theater above and is disconnected from the restaurant/ kantine. The foyer for the theater is on the same level as these facilities. In the private part there are more traditional offices.

THE THEATER

The third floor is the main floor of the theater with the entrances to the theater, the lower theater area and the stage. The foyer connects to the main circulation cores and the circulation cores are connected to the theater rooms in the wings. The wings are in such an angle that the seats point to the main stage.

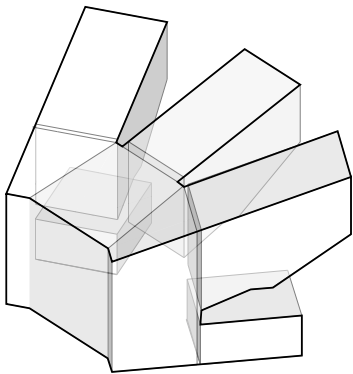
On the fourth floor the balconies of the theater are situated. They are connected to the main circulation cores. The balconies, similarly to the theater halls below, are in such an angle that they focus on the main stage. This allows for a megaphone shape and therefore has a positive impact on the sound in the theater.

RUSAKOV WORKER'S CLUB

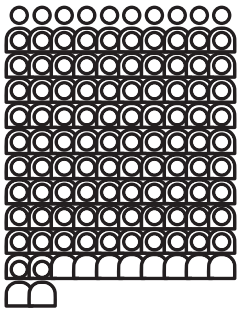
FLEXIBILITY

For Melnikov flexibility was a key factor in his design for the Rusakov Workers club. Melnikov designed the theater in such a way that all smaller theater halls could be seperated from the main theater. This allowed for smaller theater halls suitable for the desired programme of the user. The total hall could in be divided up to 6 smaller theater halls.

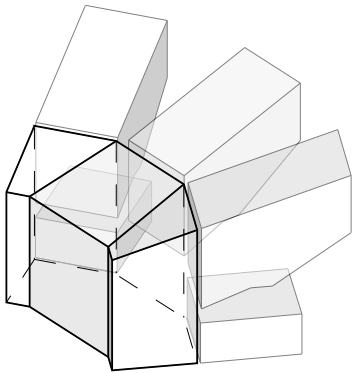
To increase the possible scenarios that could be housed in the building Melnikov developed a system of movable partition walls. The three balconies could be divided by vertical partition walls creating a seperate room of 190 spectators. This made it possible for the theater to vary in crowd from 190 attendees up to 1020 attendees. To realise this new technologies were needed that have not been used before in that era. Melnikov therefore asked technical specialist to help him develop such a system. The design of the moving partition walls is developed by N.I. Gubin.



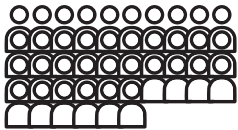
Max sized theater hall



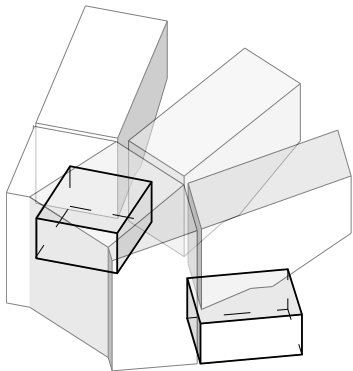
1020 Spectators



Centre seperate theater hall



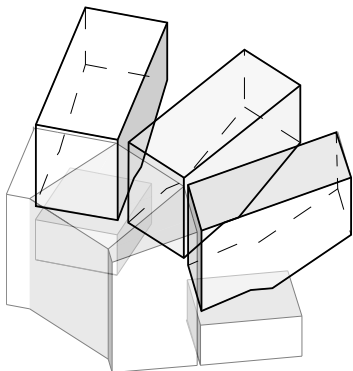
360 Spectators



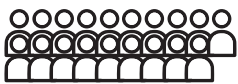
Two seperate lower theaters



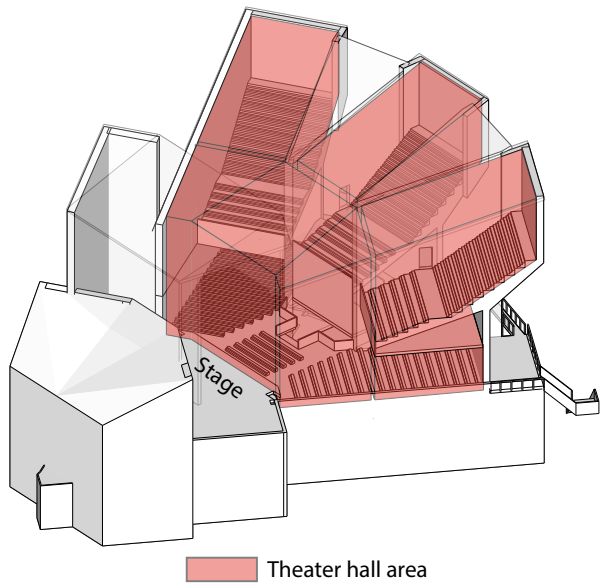
120 Spectators per theater



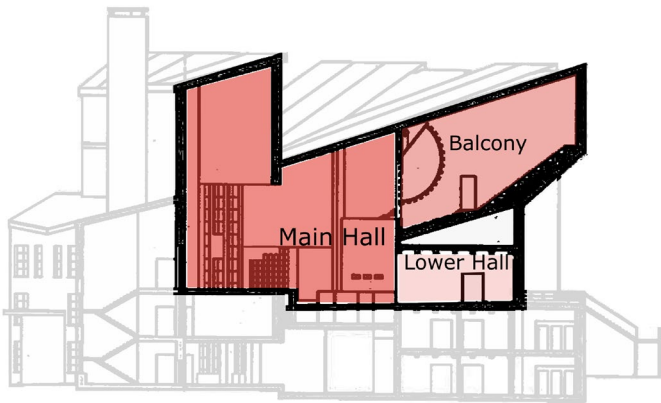
Three seperate upper theaters



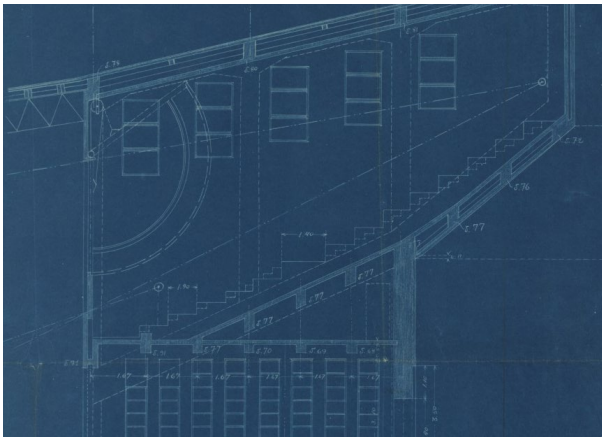
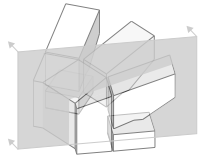
190 Spectators per theater



Theater hall area



Section of dividable theater halls
Igor de Kuijer



Historical drawing mechanism (from culture.ru)

MECHANISMS

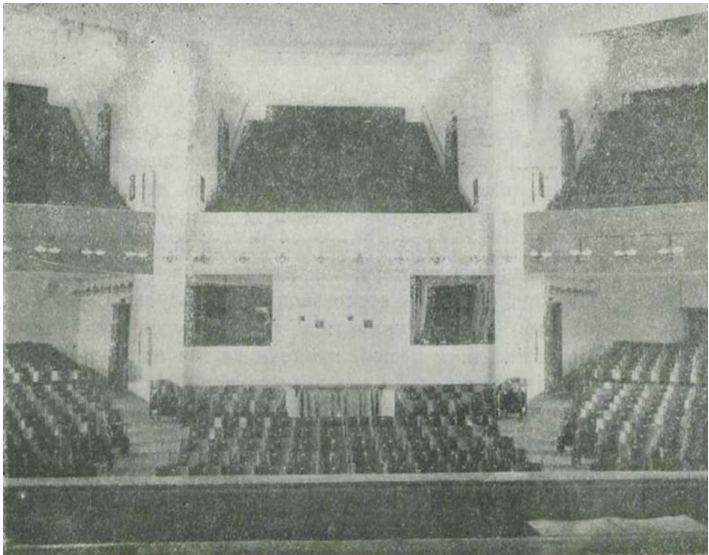
The partition walls dividing the balconies from the main theater was divided in 2 parts. The upper part was driven by an electrical engine and moved along half a circle rail in the wall. At the same time the lower wall would drop down using steel cables attached to the other wall. Because the two walls had the same weight the force was reduced on the electrical engine. The two lower halls had a partition wall that would drop from the ceiling using one elektromotor. After the second world war the flexible partition walls were dismantled and the theater lost its flexibility and became one big theater.

The section aboves shows how the main floor attached to the stage can be seperated from the smaller hall in the back and the balcony above it. This allows for three smaller halls. This can also be done on the other side and in the middle for the main hall and balcony.

RUSAKOV WORKER'S CLUB

RENOVATIONS AND TRANSFORMATIONS

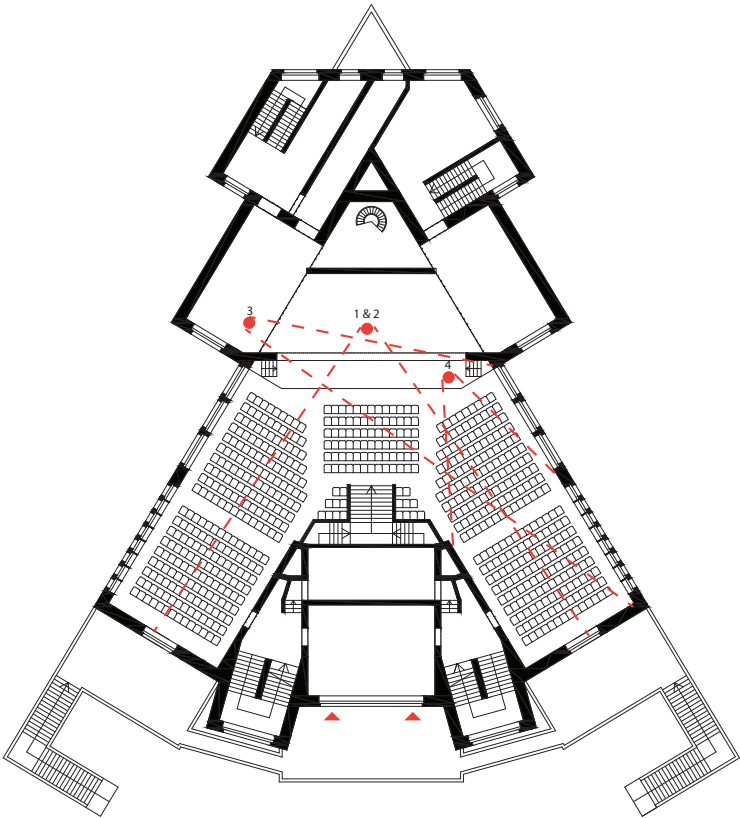
Due to renovations and transformations of the rooms the original spatial concept of flexibility and multiplicity has lost its power. The theater now has less capacity than it did in the 1920's which can also be seen on the pictures. The two lower halls are not part of the theater anymore and the seats in the middle got lost due to the new tribune stairs placed in the main hall.



1: Original state



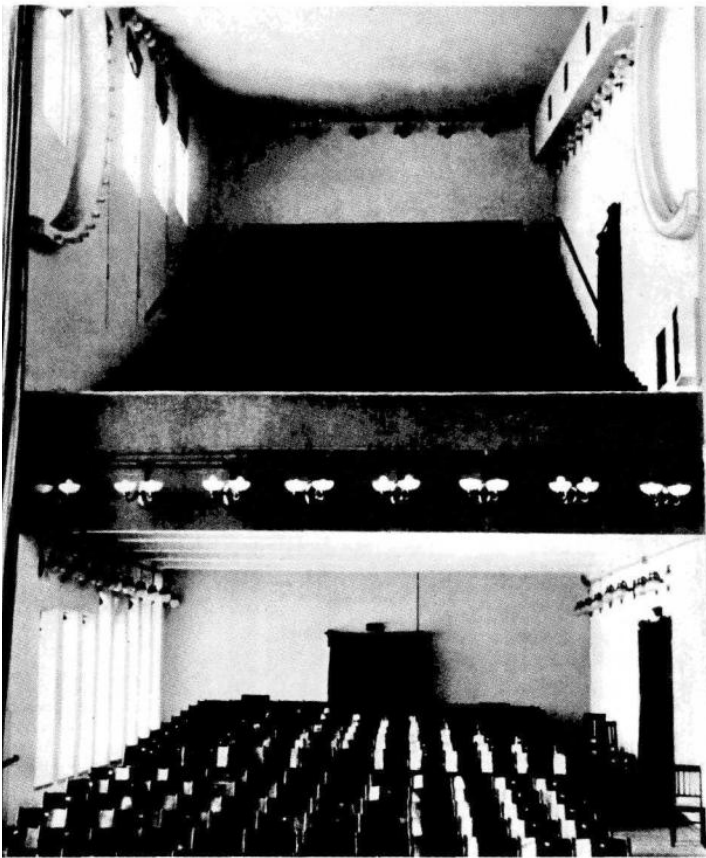
2: Present state



Floorplan 2nd floor: positions photographs



3: Original state



4: original state

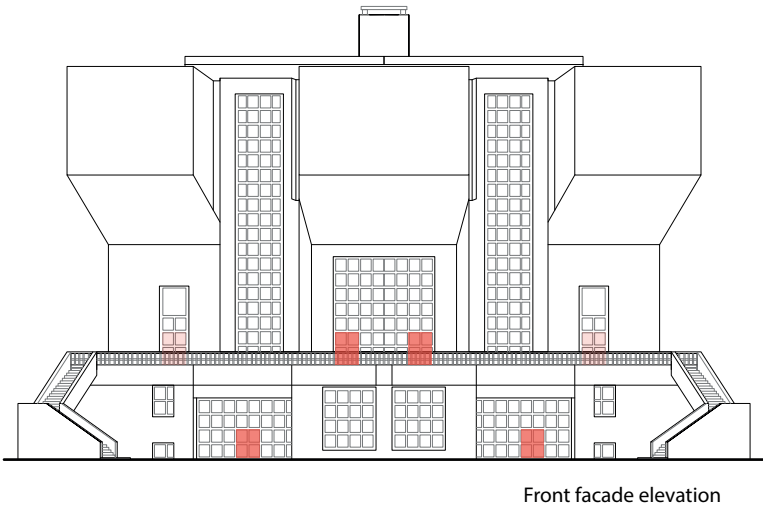
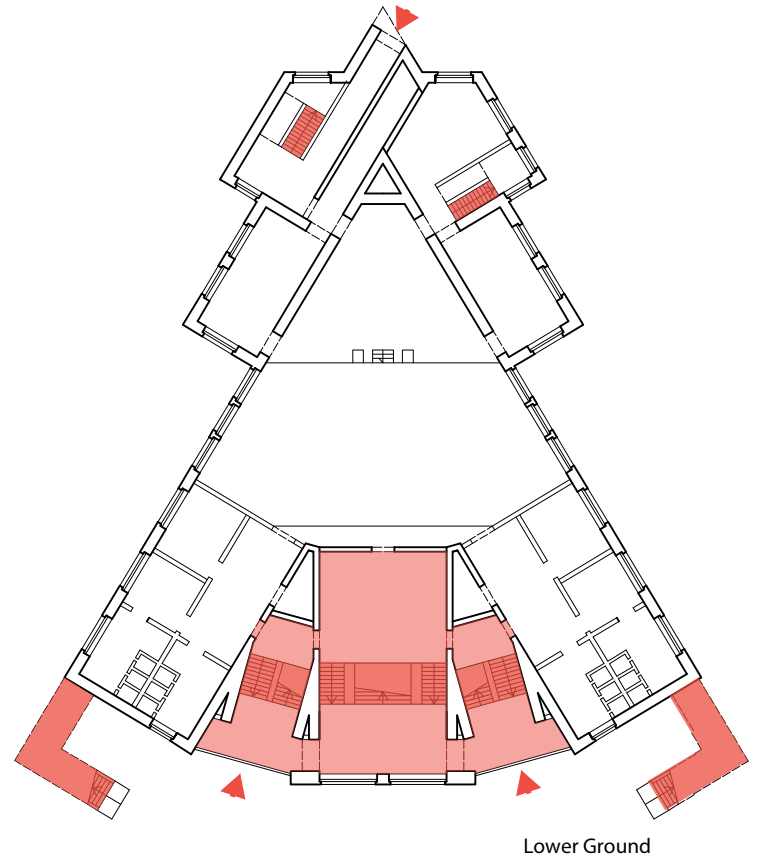
RUSAKOV WORKER'S CLUB

CIRCULATION

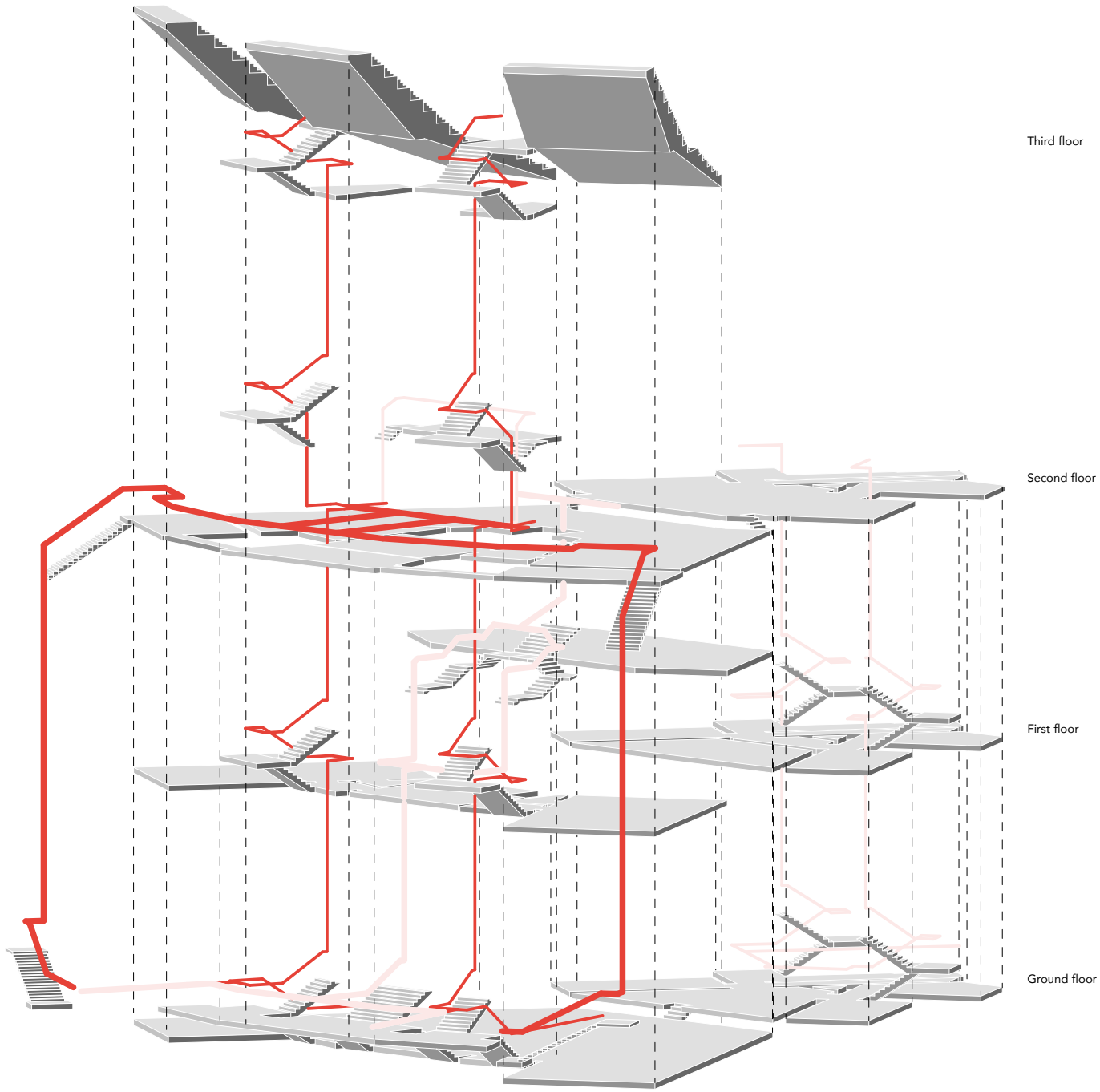
Multiple entrances and variations of routing have been implemented in the worker's club to prevent any disturbances between the large variety of programmes the building facilitates. It exists of four main entrances which will allow the visitors to enter one of the general area located in the three different sections of the building.

One of these options allows the spectators to enter from the large plateau in front of the building to replicate the experience of entering a royal theatre. These entrances will gain the spectator access to one of the vertical circulation cores located in the main compartment of the building.

The secondary compartment of the building which facilitates the services and performers programmes can be entered separately from the backside of the building. All the floor in this part of the building can be accessed by one of the two staircases which allow for an independent circulation for the performers. Both compartments are connected through the ground floor level to facilitate the cantina which is located in this area.



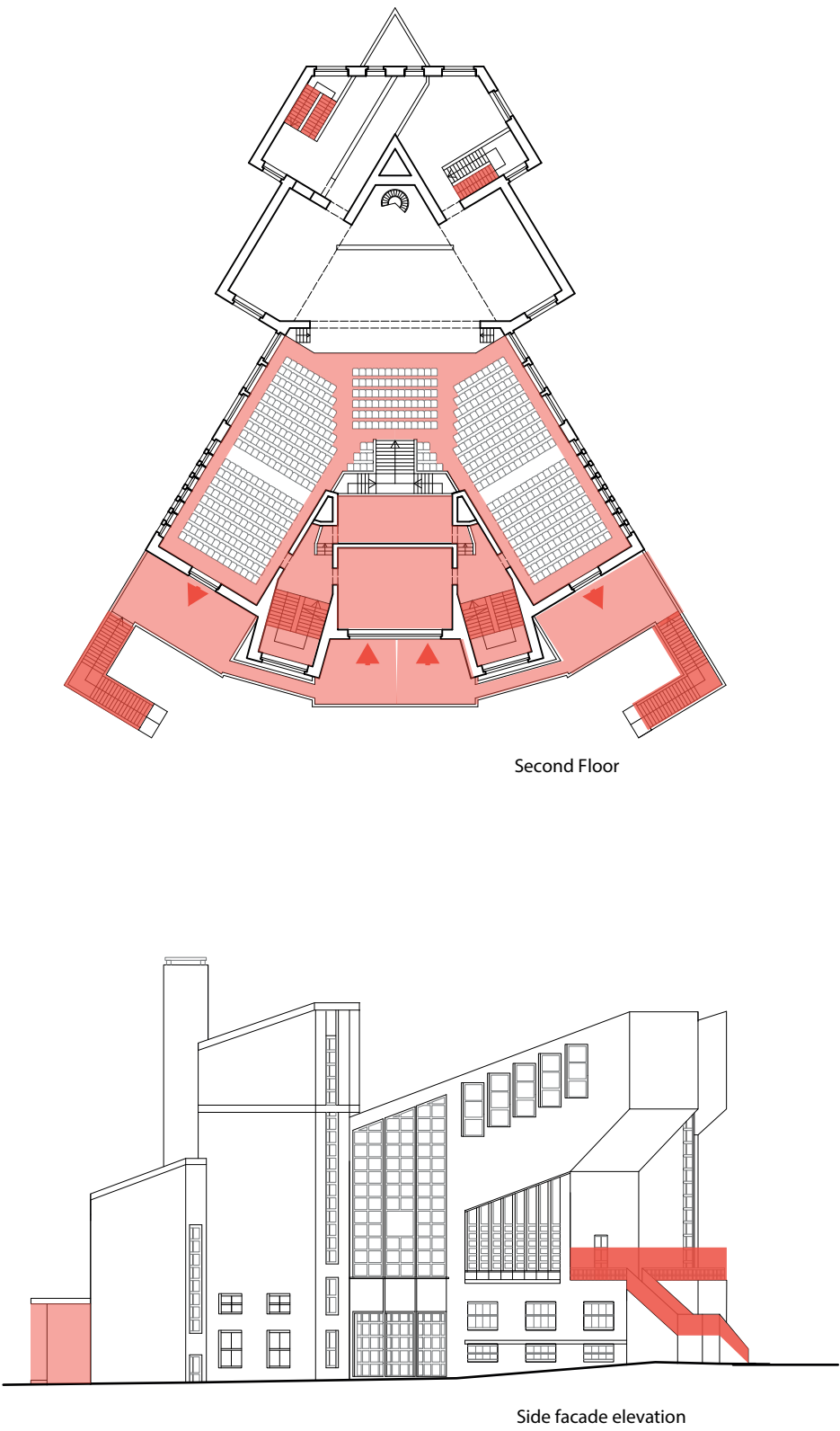
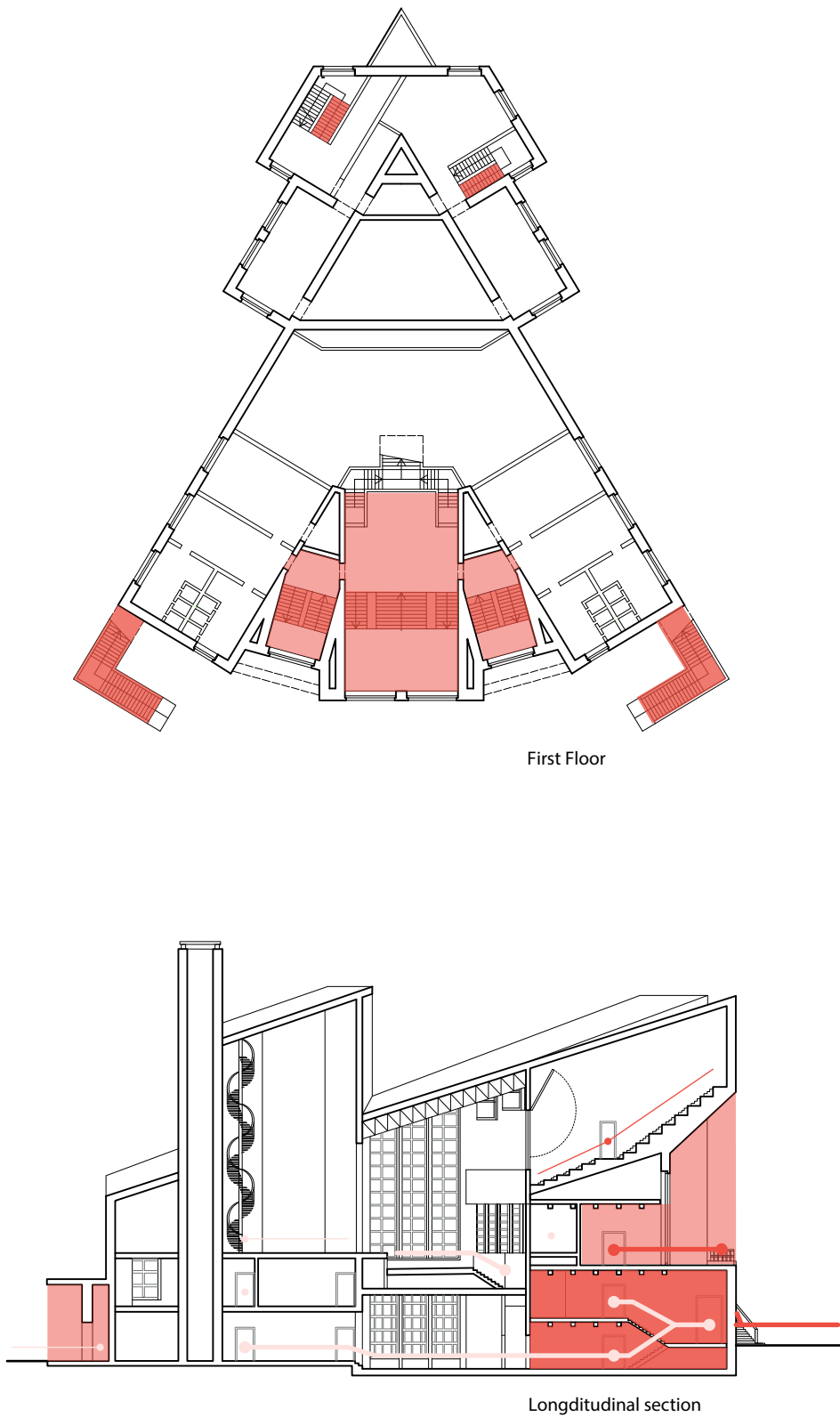
- Main exterior public route
- Main interior public route
- Secundaire public route
- Main employee route
- Circulation space
- Verticale circulation space
- Entrances



- Main exterior public route
- Main interior public route
- Secundaire public route
- Main employee route

Casper Aussems ,Circulation diagram exploded view worker's club, 2019

RUSAKOV WORKER'S CLUB

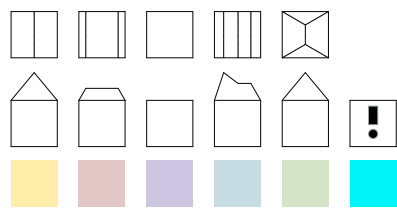
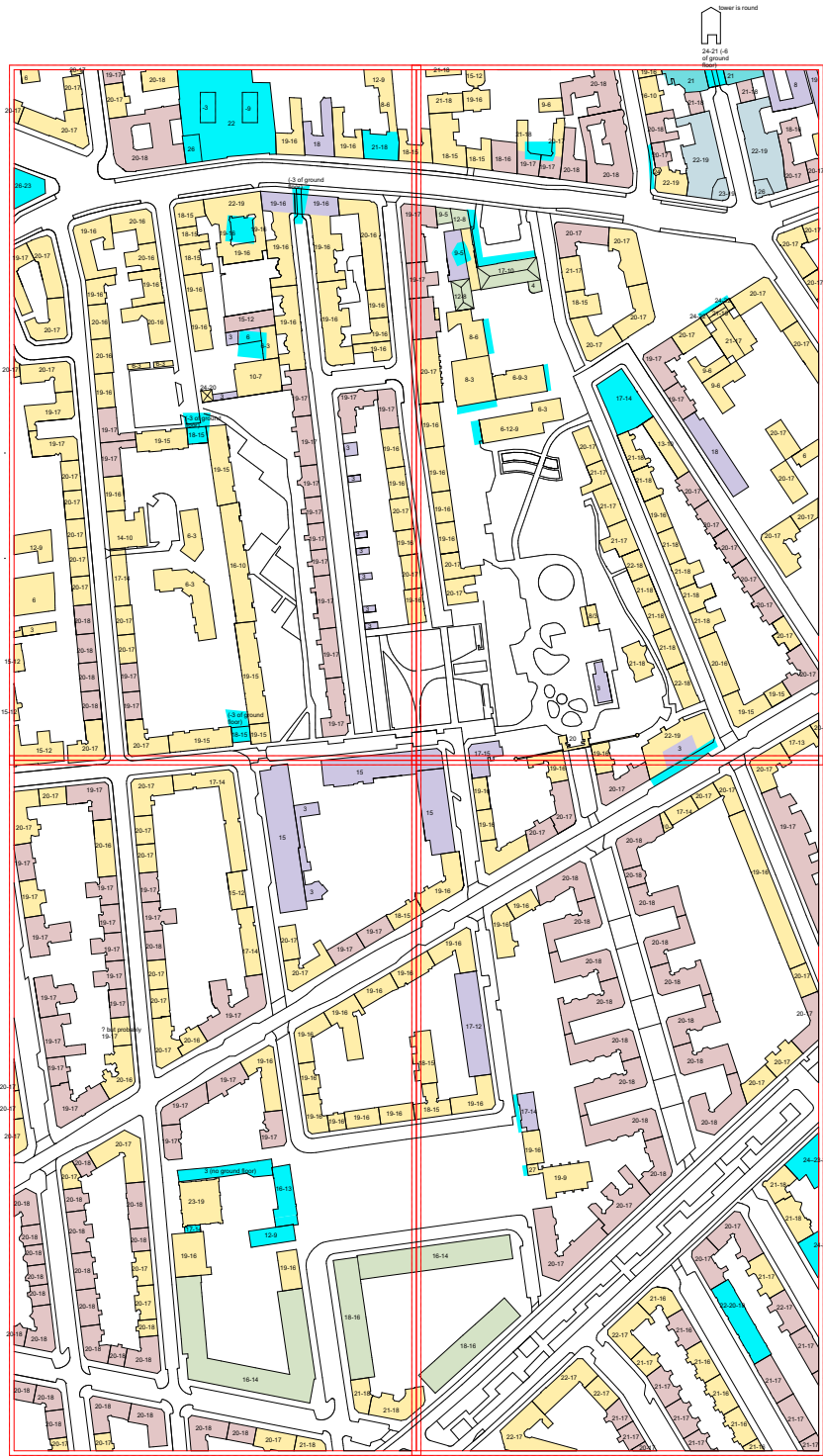


Bibliography

- 1. Fosso, Mario, Guido Canella, and Maurizio Meriggi. Konstantin S. Mel’nikov and the Construction of Moscow. Milano: Skira, 2000.
- 2. Starr, S. Frederick. Melnikov : Solo Architect in a Mass Society. Princeton, N.J.: Princeton University Press, 1978.
- 3. Anna Bokov. Soviet workers’ clubs: lessons from the social condensers, The Journal of Architecture, 22:3, 403-436, 2017.
- 4. Brian Pagnotta. “AD Classics: AD Classics: Rusakov Workers’ Club / Konstantin Melnikov” 15 Aug 2011. ArchDaily. Accessed 30 Oct 2019. <<https://www.archdaily.com/155470/ad-classics-rusakov-workers-club-konstantin-melnikov/>> ISSN 0719-8884
- 5. Roman Viktyuk Theatre. Venue. Accessed 30 Oct 2019. <https://teatrviuktuka.ru/en/building/>

● SITE MODEL

MEASUREMENT

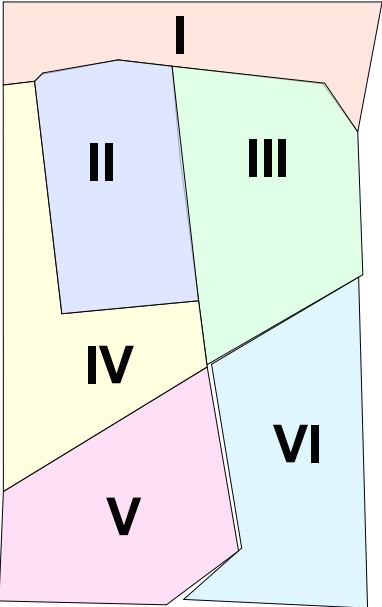
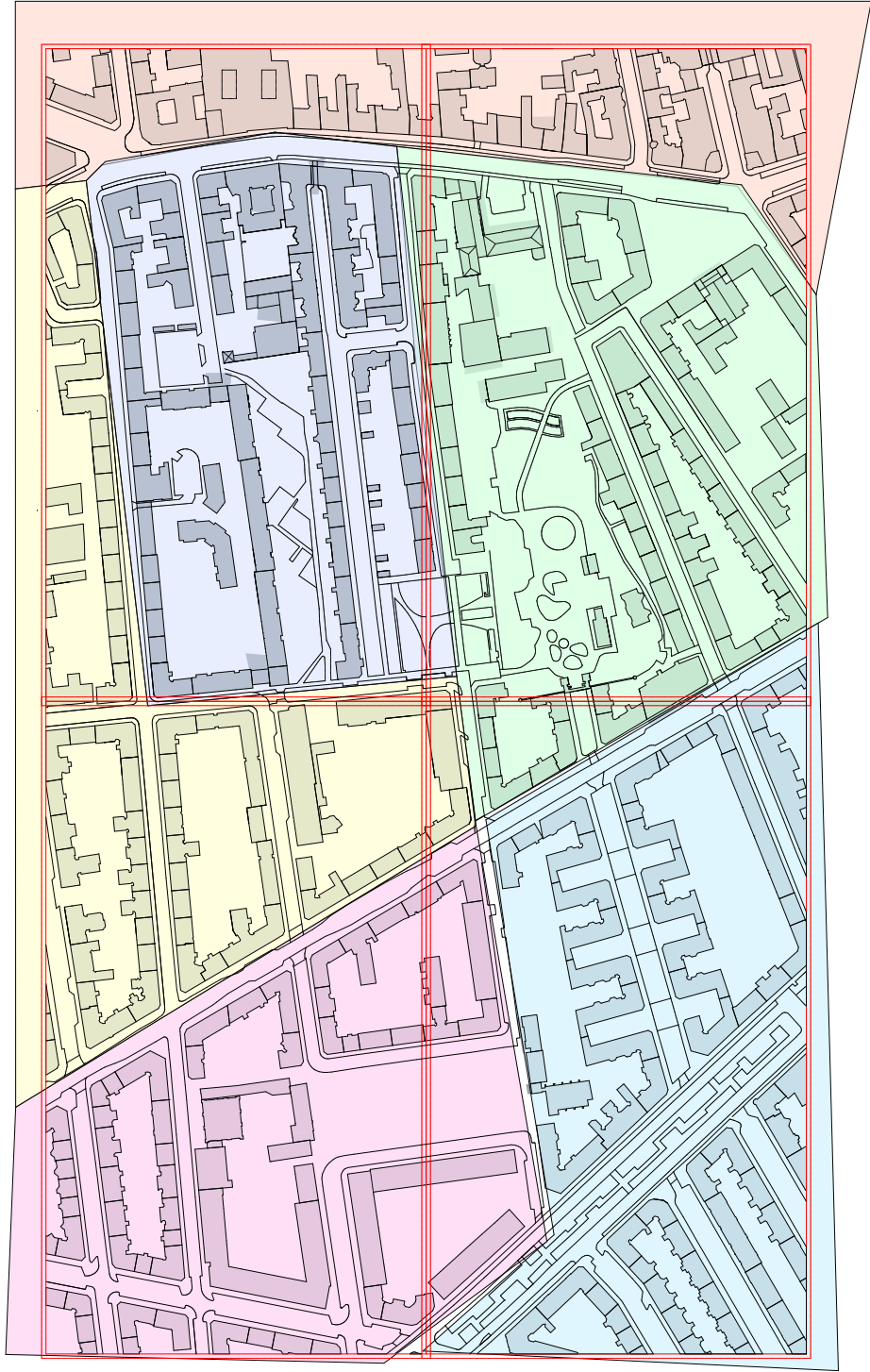


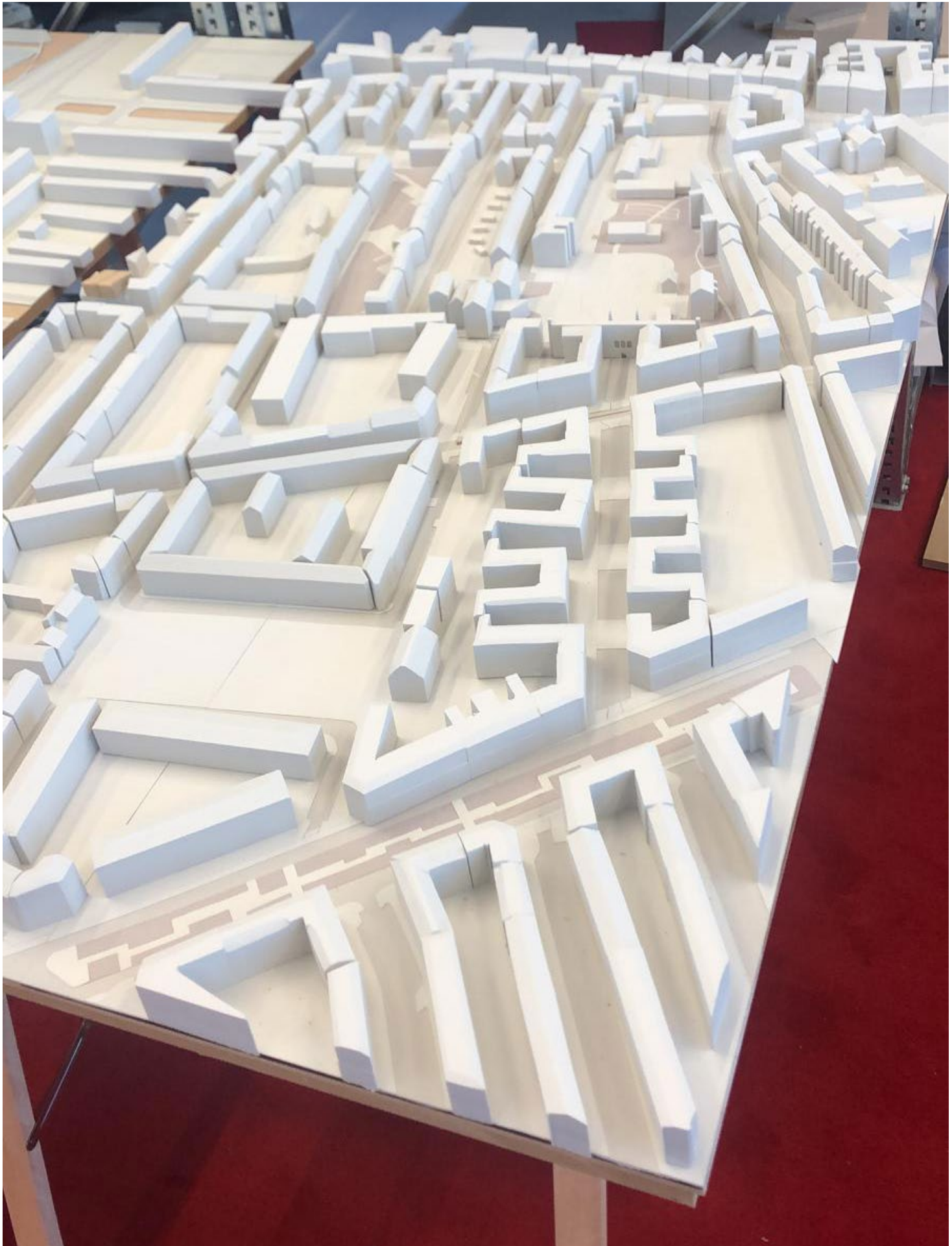
MEASUREMENTS

meters	cm (1:500)
1	0,2
2	0,4
3	0,6
4	0,8
5	1,0
6	1,2
7	1,4
8	1,6
9	1,8
10	2,0
11	2,2
12	2,4
13	2,6
14	2,8
15	3,0
16	3,2
17	3,4
18	3,6
19	3,8
20	4,0
21	4,2
22	4,4
23	4,6
24	4,8
25	5,0
26	5,2
27	5,4
28	5,6
29	5,8
30	6,0

} MOST COMMON MEASUREMENTS

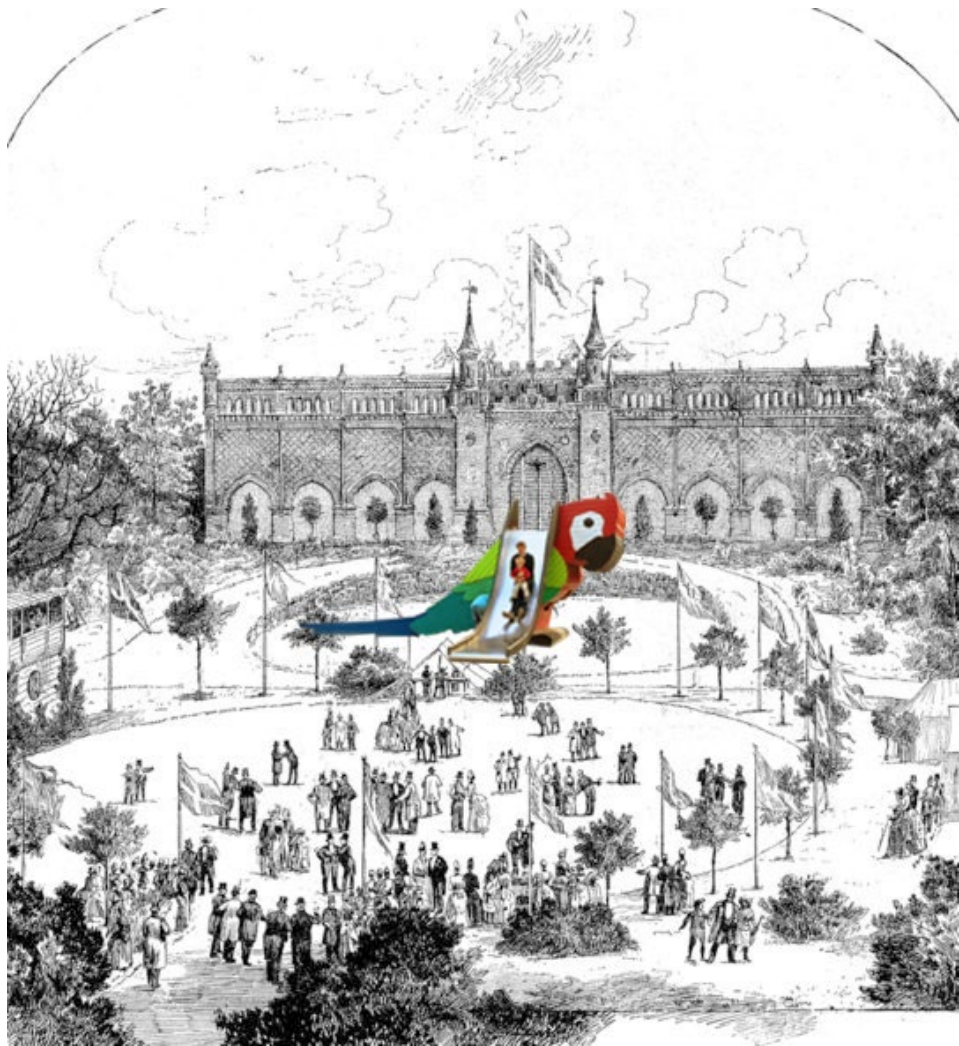
DIVISION





MANIFESTO

VERSION 1

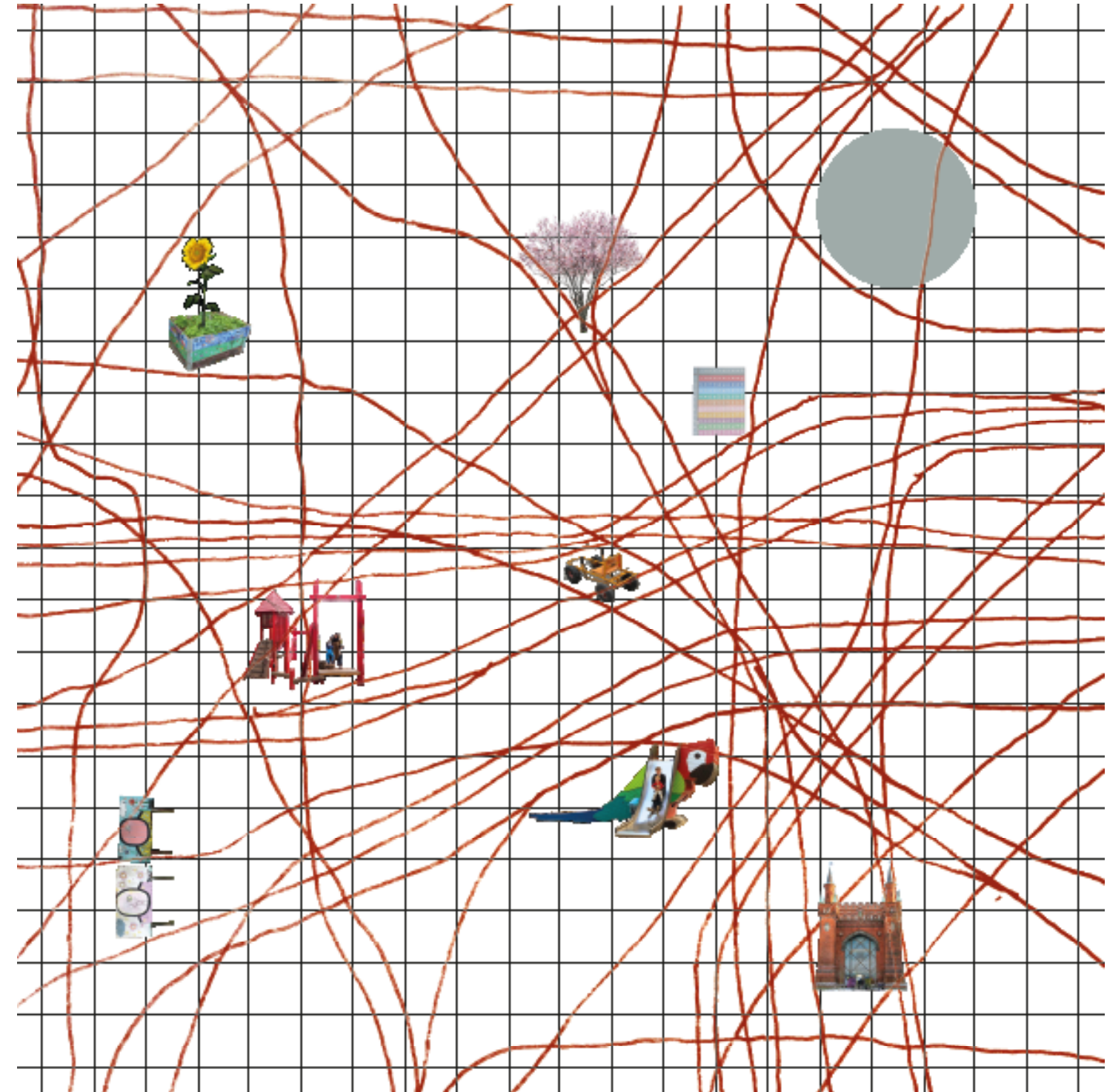


VERSION 2



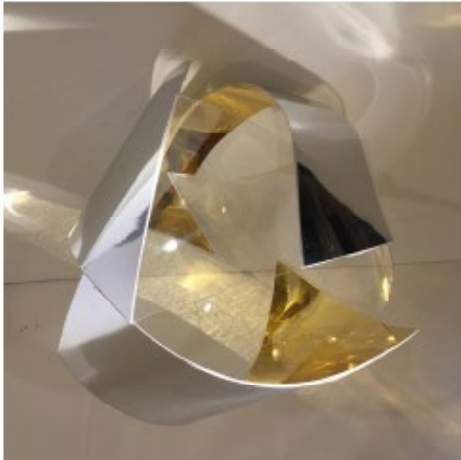
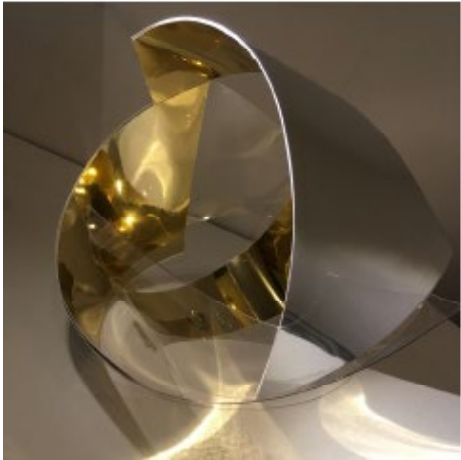
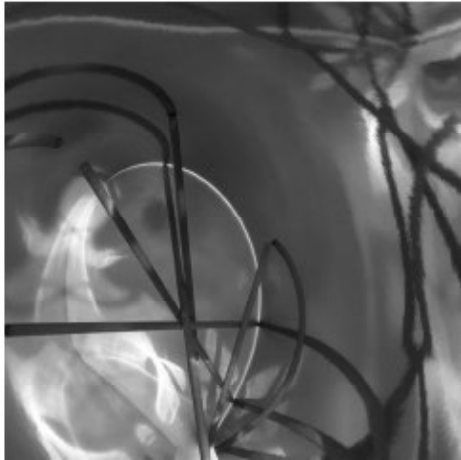
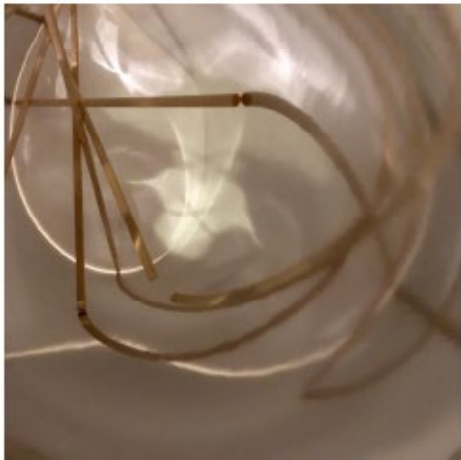
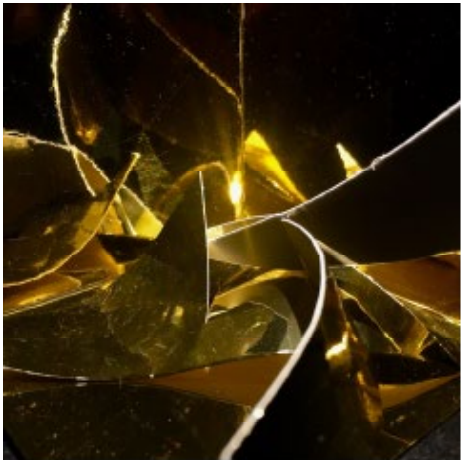
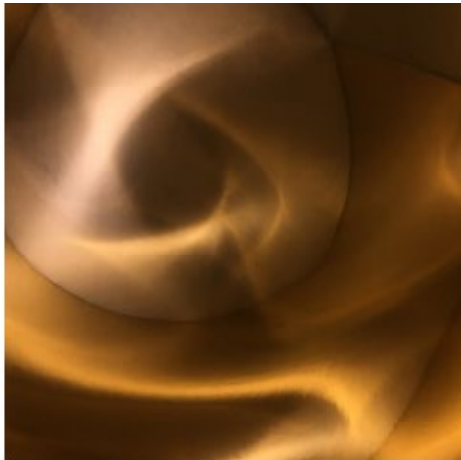
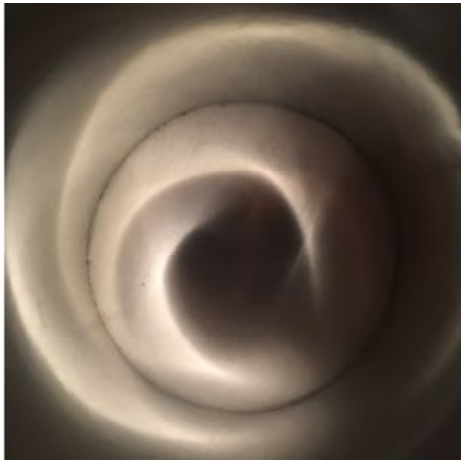
FINAL VERSION

The manifesto is based on the study of "The Practice of Everyday Life" by Michel De Certeau and the "New Babylon" by Constant. The city is planned by "strategies" as a grid that tells people how to perform. However, in the Skydebanehaven playground, people's movement is triggered by interesting elements such as the playful parrot slide, the pool, the cherry blossom, etc. The subversion of existing structure embodies the "tactics" of everyday life. As Constant addressed, "Everything should remain possible. Everything should be able to happen. The environment is created by the activities of life and not the other way around." The public condenser is a place where people share and create. What I'd like to achieve is to design space that can catalyze the encounter of unknown and indeterminacy.



SEMINAR

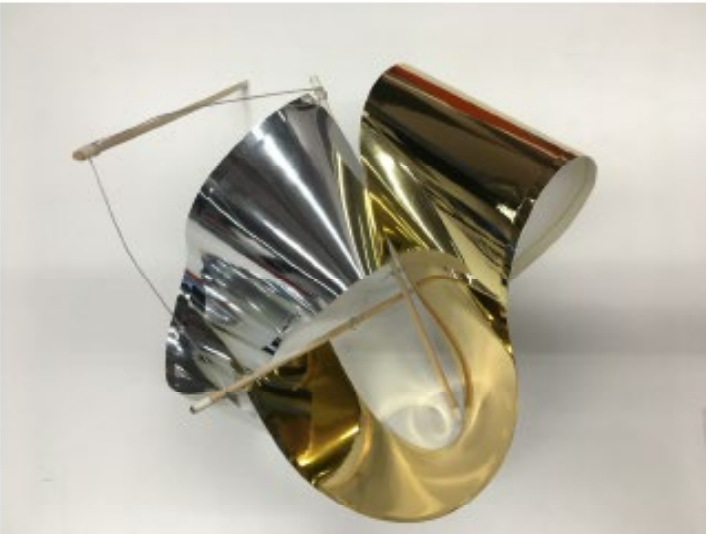
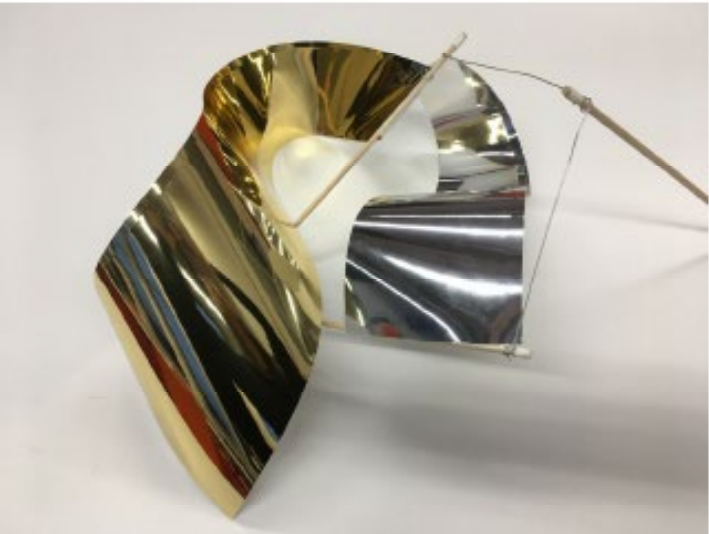
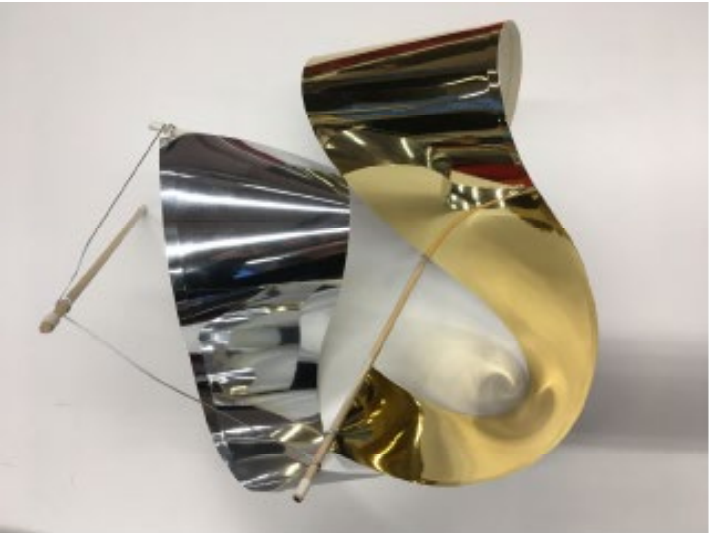
MULTIMODAL OBJECT



MULTIMODAL OBJECT

The object is assembled by three types of elements: reflective aluminum coated material, wooden sticks and steel wires. The image reflected on the mirror surface changes according to the curvature of the surface, which is controlled by the movement of joints. In different circumstances, the image appears in diverse ways such as multiply, scaling up/down, inverted, distorted, etc. This moveable mechine reflects on the relation between subject and object. Architecture as a physical object, also embodies multiplicity of narrative layers for individuals.

The proliferation of science lies in its legibility and distinguishing between functions. Thus the operation of technics always tries to eliminate the indeterminacy and expel it from the calculation as an illegitimate accident. An obstacle to rationality is to interdict the possibility of everyday practice of the city. My thesis questions the dominance of functionalist technocracy in architecture and urban planning. In consideration of the dynamic social praxis, it is crucial to redefine the realm of public and reflect on the stratification of space. The underlying multiplicity offers a new insight of positioning architecture beyond disciplinary delimitations.



DESIGN BRIEF

SITUATION

Vesterbro witnessed great change in the urban renewal during the past decades. Inner courtyard become one of the most characteristic elements in urban texture. The Skydebanehaven, as the most important open public space in Vesterbro, is like an oasis within the urban fabric. It is a lively protected playground valued by the local, however, to some extent, the activities happening inside are invisible from the outside. This isolated condition is a miniature of the neighborhood.

On the one hand, opaque walls, continuous building blocks and fences form the physical boundary of the spaces. Private and public spheres are clearly divided. On the other hand, due to gentrification, consumerist set invisible social thresholds by means of the increasing commercial spaces. As the power of market economy shaped the local business ecology in “hipster” culture and more young family with higher income moved in, the spaces for the underprivileged groups such as the elderly, the unemployed and the poor are gradually decreasing. The gentrification led to the problem of social inequality and missing social interactions of the area.

TARGET

Vesterbro is a compound neighborhood in terms of ethnicity, age, gross income and level of education. By rethinking the boundary of the spaces, it's possible to redefine the relation between architecture interface and people. Different programmes require different level of accessibility, enclosure and spatial quality. In addition, the superposition of different activities has opportunity to create new interfaces. Therefore the public condenser that contains a multiplicity of functions could be a experiment for more friendly city interfaces.

KEY ISSUES

- Social cohesion and diversity
elderly - kids
gentrifier - original inhabitants
inhabitants - visitors

- Green
Oasis - interweaving

- Flexibility
adapt to the future change: digitalisation/ working way/
aging

Arrival: 270 m2

- entrance: 25 m2
- reception infsormation: 10 m2
- cloak room: 15 m2
- café with small kitchen: 100 m2
- shop: 30 m2
- toilets: 90 m2

Games: 250 m2

- climbing: 40 m2
- interactive play areas: 160 m2
- board game room: 30 m2
- VR room: 20 m2

Pulse: 1530 m2

- multi-sport hall (basketball, badminton, volleyball...): 690 m2
- martial arts: 150 m2
- dance/ aerobics: 230 m2
- skatepark: 460 m2

Zen: 330 m2

- Yoga/ Pilates: 100 m2
- Tai Chi/ meditation: 50 m2
- lounge: 30 m2
- dressing rooms: 150 m2

Performance: 380 m2

- theater hall for 250 people: 200 m2
- music room: 60 m2
- exhibition space: 70 m2
- outdoor amphitheater: 50 m2

Think: 540 m2

- auditorium for 80 people: 70 m2
- flexible workspace: 100 m2
- digital lab, equipped with laser cutters, 3D printers: 40 m2
- multi-media room: 30 m2
- art studio: 40 m2
- DIY workshop (Wood, ceramic, textile...): 100 m2
- farm garden: 100 m2
- communal kitchen: 60 m2

Health: 200 m2

- physiotherapy: 60 m2
- sauna: 20 m2
- spa: 120 m2

Administration: 250 m2

- offices: 50 m2
- staff changing rooms: 20 m2
- storage: 80 m2
- technical spaces: 100 m2

UFA Total: 3,750 m2

Circulation (~20%): 750 m2

Parking Facilities: 300 m2

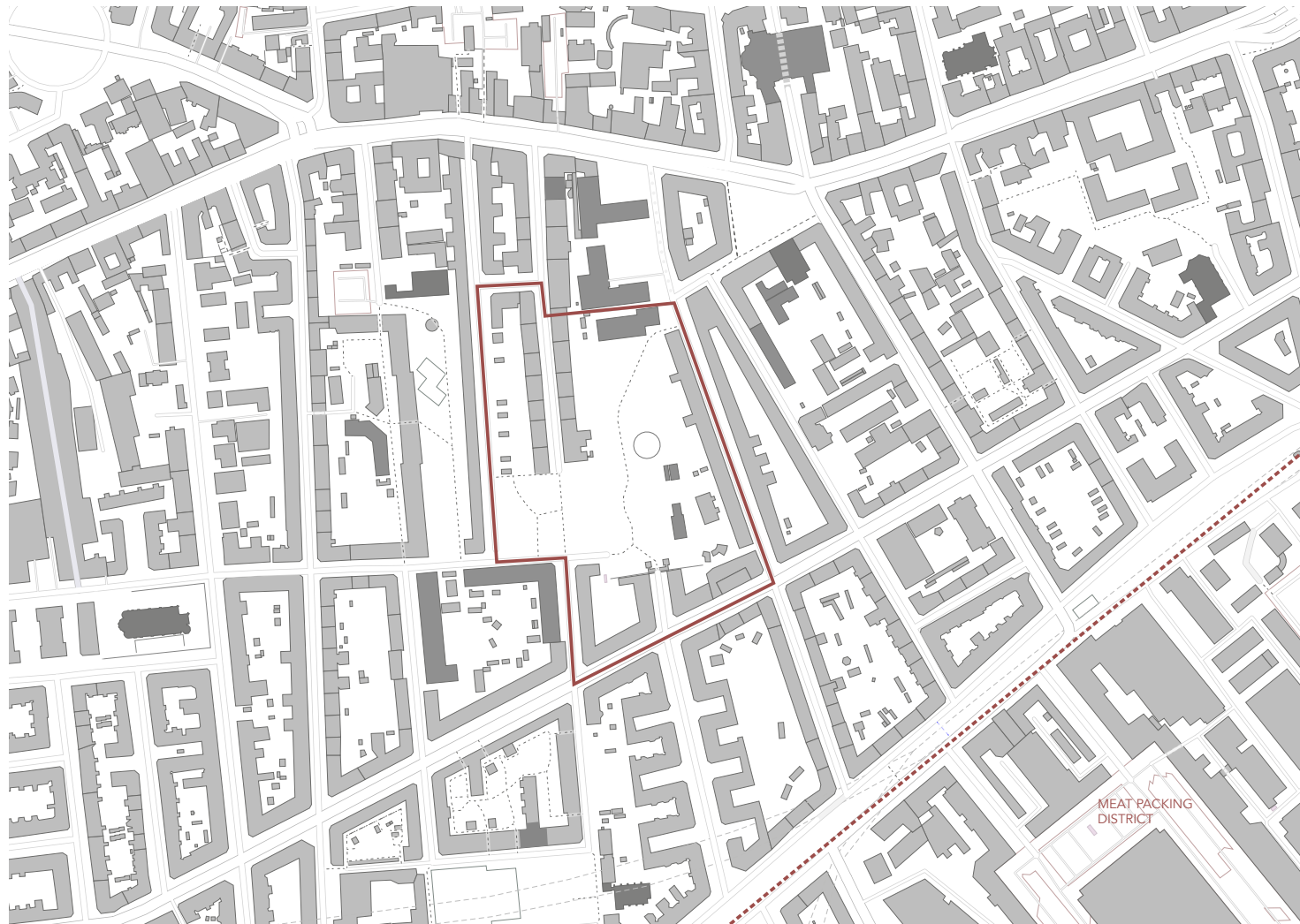
- bicycle parking: 100 m2
- car parking: 200 m2

Total: 3,750 m2 +1050 m2 = 4800 m2

AR3AP131 | MSc3 | Public Building Graduation Studio
Public Condenser | The Hague | Copenhagen

DESIGN JOURNAL

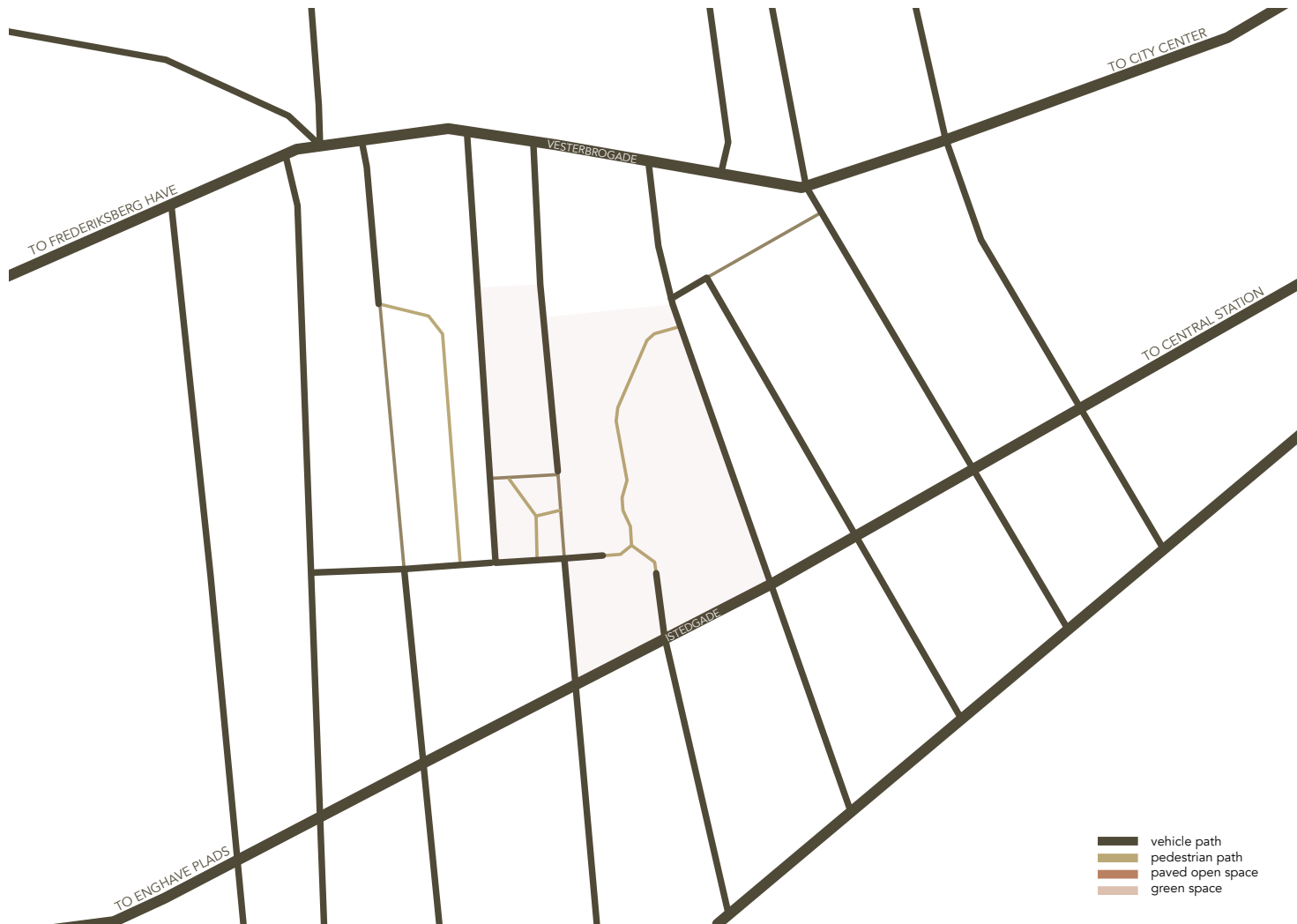
Haiqi Deng 4905040



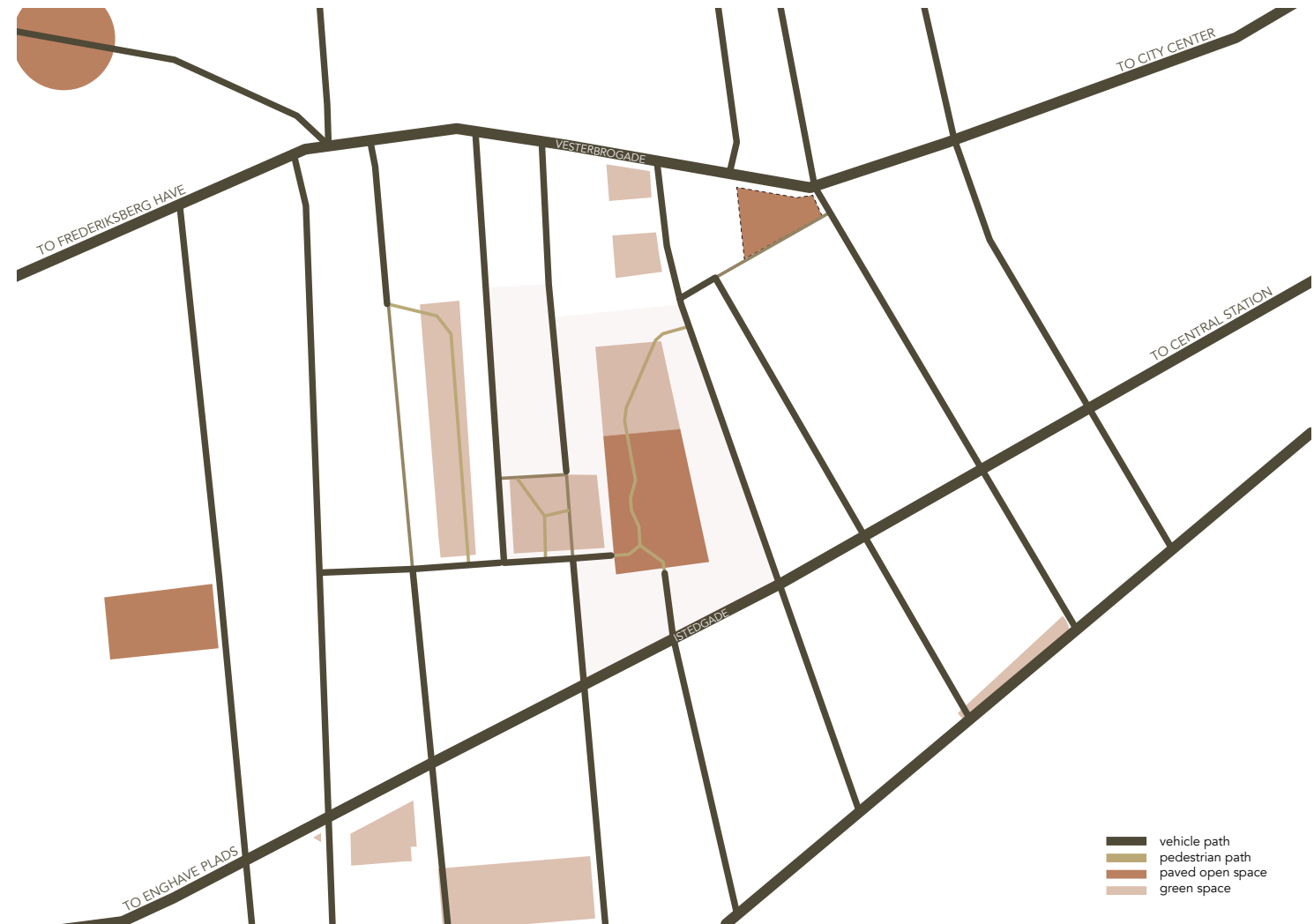
URBAN MORPHOLOGY



PUBLIC BUILDINGS



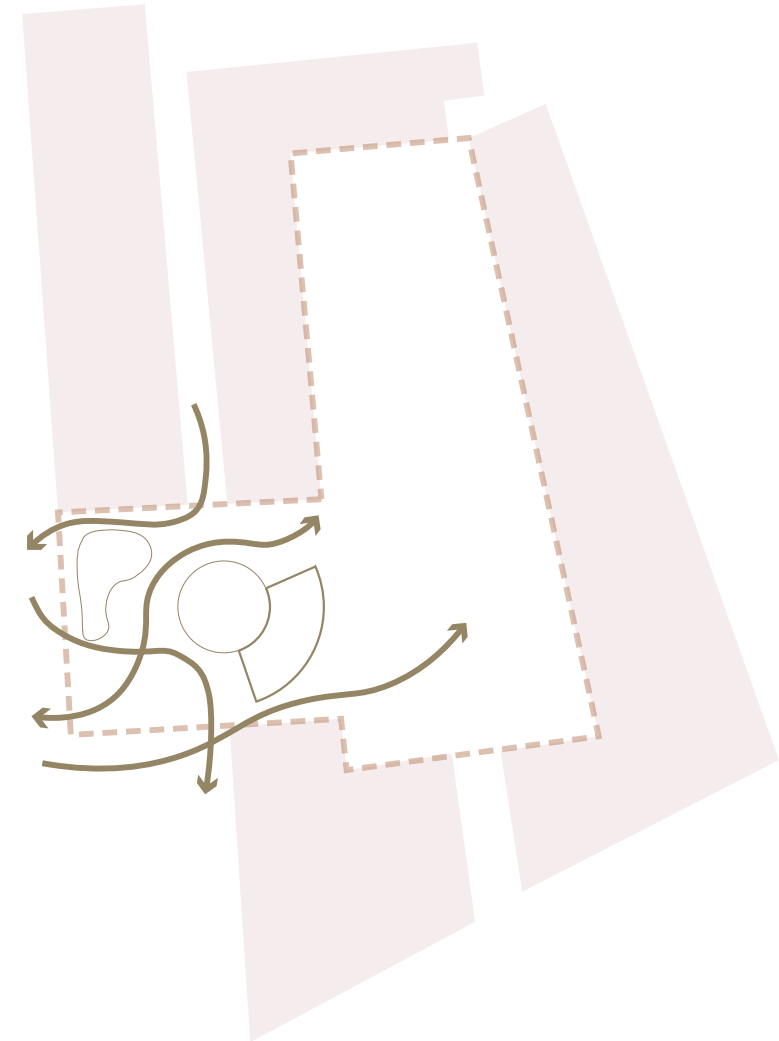
CONNECTION



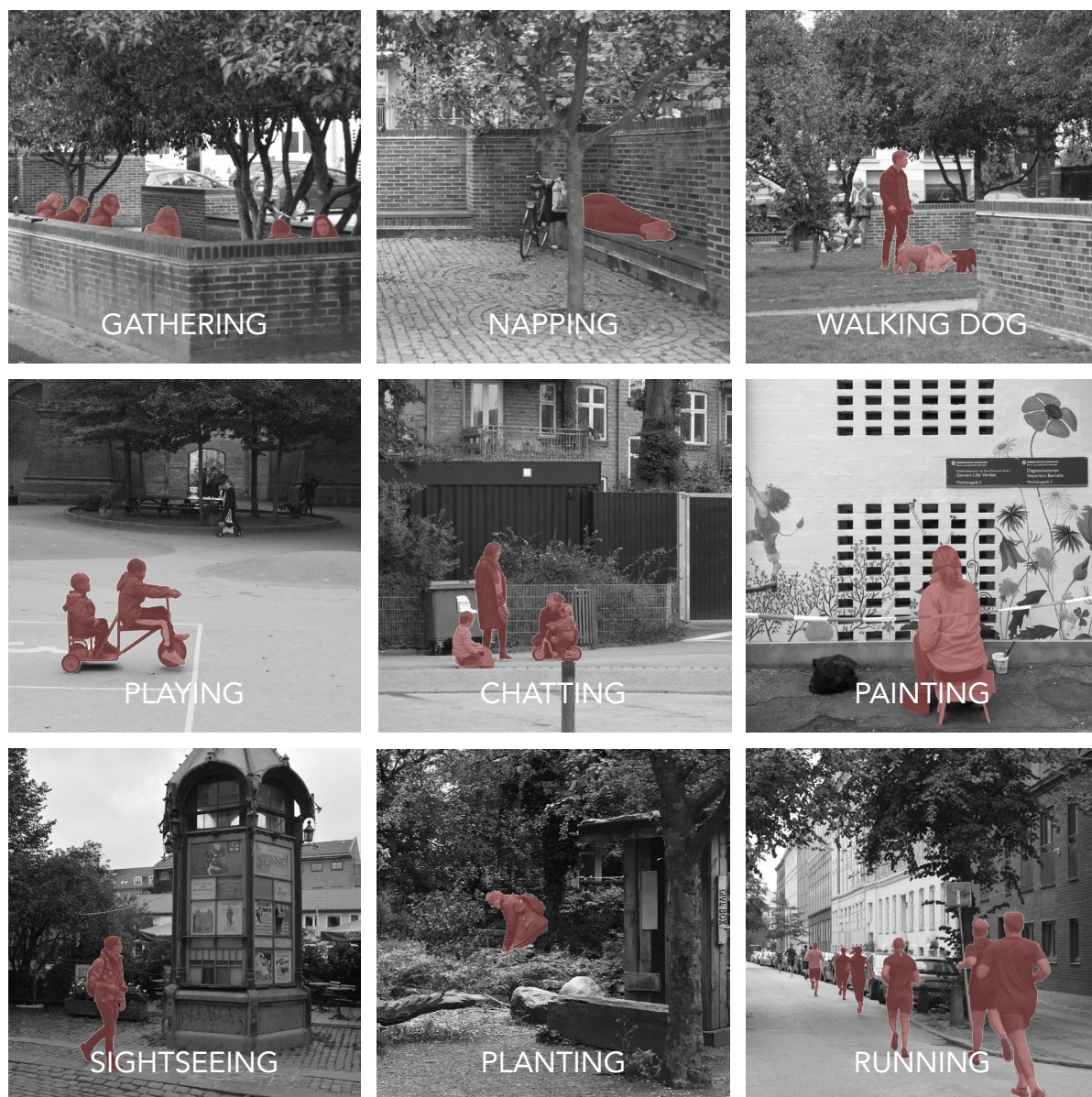
OPEN SPACE



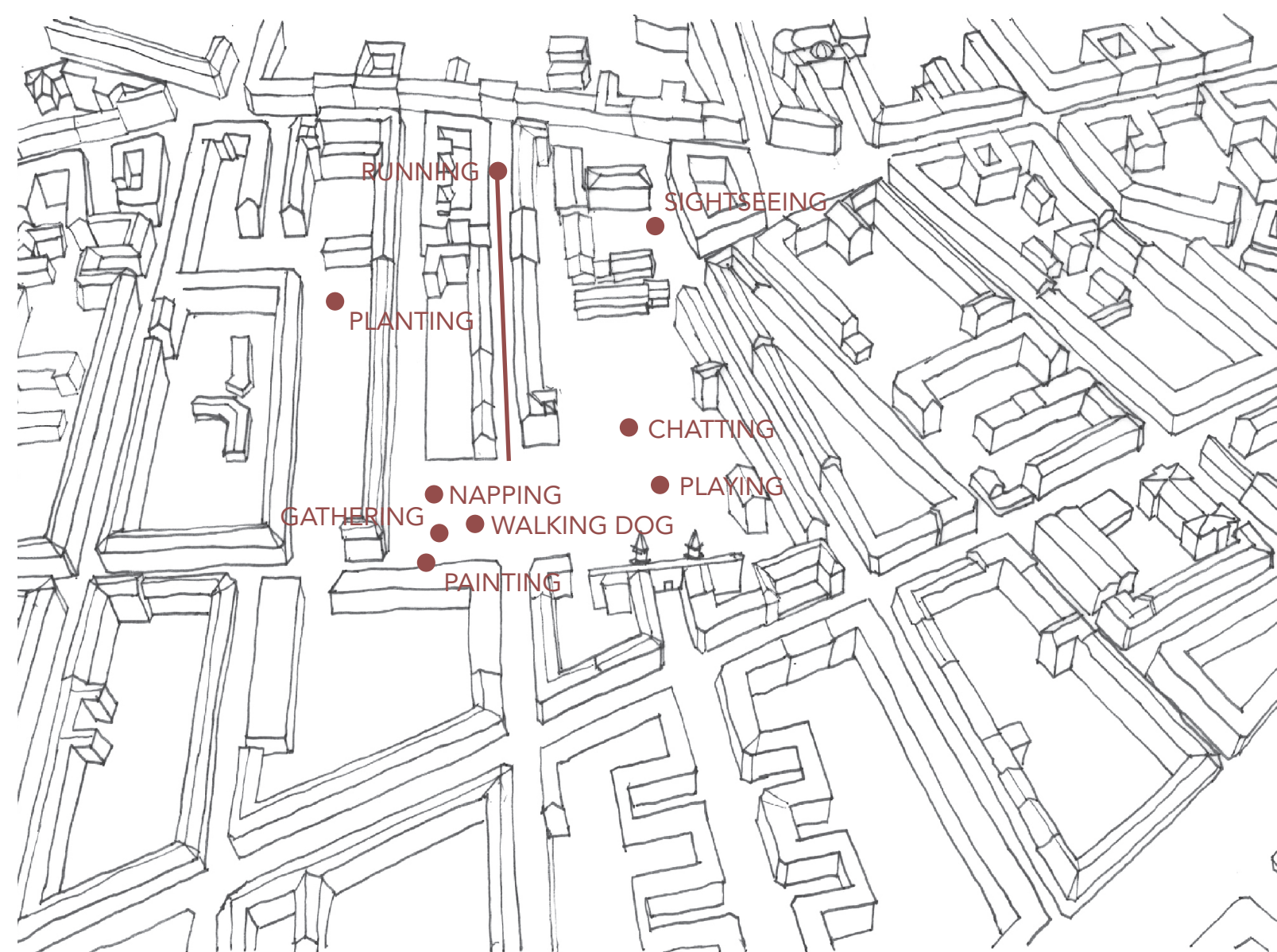
THREE OPEN SPACES



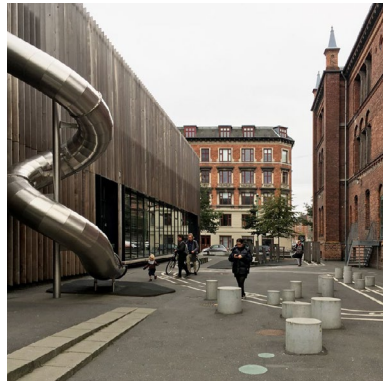
OPEN GROUND FLOOR



ACTIVITY MAPPING

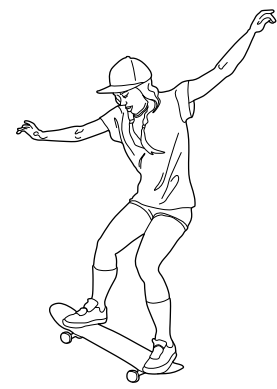


ACTIVITY MAPPING



CITY INTERFACE

CITY THRESHOLD



Children

VISION
MOBILITY
KNOWLEDGE
CURIOSITY

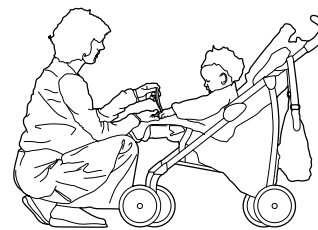


The Elderly



Original Inhabitants

AGE
OCCUPATION
NETWORK
BELONGING



New Inhabitants



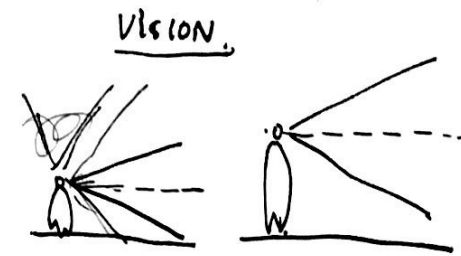
Inhabitants

COMMUTE
ATTRACTION
FAMILIARITY
FREQUENCY



Visitors

BARRIER OF GROUPS



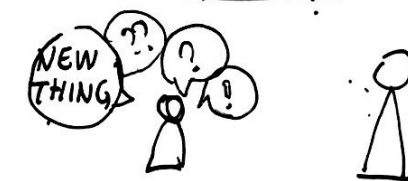
MOBILITY



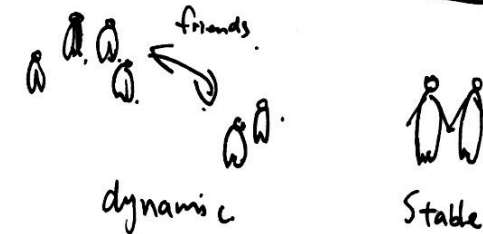
KNOWLEDGE



CURIOSITY



BUILD ~~P~~ INTERPERSONAL
RELATIONSHIP

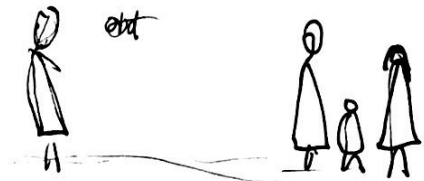


OCCUPATION

Hotel, tourism business
restaurant
~~construction~~
Service industries
agriculture, Food industry
Administration
Transport & logistic

Art & culture
IT
Education, Science & Research
Management
Healthcare
Media & press

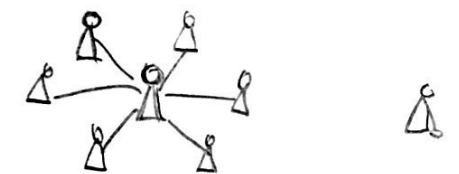
AGE



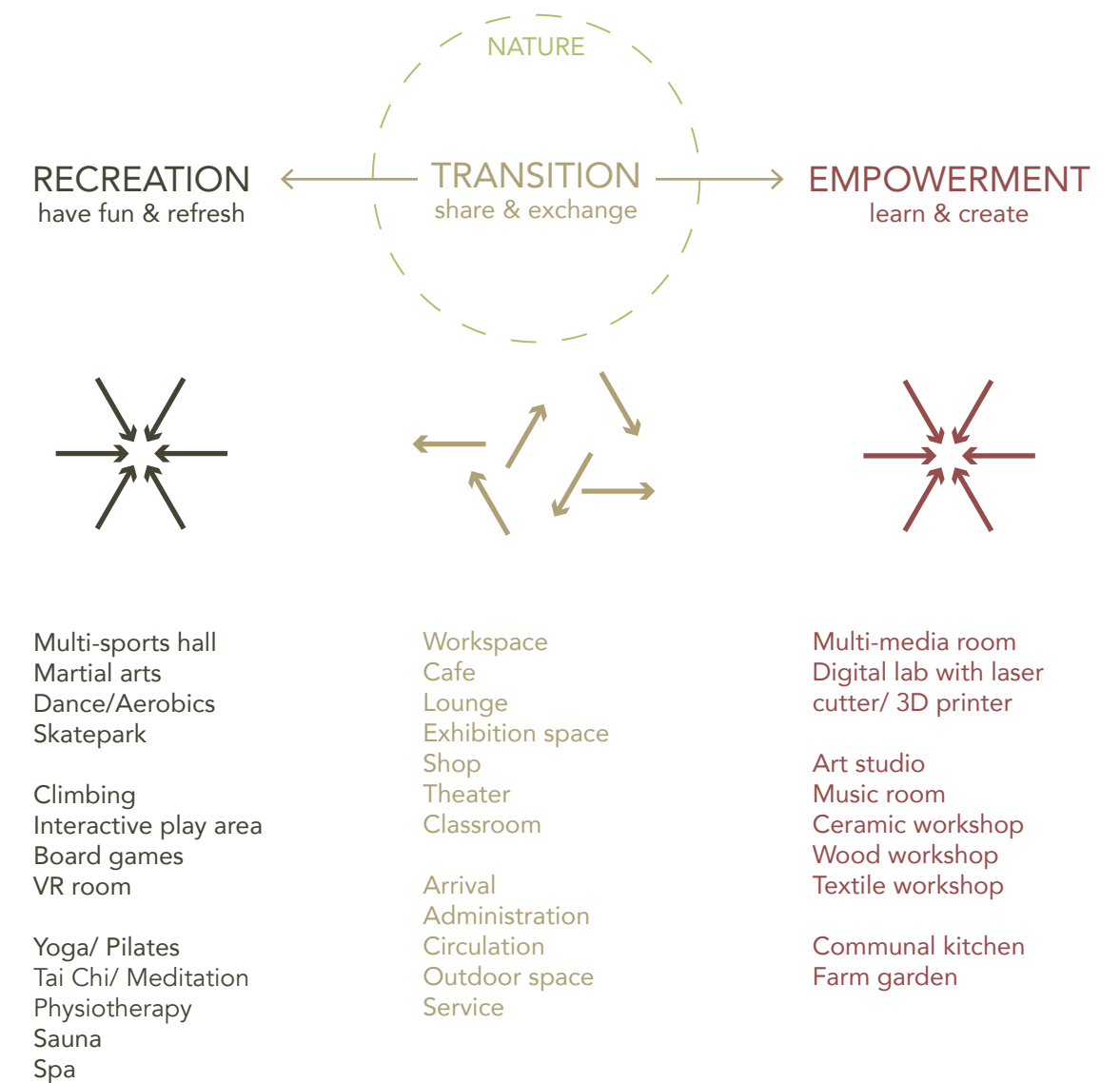
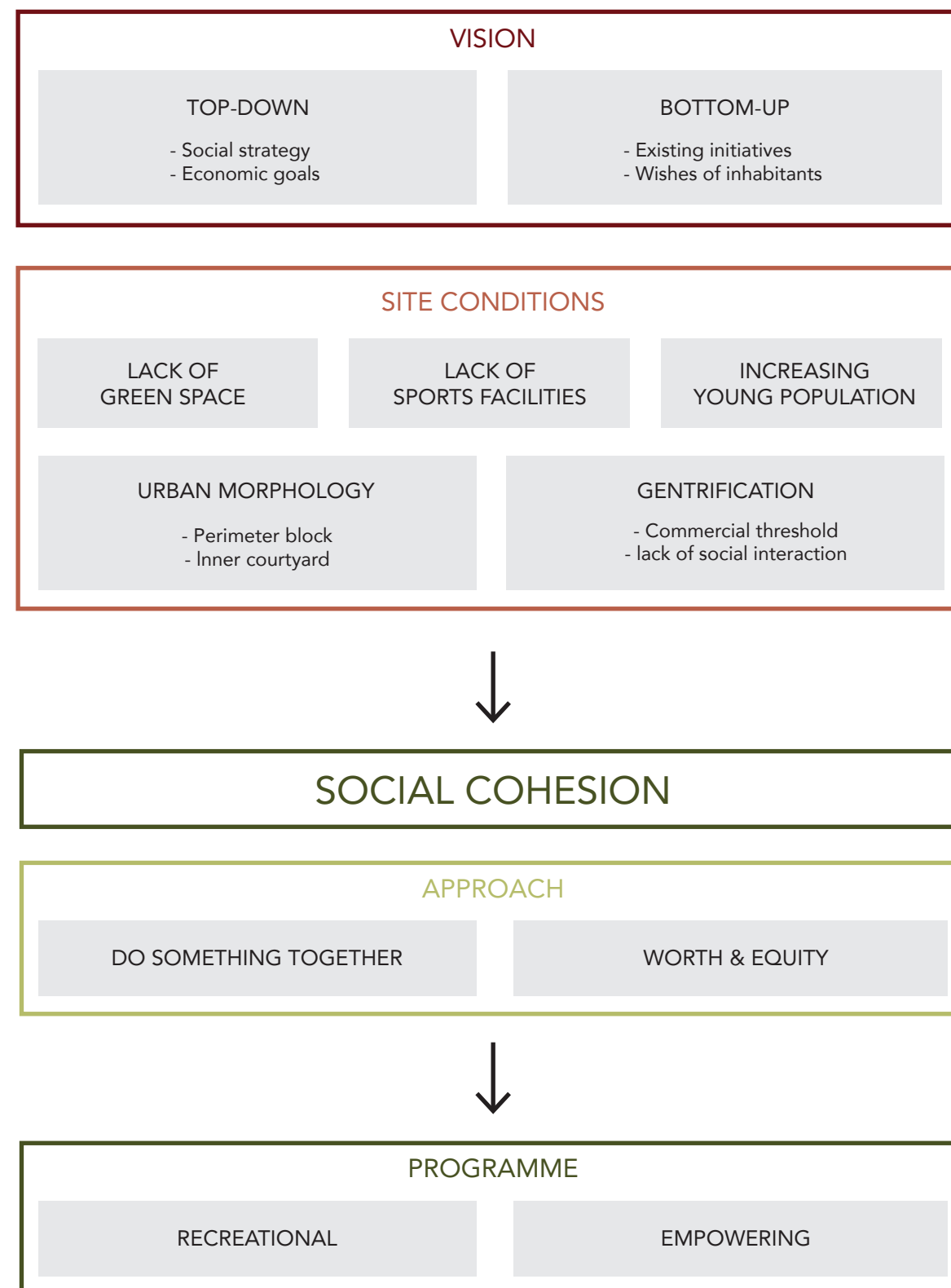
BELONGING



SOCIAL CONNECTION



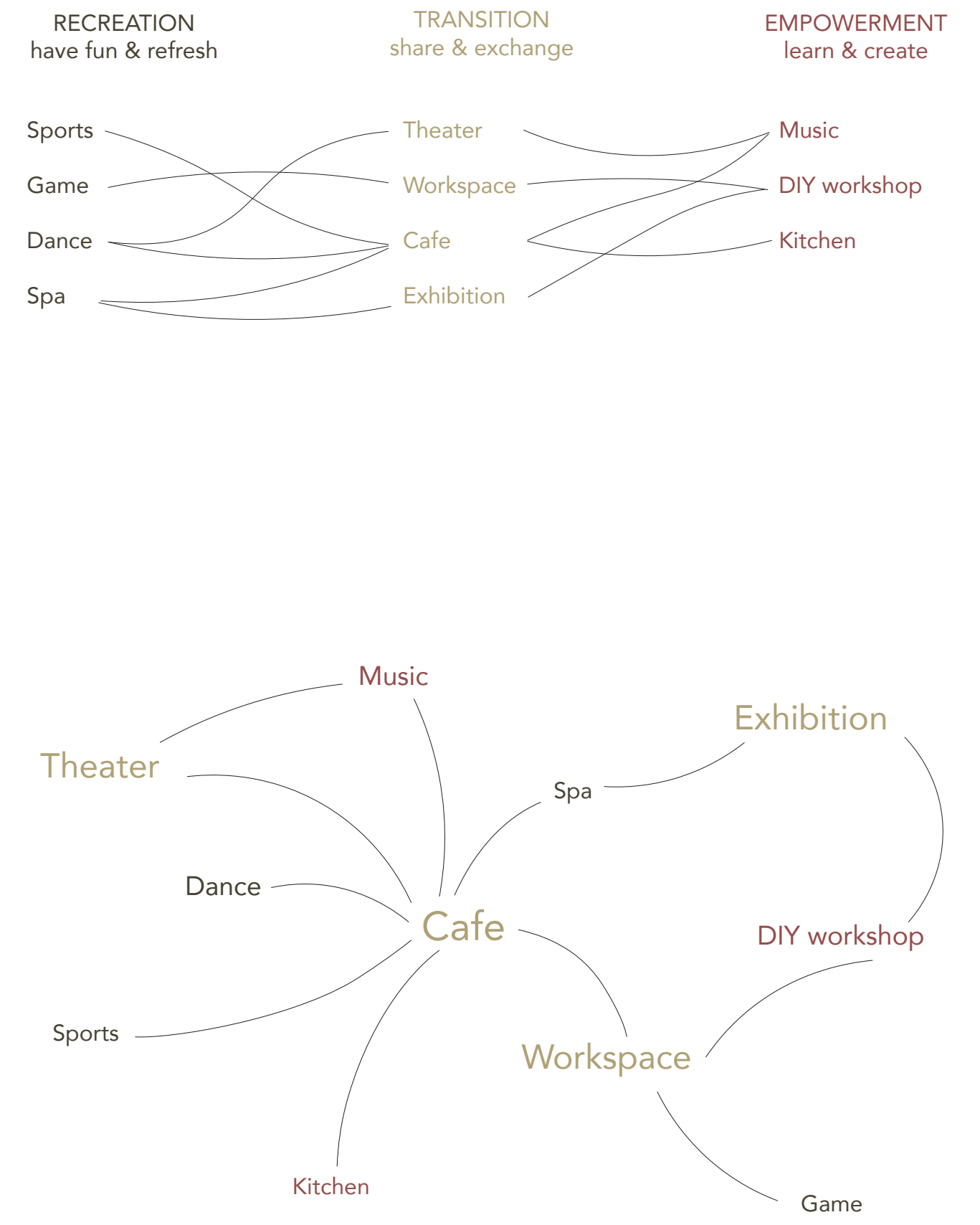
HOW TO BRING THEM TOGETHER?



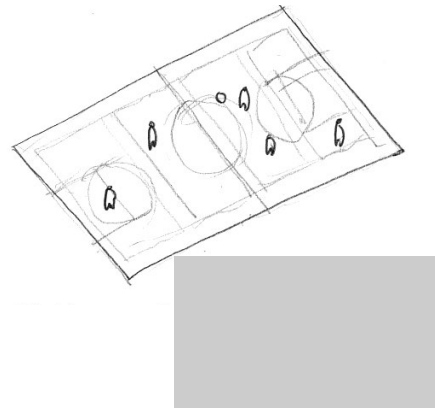
PROGRAMME



PROGRAMME PROXIMITY

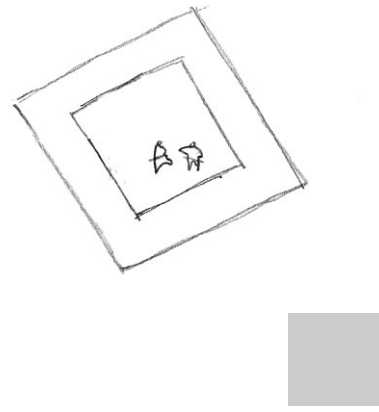


PROGRAMME PROXIMITY



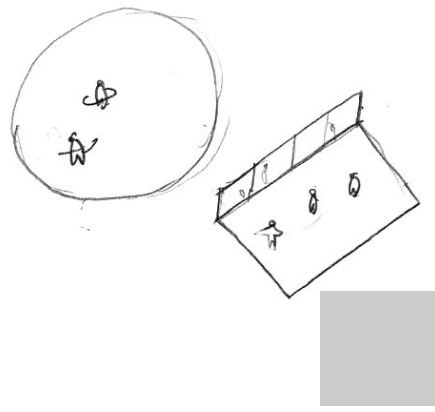
Multi-sports hall

area 690 m²
 spatial limit rectangular
 user age
 dynamics
 exclusiveness



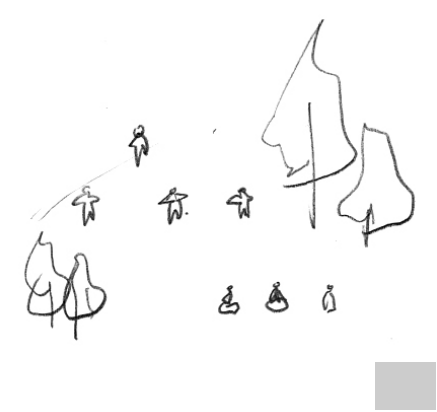
Martial arts

area 150 m²
 spatial limit rectangular
 user age
 dynamics
 exclusiveness



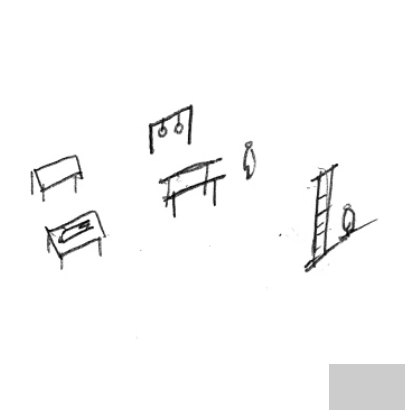
Dance/Aerobics

area 230 m²
 spatial limit mirror
 user age
 dynamics
 exclusiveness



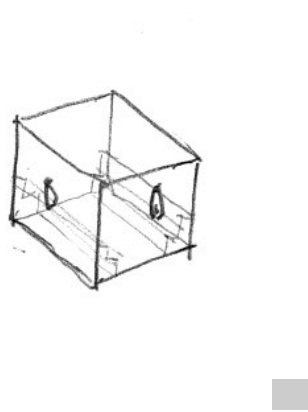
Tai Chi/ Mediation

area 50 m²
 spatial limit quiet
 user age
 dynamics
 exclusiveness



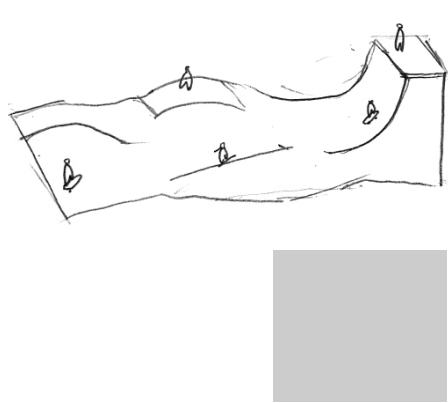
Physiotherapy

area 60 m²
 spatial limit facilities
 user age
 dynamics
 exclusiveness



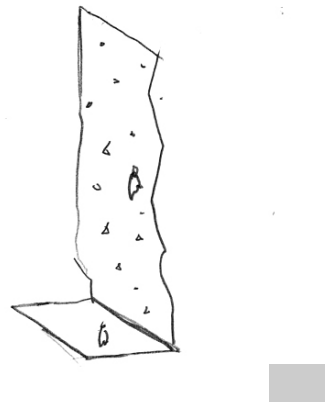
Sauna

area 20 m²
 spatial limit insulated
 user age
 dynamics
 exclusiveness



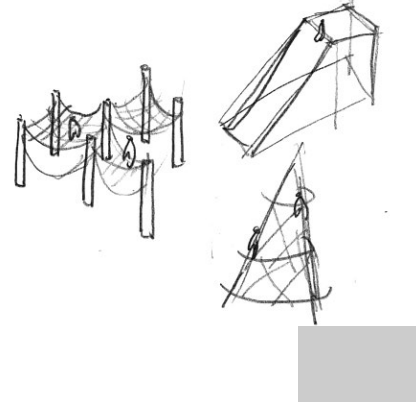
Skatepark

area 460 m²
 spatial limit ramps
 user age
 dynamics
 exclusiveness



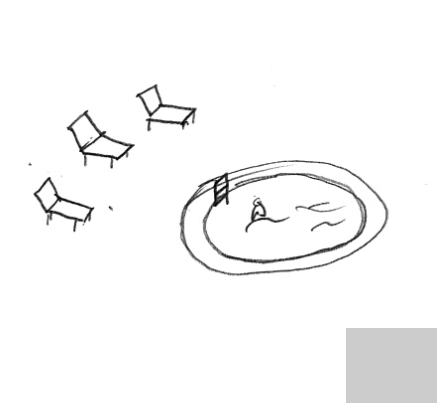
Climbing

area 40 m²
 spatial limit vertical wall
 user age
 dynamics
 exclusiveness



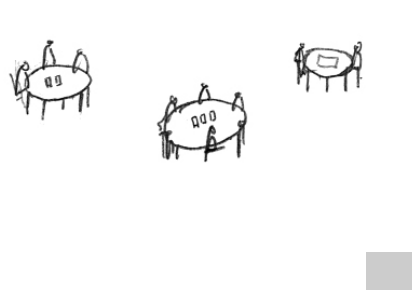
Interactive play area

area 160 m²
 spatial limit play elements
 user age
 dynamics
 exclusiveness



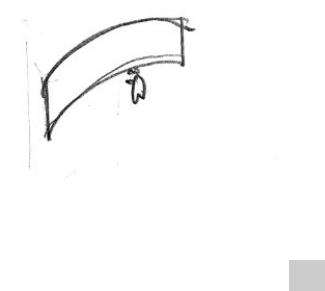
Spa

area 120 m²
 spatial limit pool
 user age
 dynamics
 exclusiveness



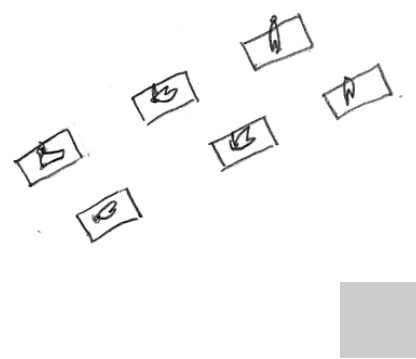
Board games

area 30 m²
 spatial limit N/A
 user age
 dynamics
 exclusiveness



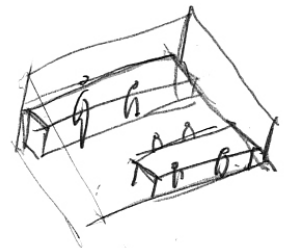
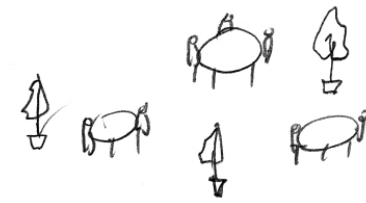
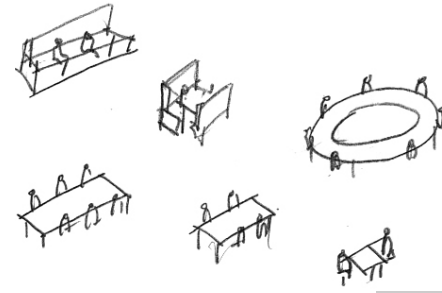
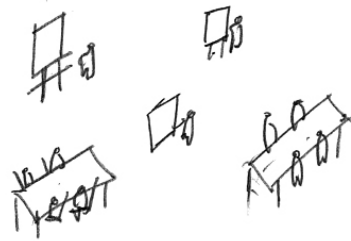
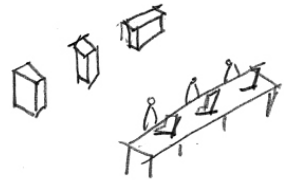
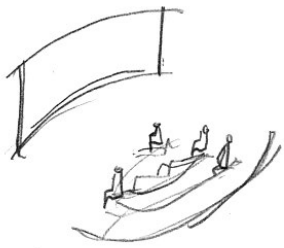
VR room

area 20 m²
 spatial limit dark
 user age
 dynamics
 exclusiveness



Yoga/ Pilates

area 100 m²
 spatial limit quiet
 user age
 dynamics
 exclusiveness



Multi-media room

area	30 m ²
spatial limit	closed
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

Digital lab

area	40 m ²
spatial limit	facilities
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

Art studio

area	40 m ²
spatial limit	N/A
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

Workspace

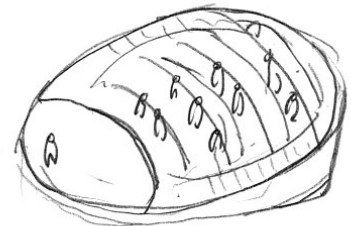
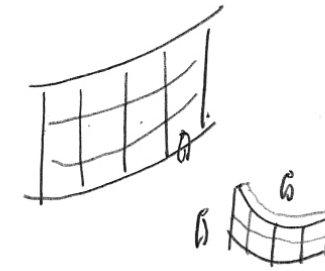
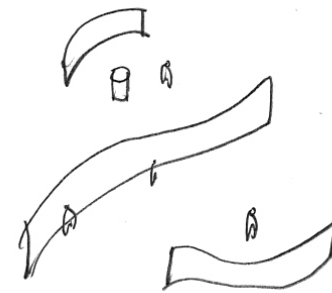
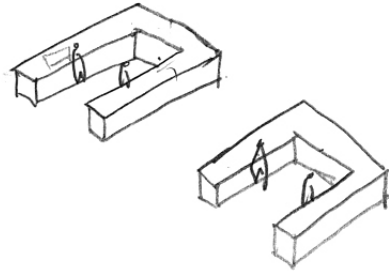
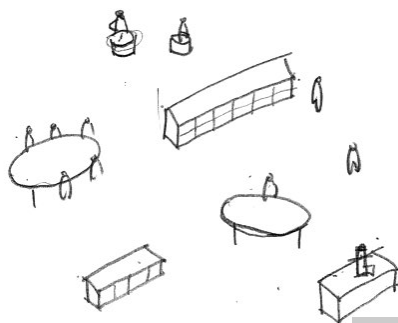
area	100 m ²
spatial limit	N/A
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

Cafe

area	100 m ²
spatial limit	N/A
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

Lounge

area	30 m ²
spatial limit	N/A
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>



Music room

area	60 m ²
spatial limit	acoustic
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

DIY workshop

area	100 m ²
spatial limit	facilities
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

Communal kitchen

area	60 m ²
spatial limit	facilities
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

Exhibition

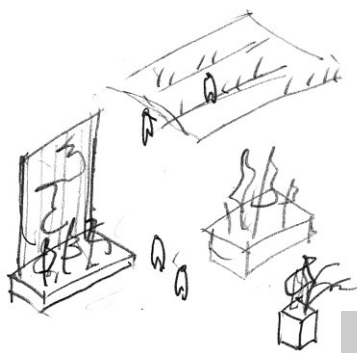
area	70 m ²
spatial limit	N/A
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

Shop

area	30 m ²
spatial limit	furniture for display
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>

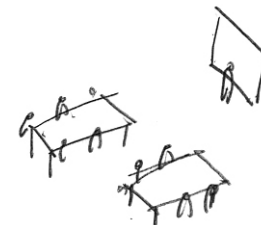
Theater/ Auditorium

area	200 m ²
spatial limit	step
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>



Farm Garden

area	100 m ²
spatial limit	Sunlight
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>



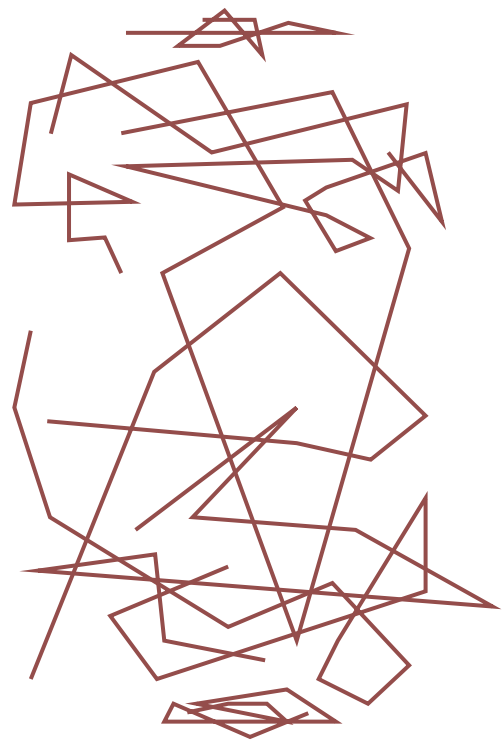
Classroom

area	70 m ²
spatial limit	N/A
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>



Outdoor amphitheater

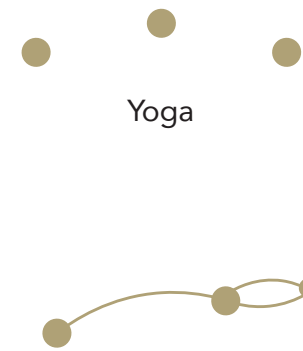
area	50 m ²
spatial limit	steps
user age	<div><div></div><div></div><div></div><div></div><div></div></div>
dynamics	<div><div></div><div></div><div></div><div></div><div></div></div>
exclusiveness	<div><div></div><div></div><div></div><div></div><div></div></div>



Ball sports

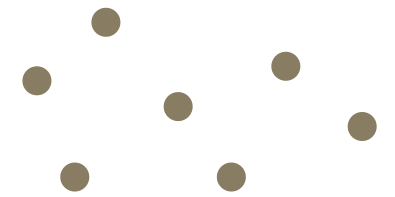


Dance



Yoga

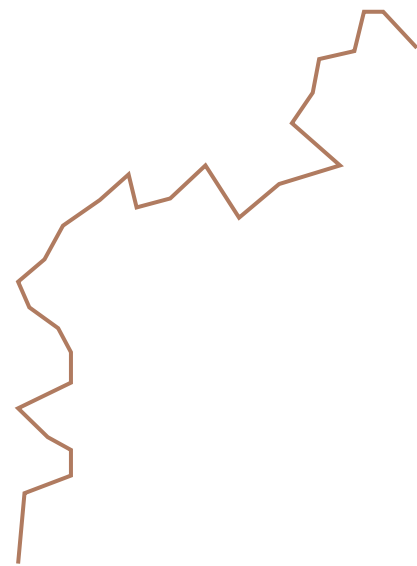
Communal kitchen



Art studio



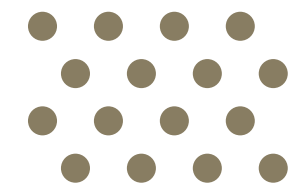
Music



Climbing



Farm garden



Movie



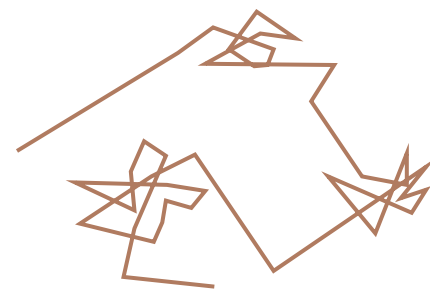
Skateboarding



Wood workshop



Digital workshop



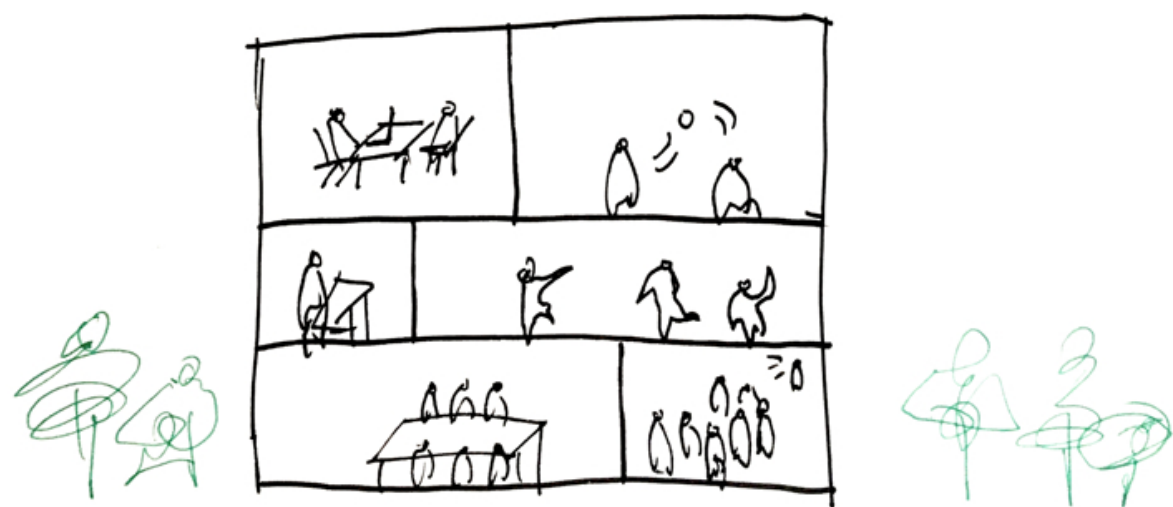
Interactive play area



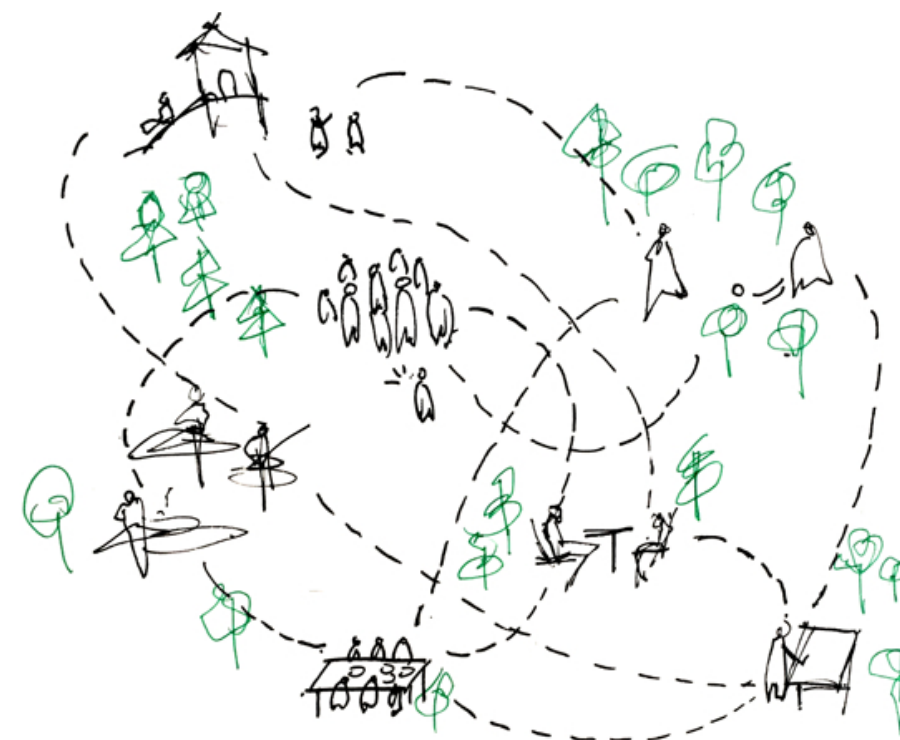
Board game

MOVEMENT STUDY

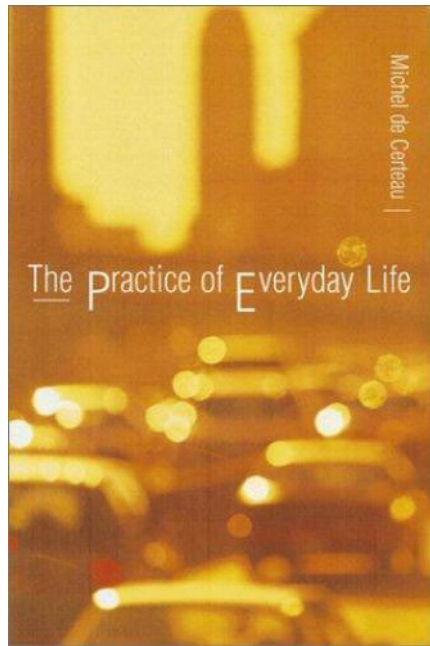
MOVEMENT STUDY



PROGRAMMETIC LAYERING?



SPACE FOR INDETERMINACY



Walking the city - Michel de Certeau.

A rich indeterminateness gives them, by means of a ^{infix} semantic rarefaction, the function of articulating a second, poetic geography on top of the geography of the literal, forbidden or permitted meanings.

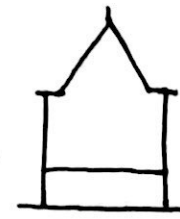
the city by strategies. ↔ Walking at ~~tactics~~ ^{infix} tactics.

Wiki: "Everyday life works by a process of poaching on the territory of others, using the rules and products that already exist in culture in a way that is influenced, but never wholly determined, by those rules and products."

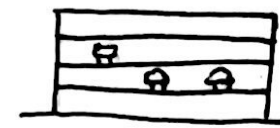
"Places are fragmentary and inward-turning histories, pasts that others are not allowed to read, accumulated times that can be unfolded but like stories held in reserve, remaining in an enigmatic (~~infix~~) state, symbolizations encrypted in the ~~po~~ pain or pleasures of the body." a fleeting glimmer is a special practice.

Kandinsky: "a great city built according to all the rules of archi and then suddenly shaken by a force the deties all calculation."

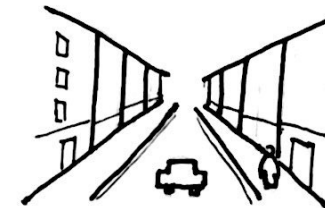
STRATEGIES



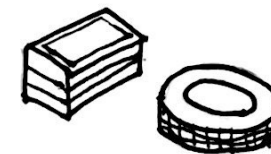
Building facade



Parking lot



Steet

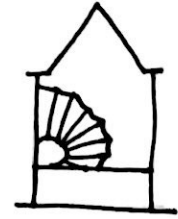


Waste

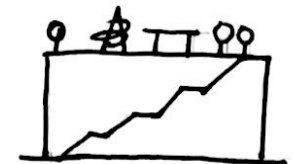


City

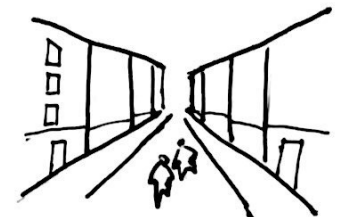
TACTICS



Graffiti on building facade



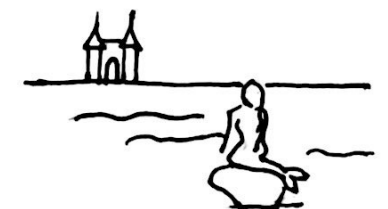
Playground on parking lot



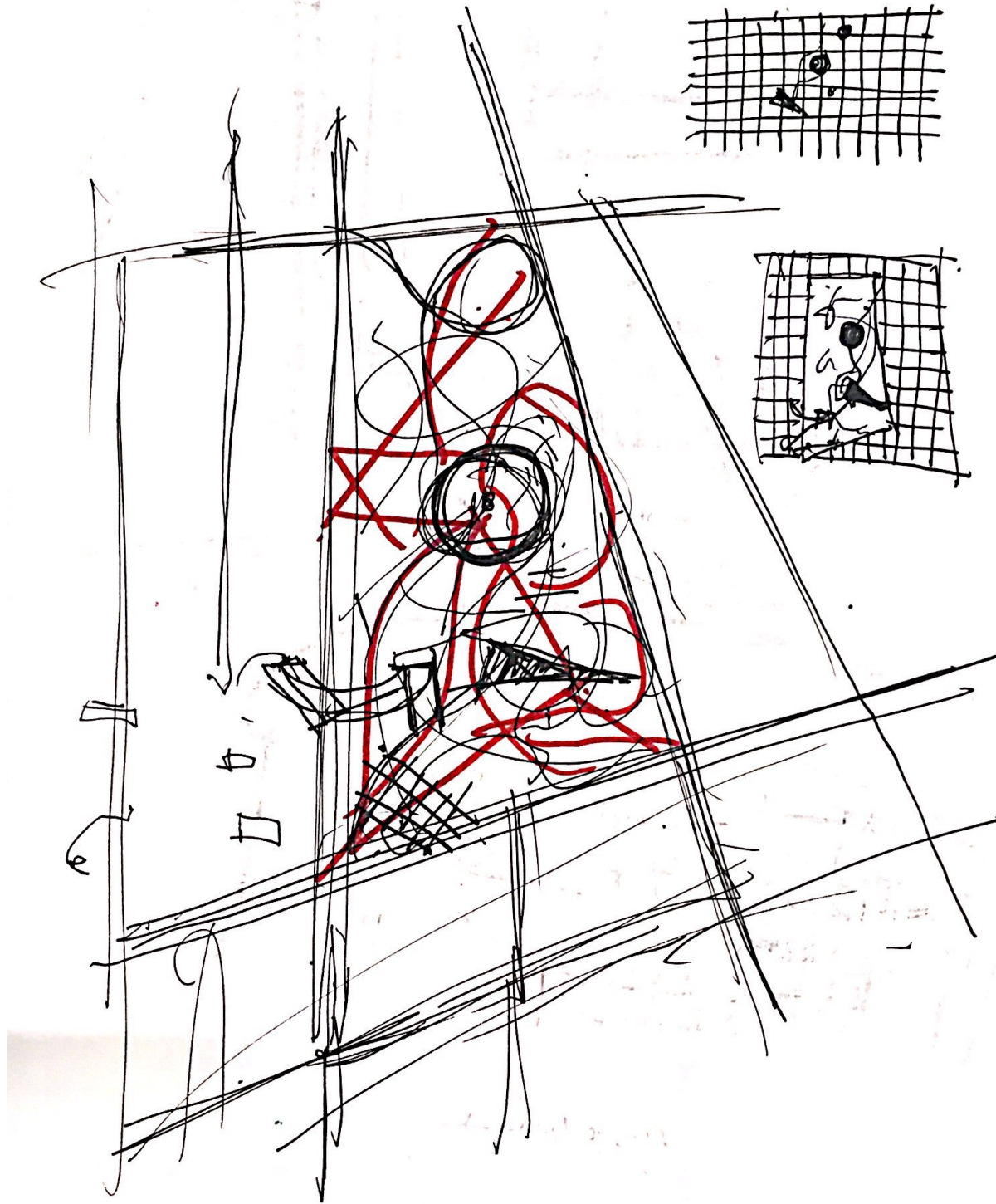
People running on street



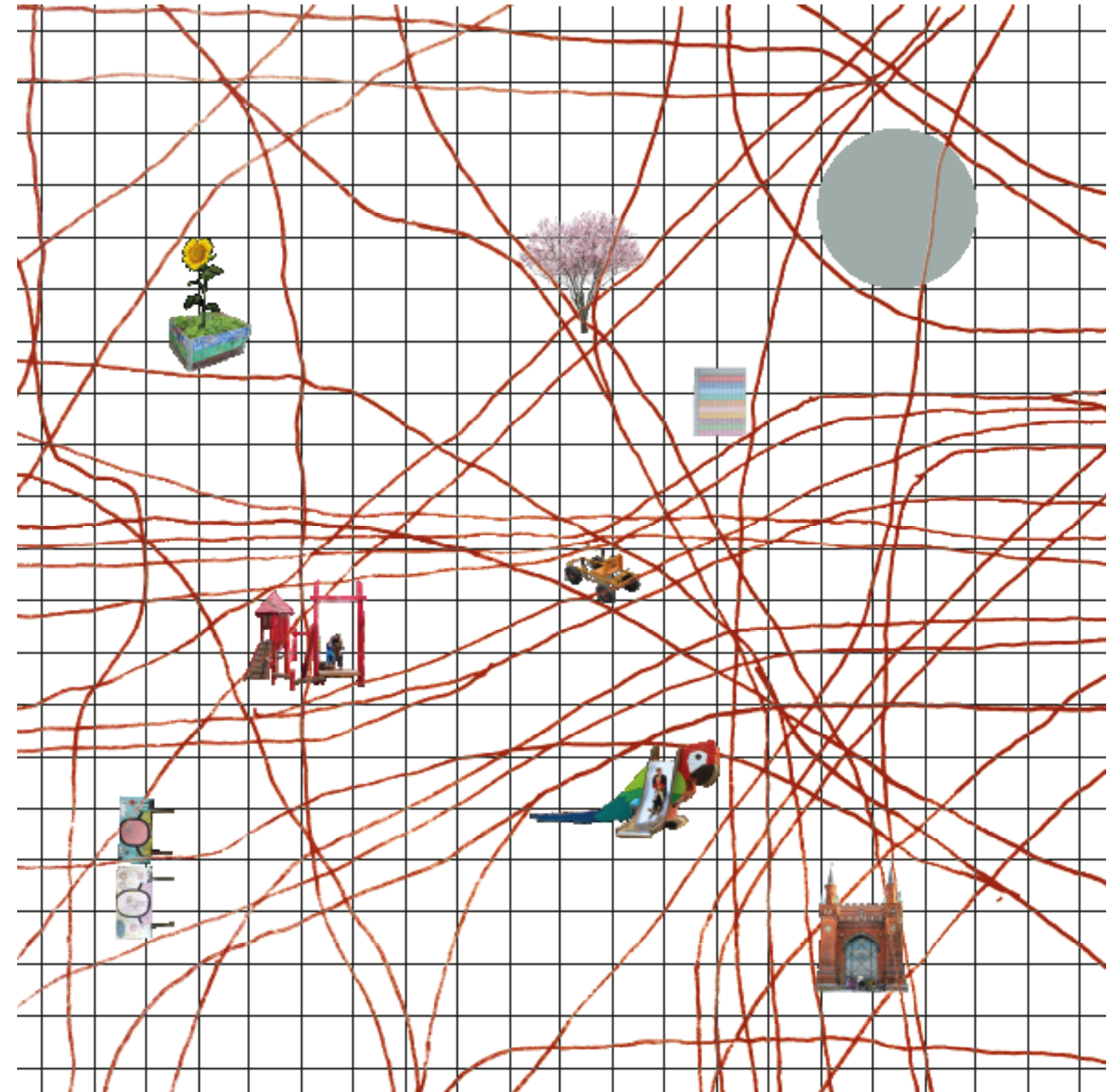
Waste as planters



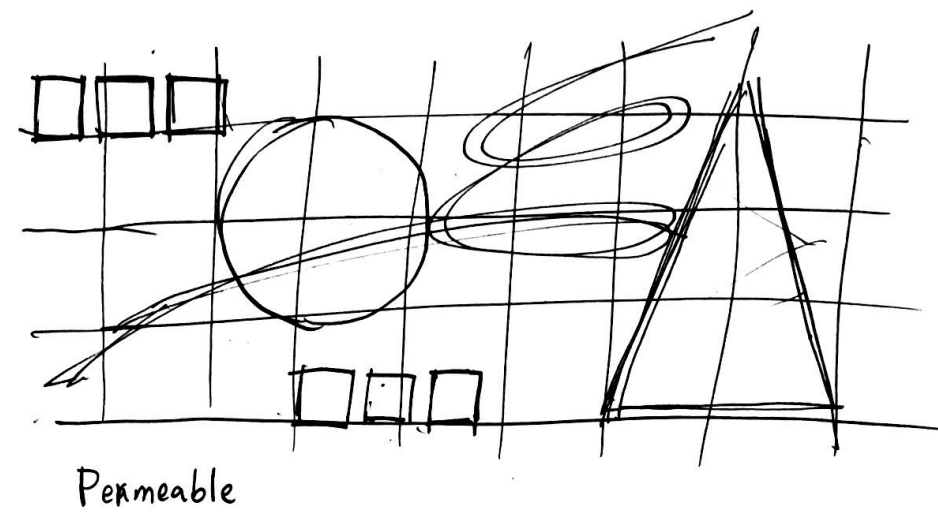
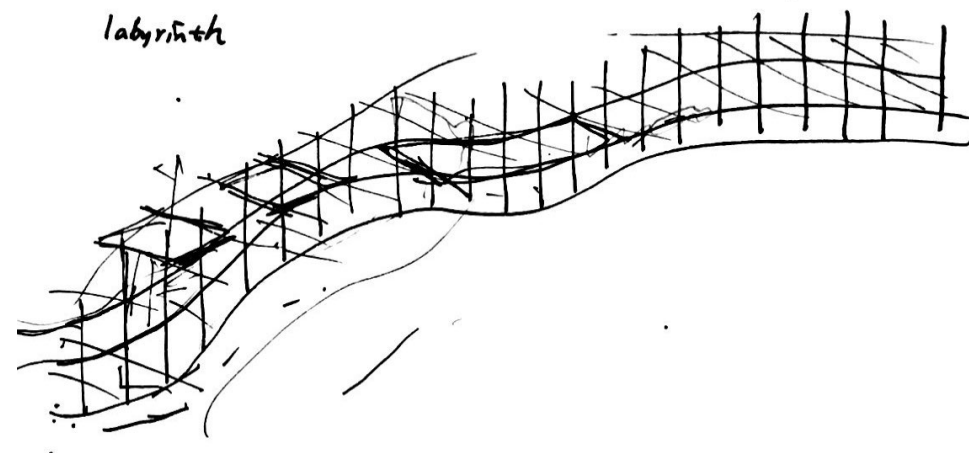
Fairy tale



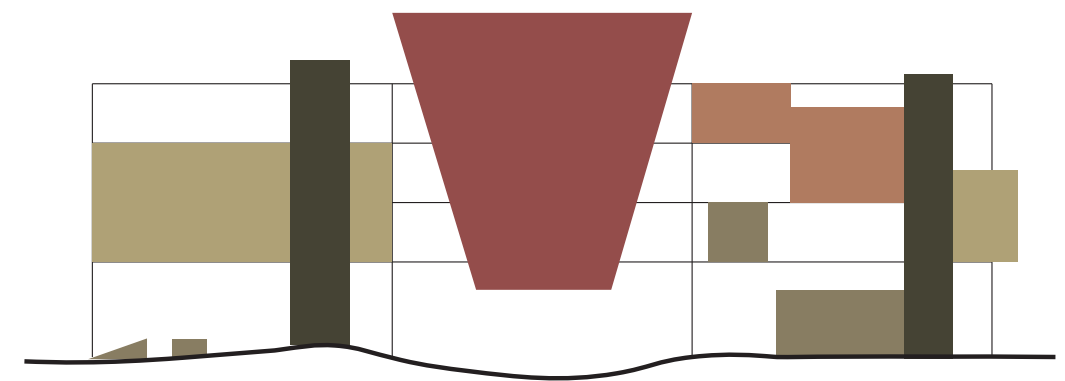
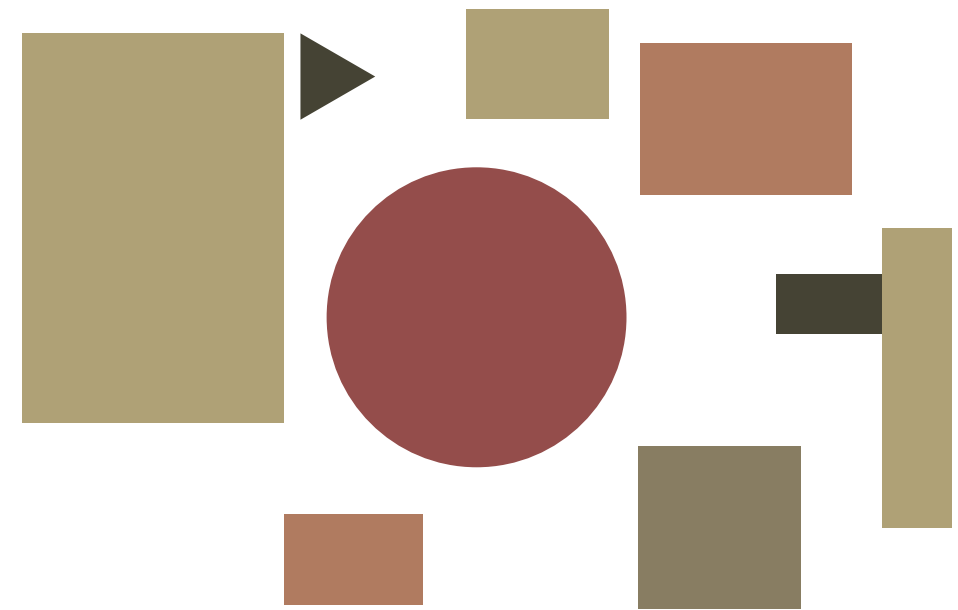
FREE MOVEMENT IN THE PLAYGROUND



MANIFESTO



ENCOUNTER OF UNKNOWN

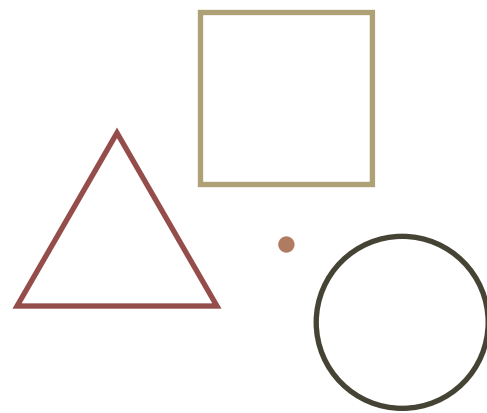


a communal space for sharing and creativity
public condenser that facilitates the encounter of unknown

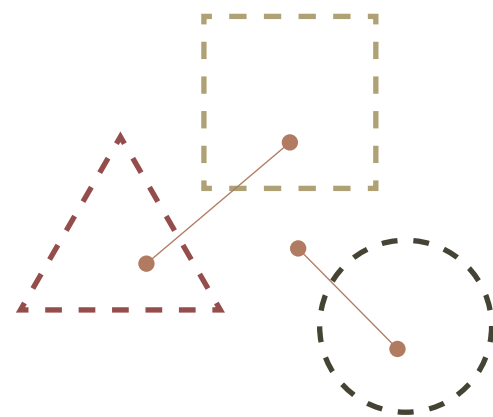
CONCEPT



variation

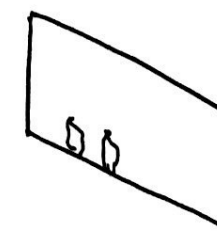


visual connection

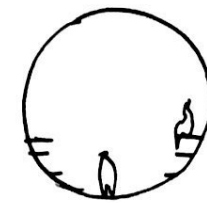


permeable boundary

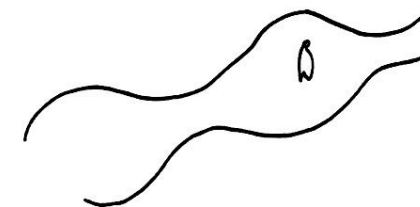
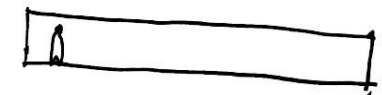
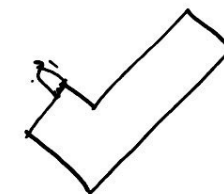
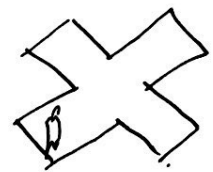
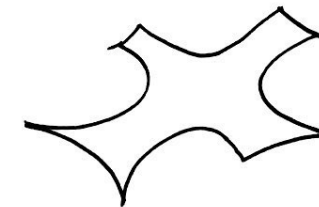
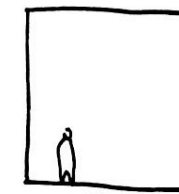
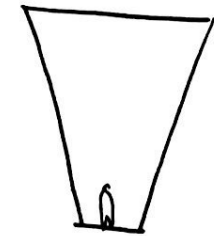
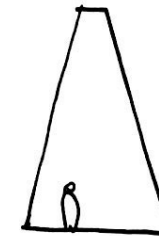
PRECONDITION OF INDETERMINACY



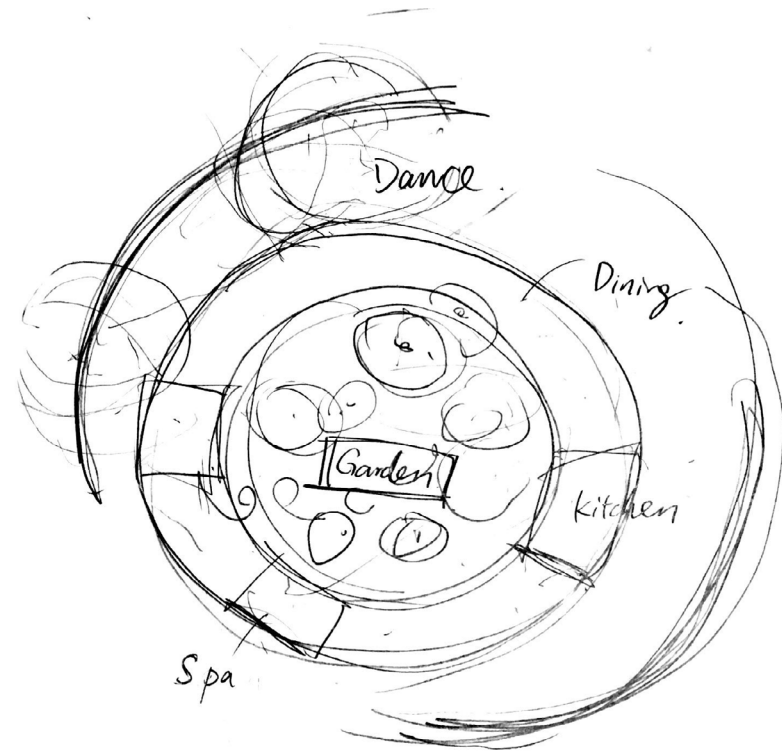
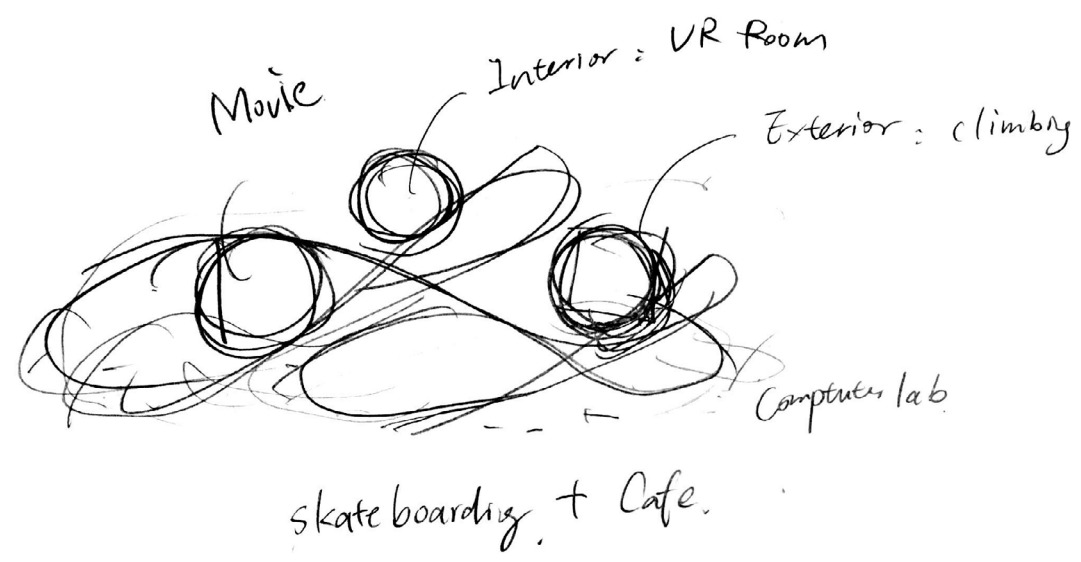
Lecture



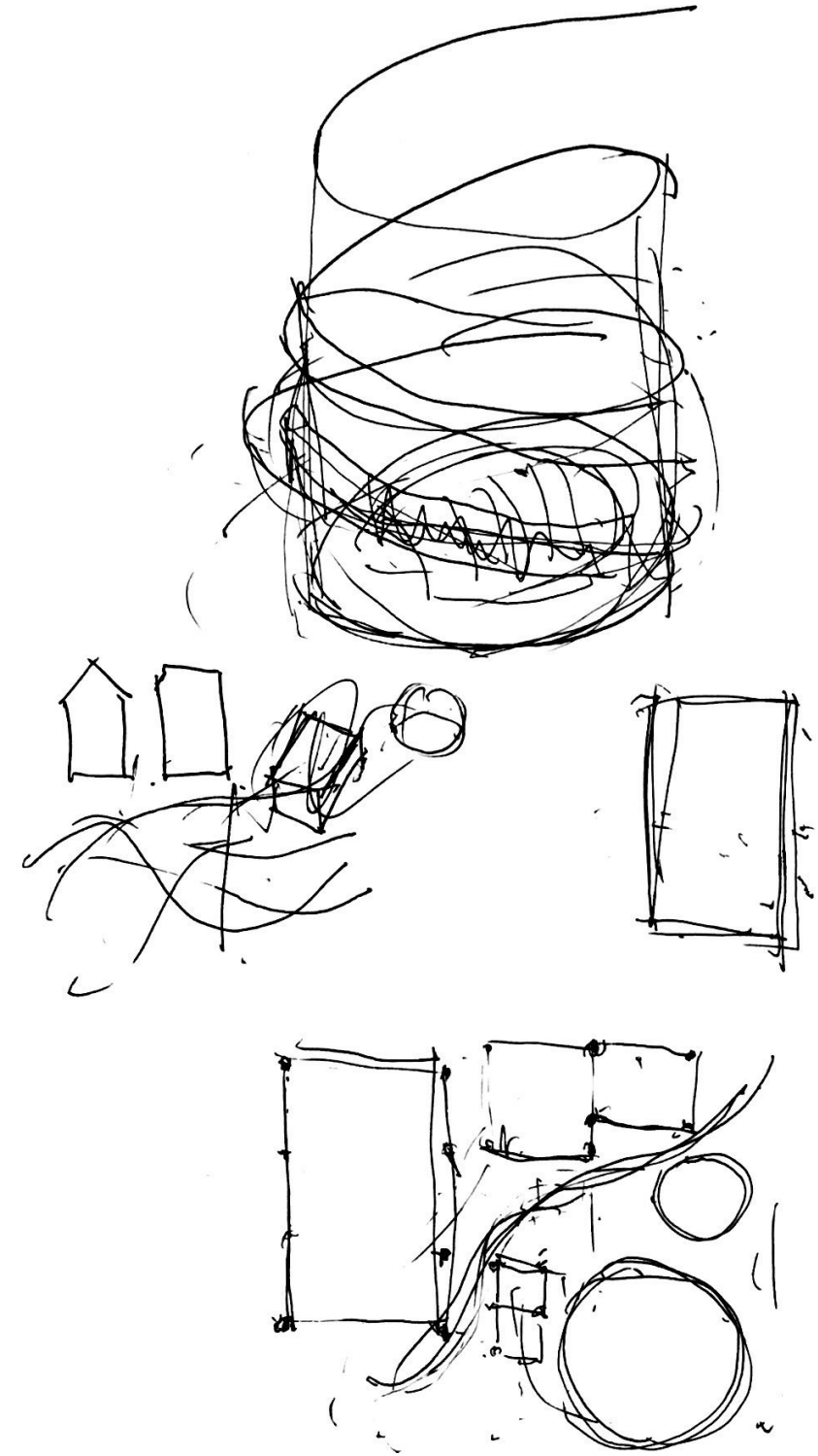
Performance



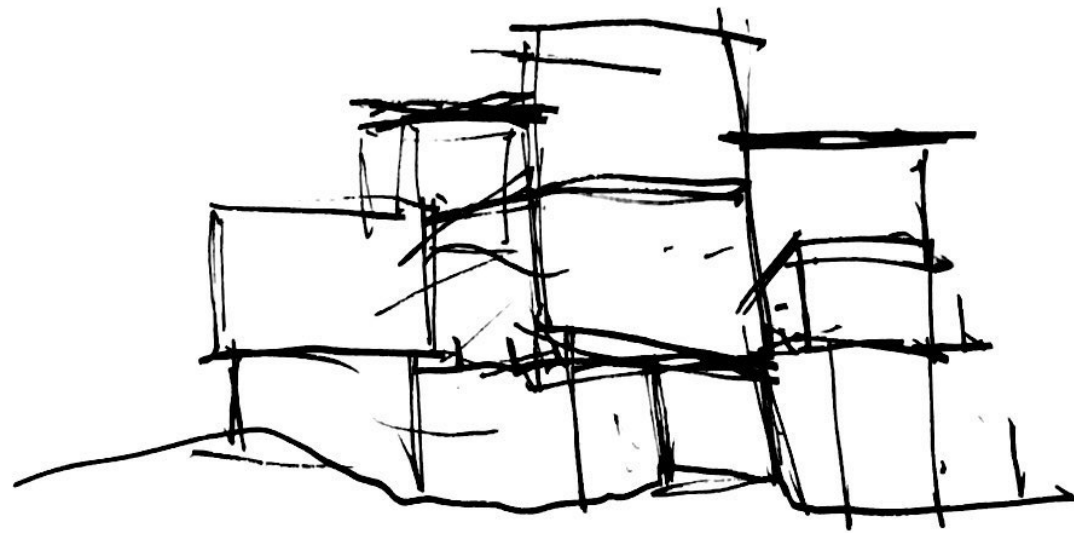
VARIOUS SPATIAL QUALITIES



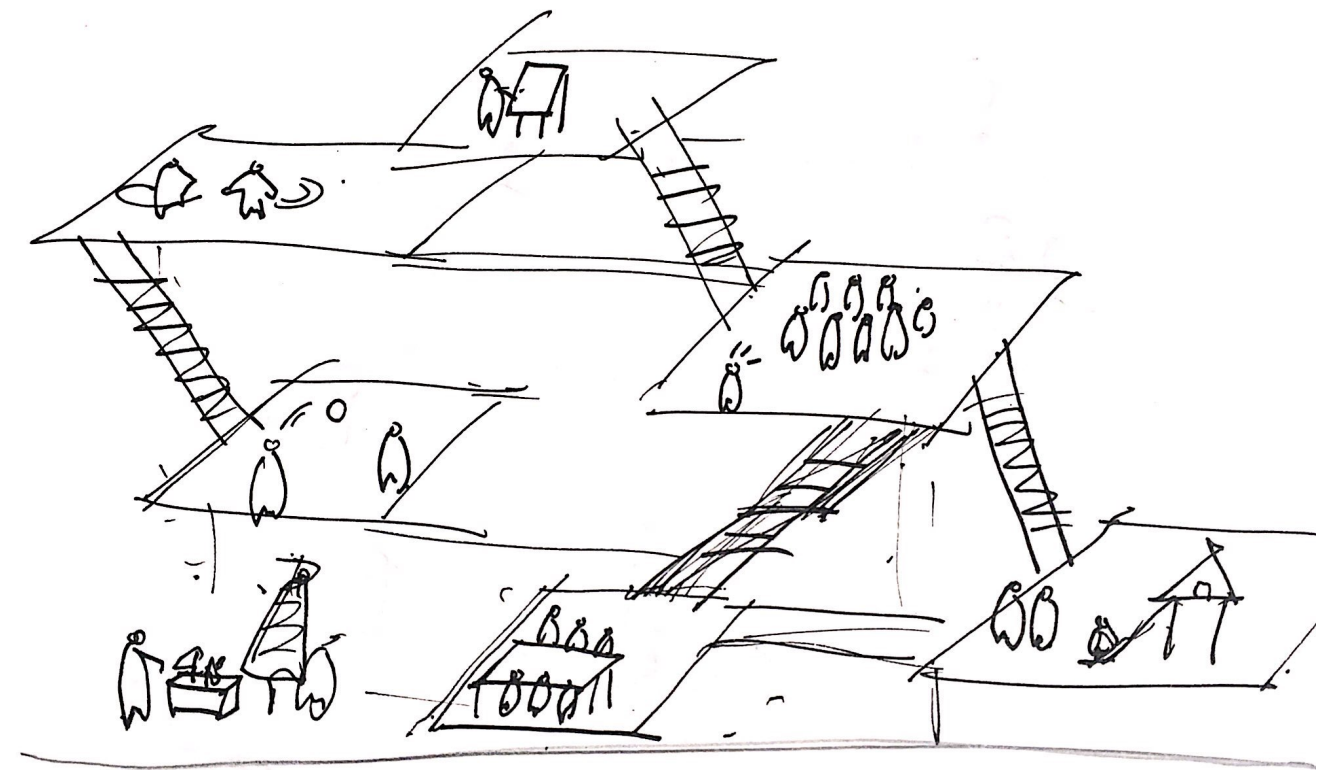
SPATIAL IMAGINATION



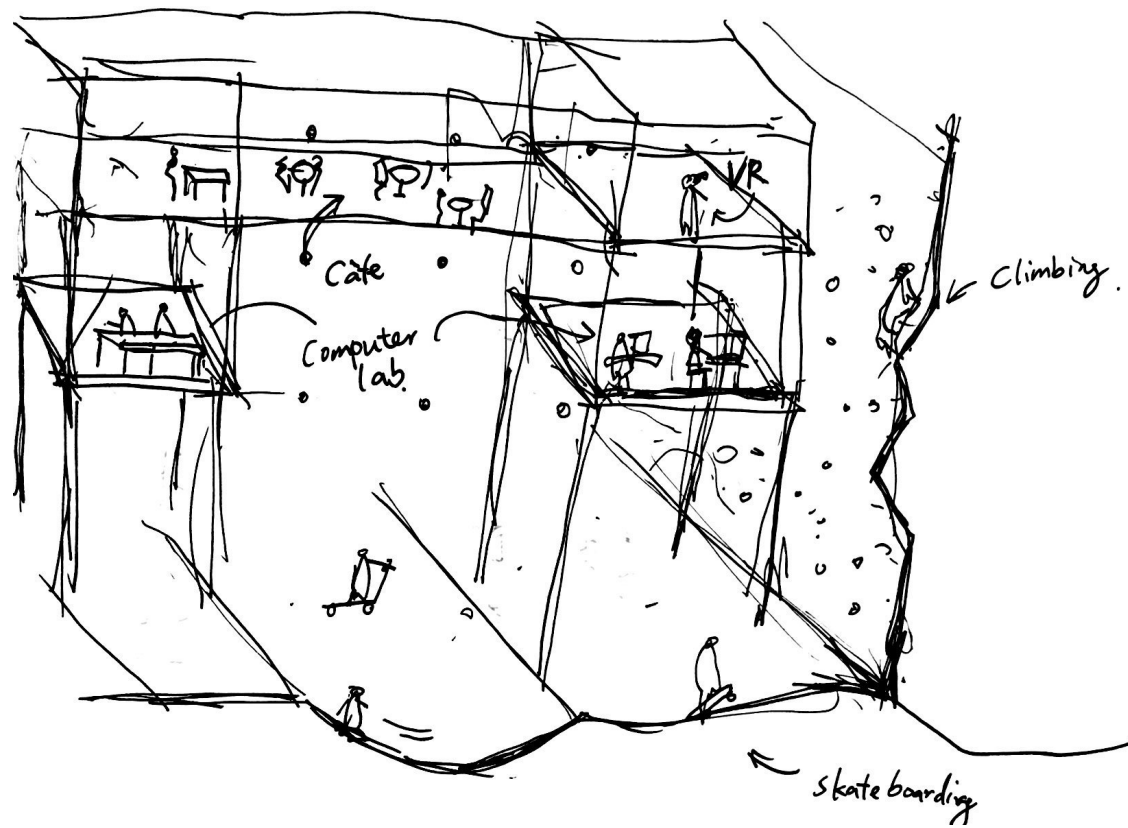
SPATIAL IMAGINATION



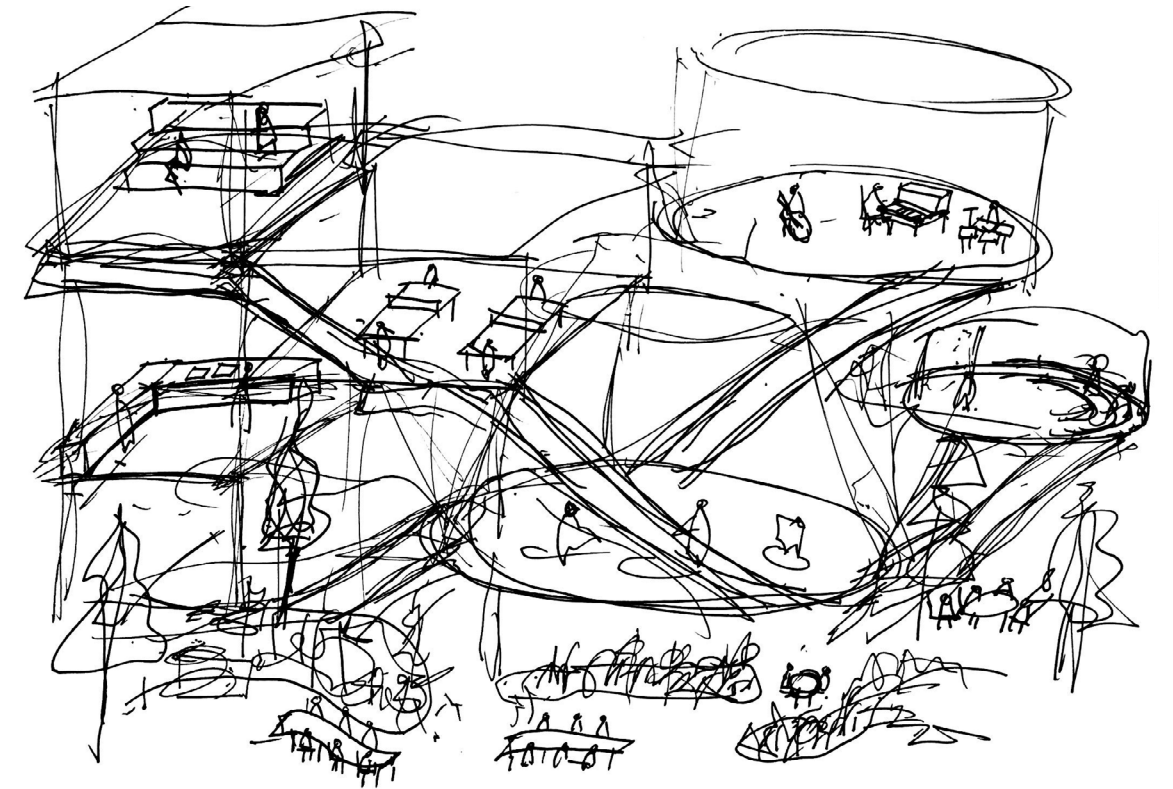
SPATIAL IMAGINATION



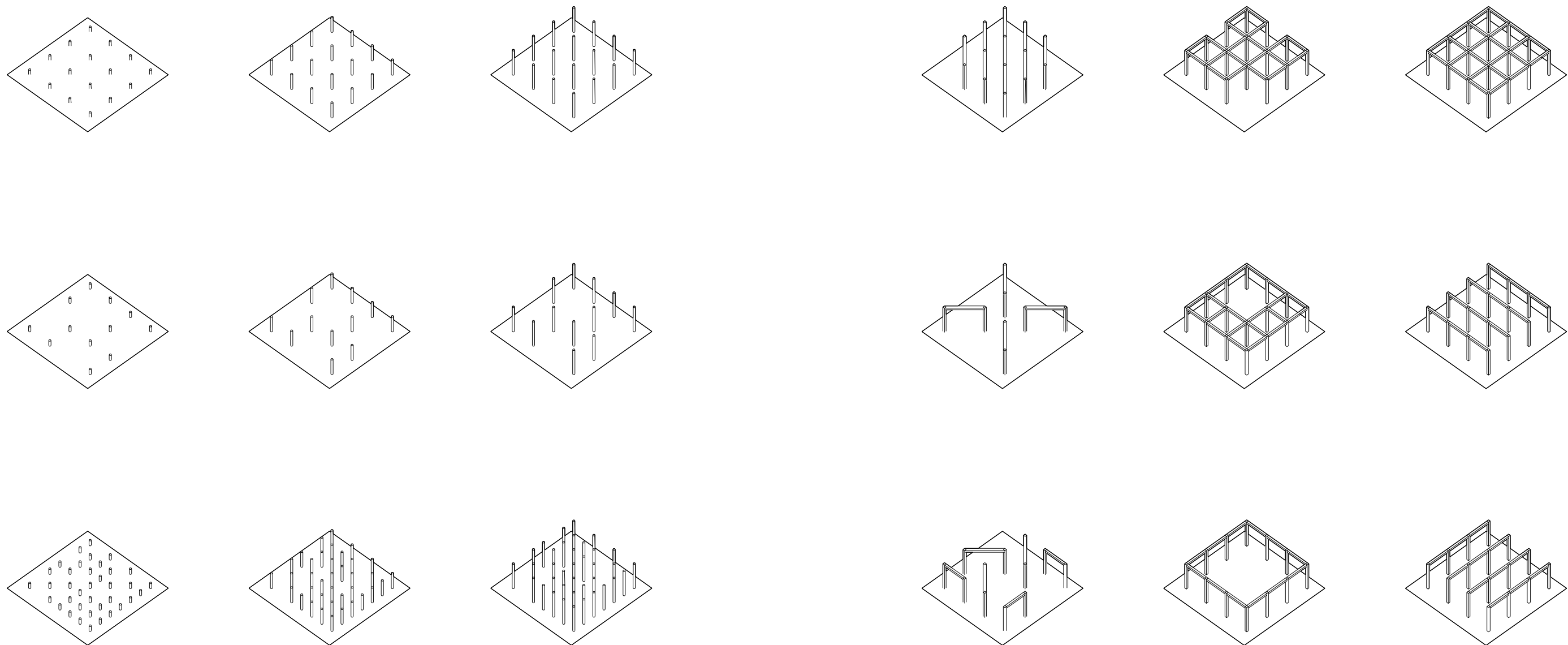
SPATIAL IMAGINATION



SPATIAL IMAGINATION

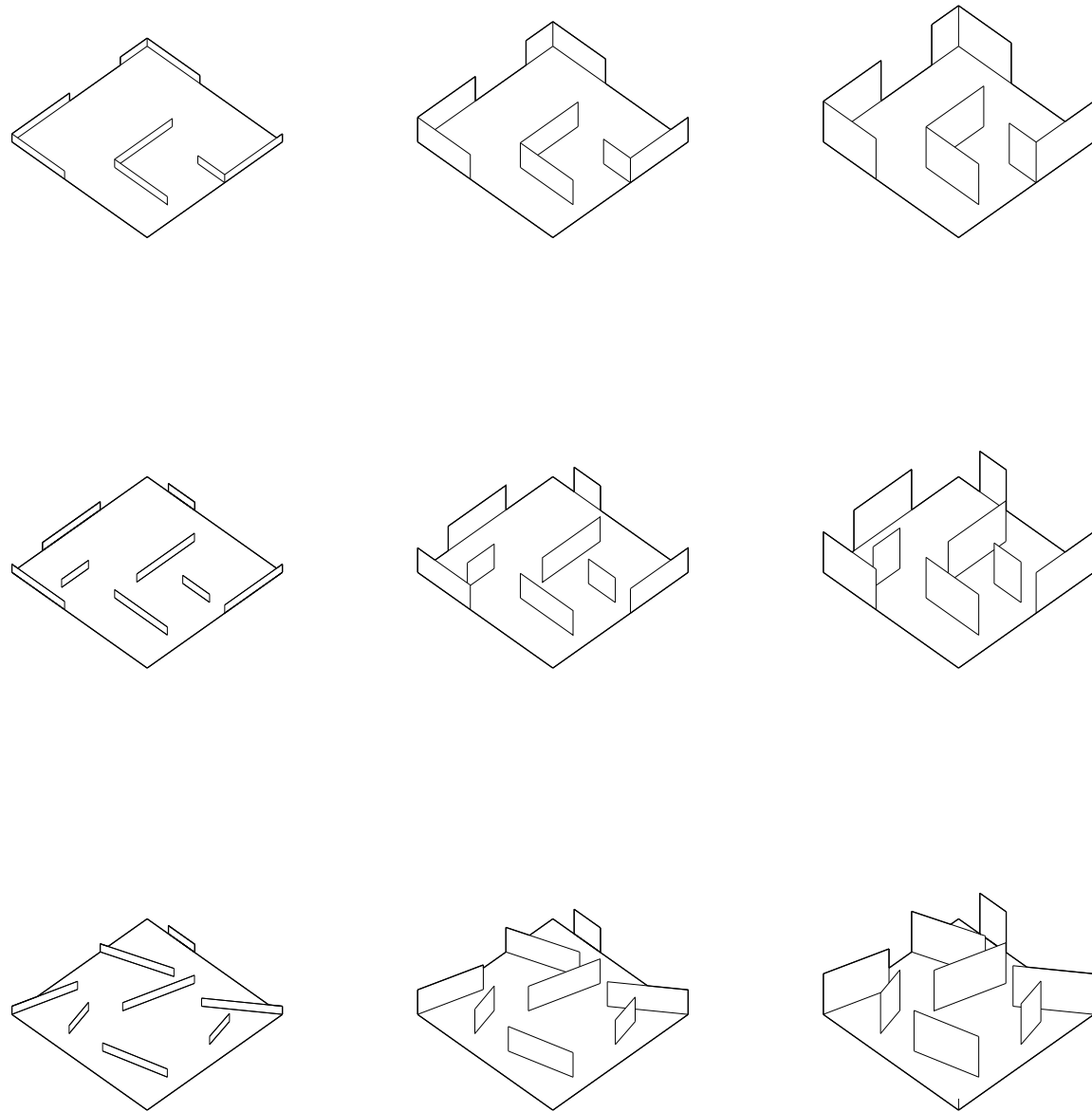


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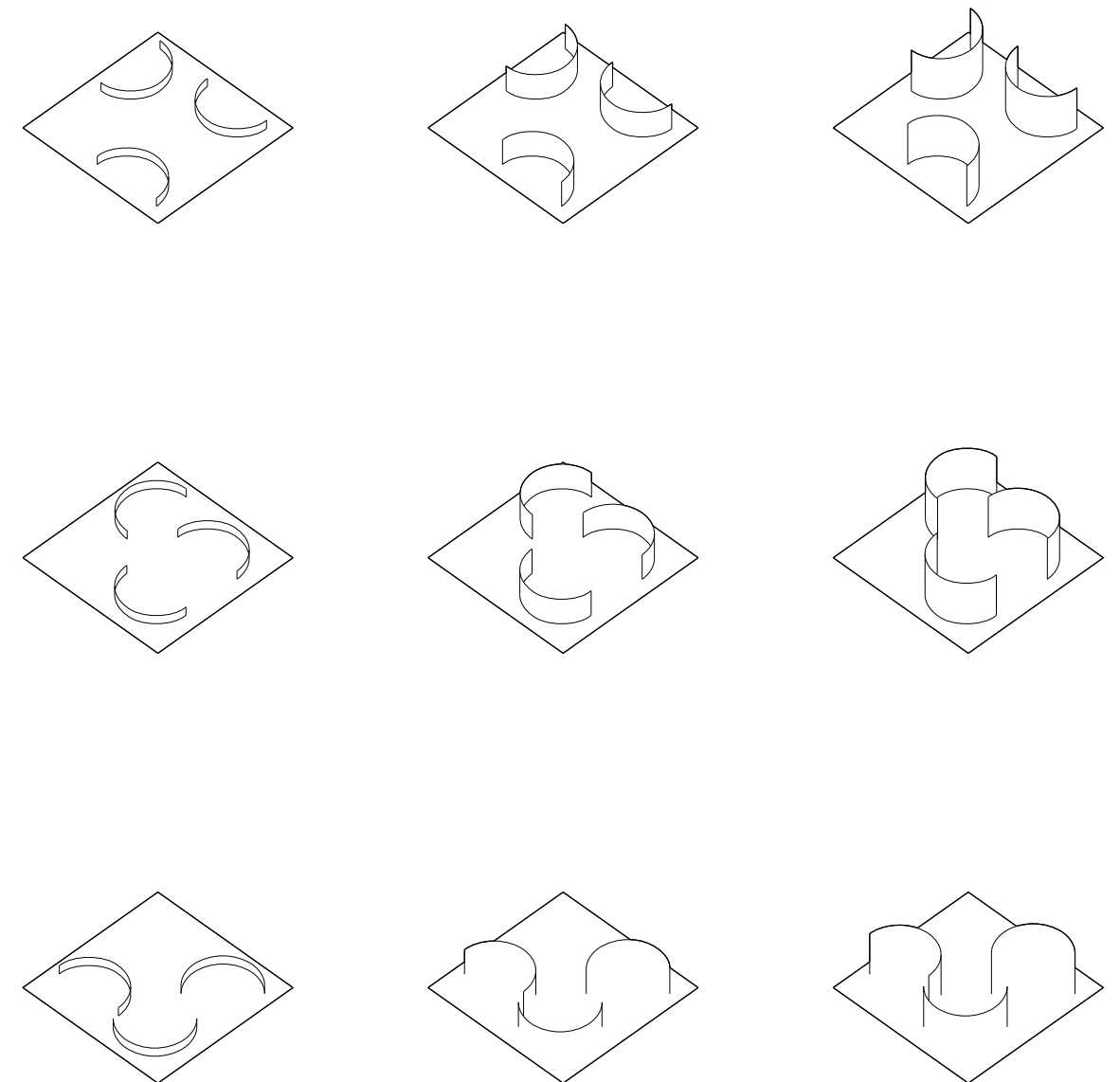


COLUMN
Element that Defines Space

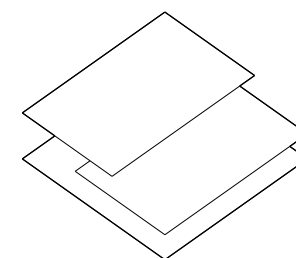
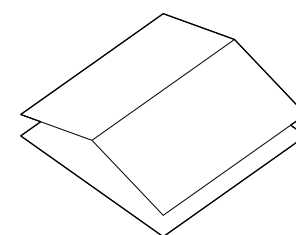
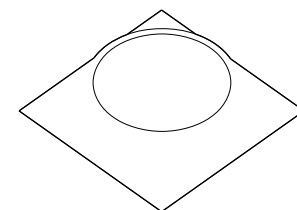
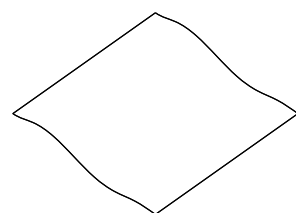
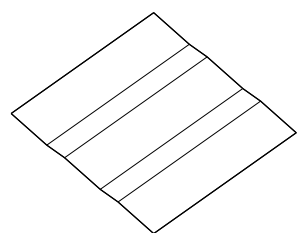
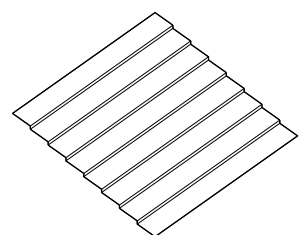
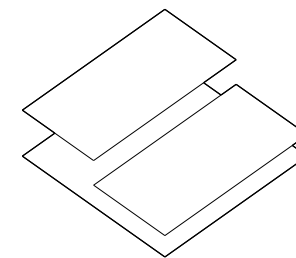
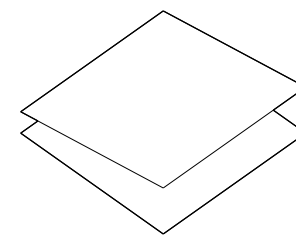
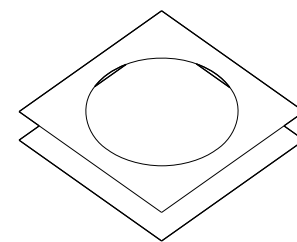
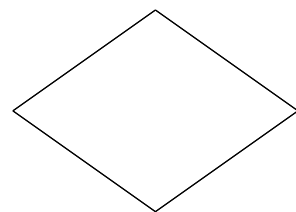
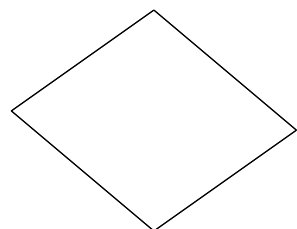
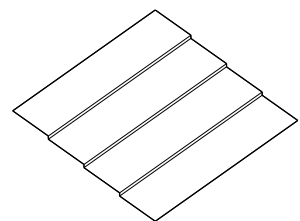
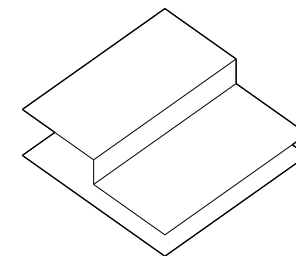
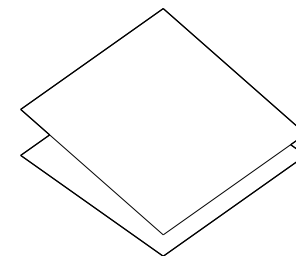
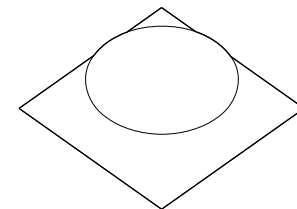
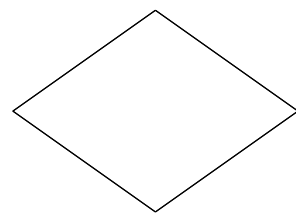
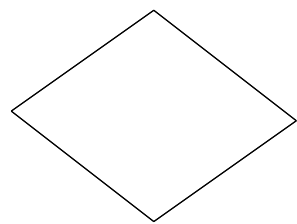
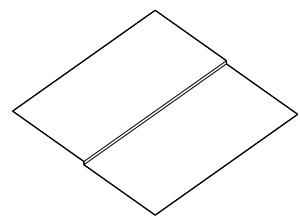
FRAME
Element that Defines Space



STRAIGHT WALL
Element that Defines Space

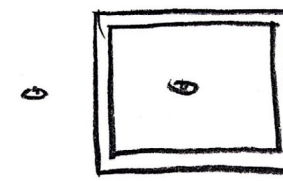
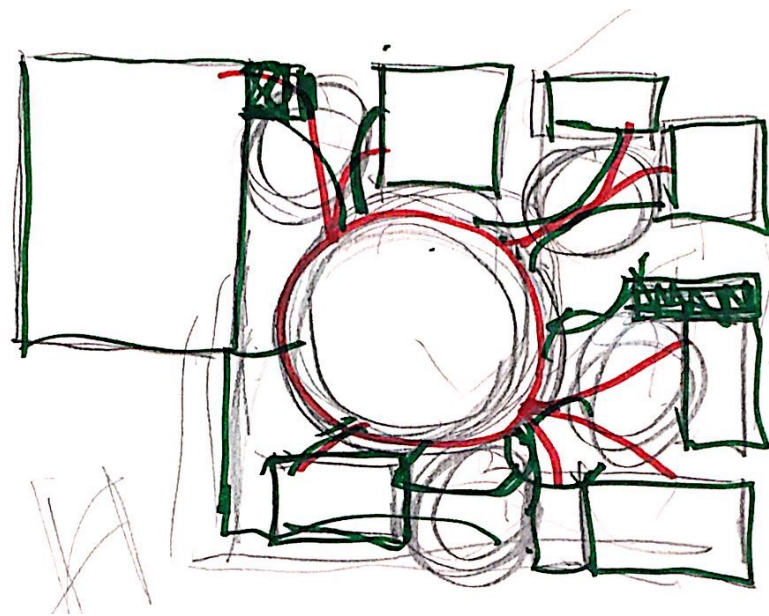


CURVED WALL
Element that Defines Space

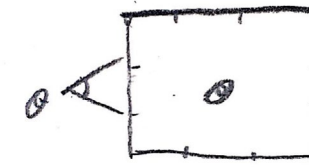


FLOOR
Element that Defines Space

CEILING
Element that Defines Space



opaque

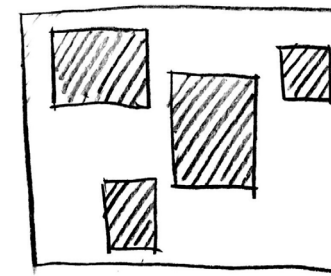


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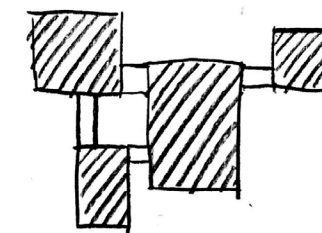


movable partition

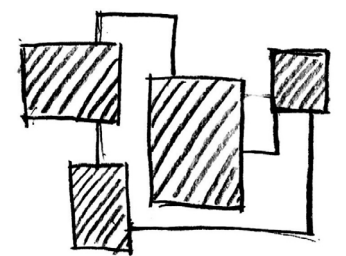
PERMEABILITY BETWEEN ACTIVITIES



slab

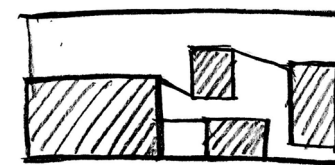


bridge



platform

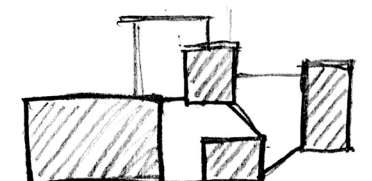
SPATIAL RELATION WITH CIRCULATION



inserting

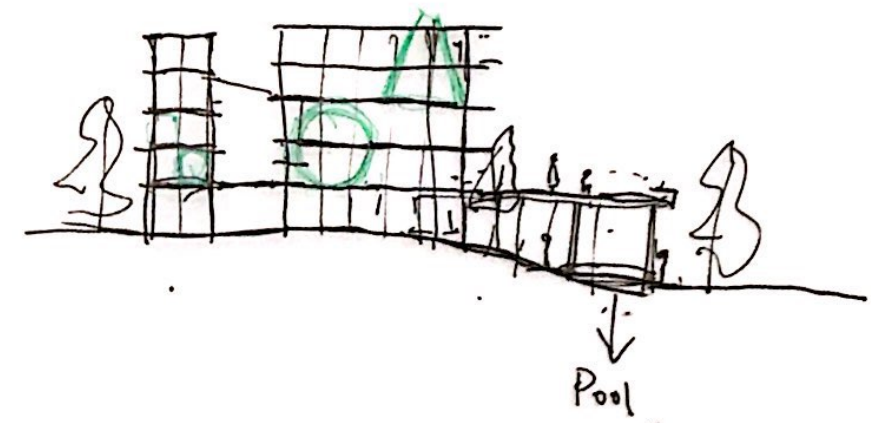
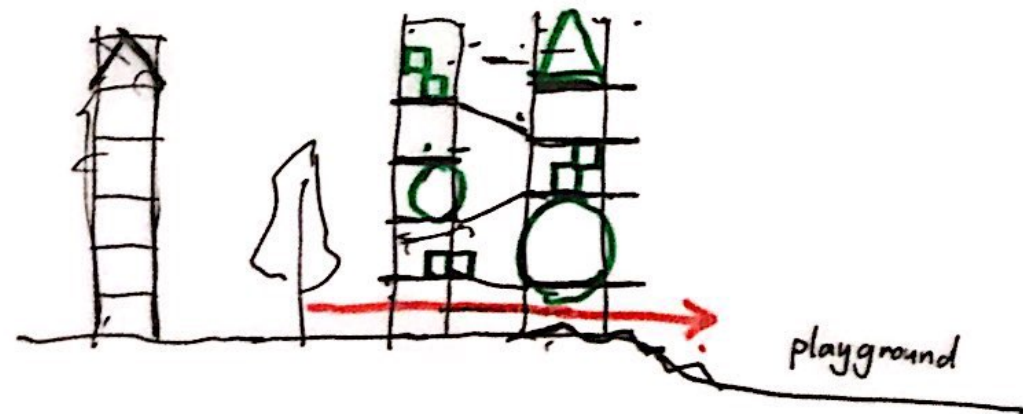
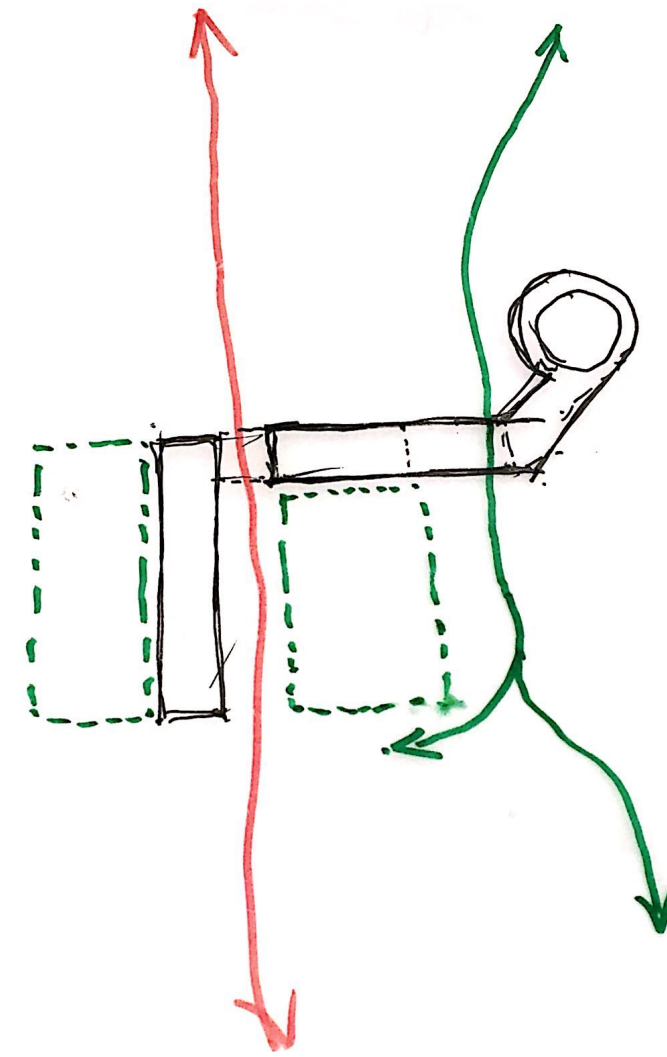
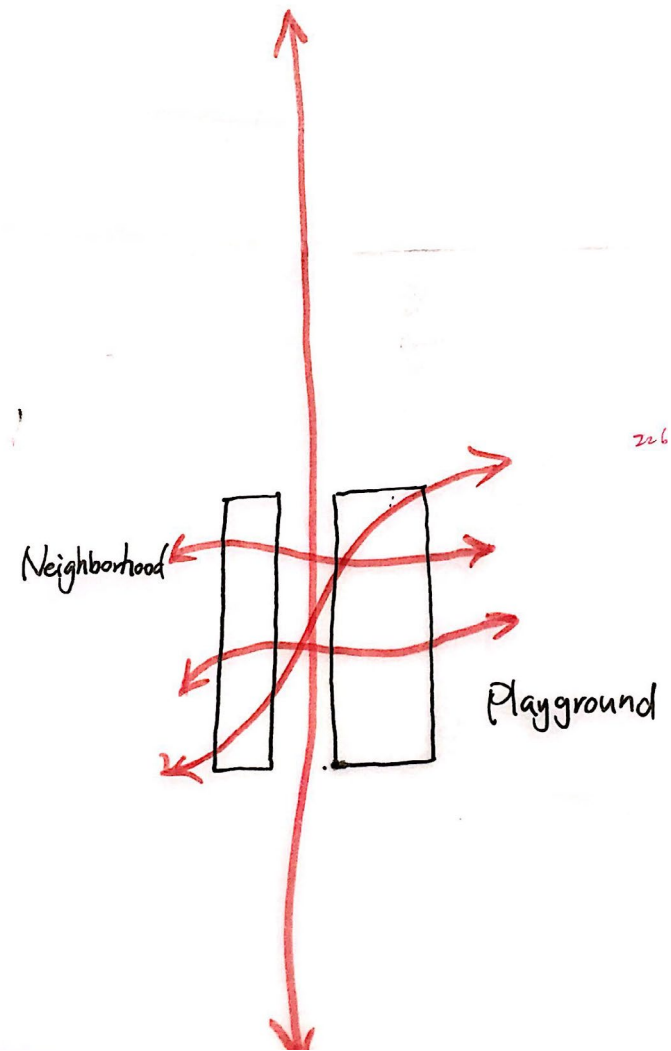


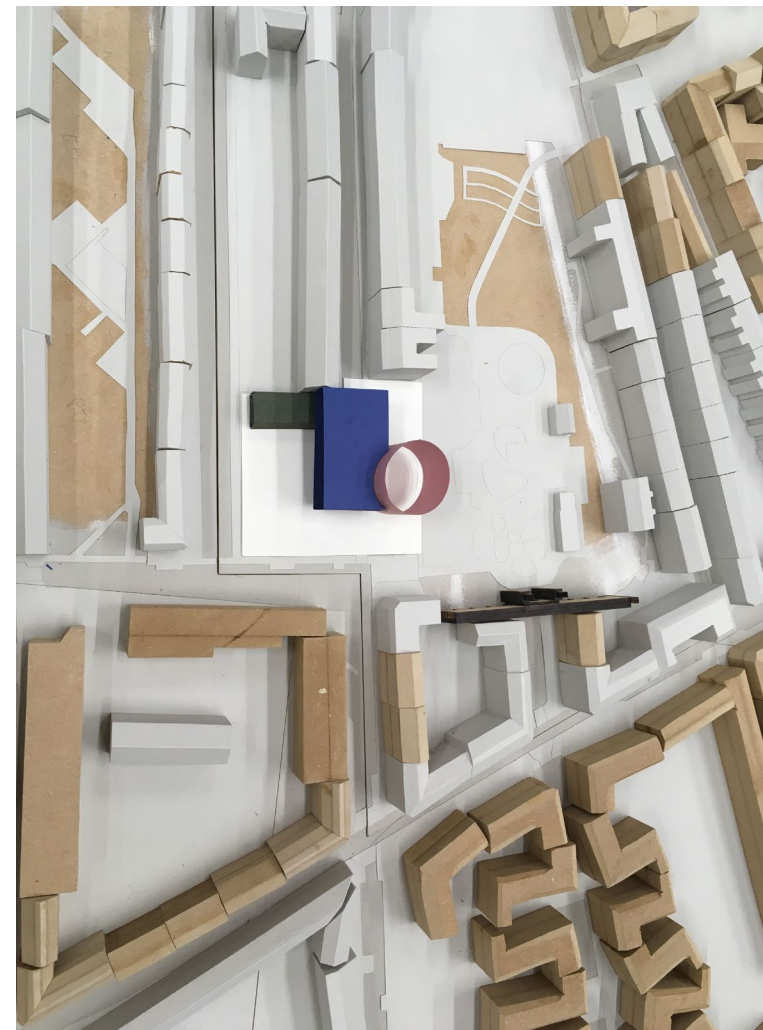
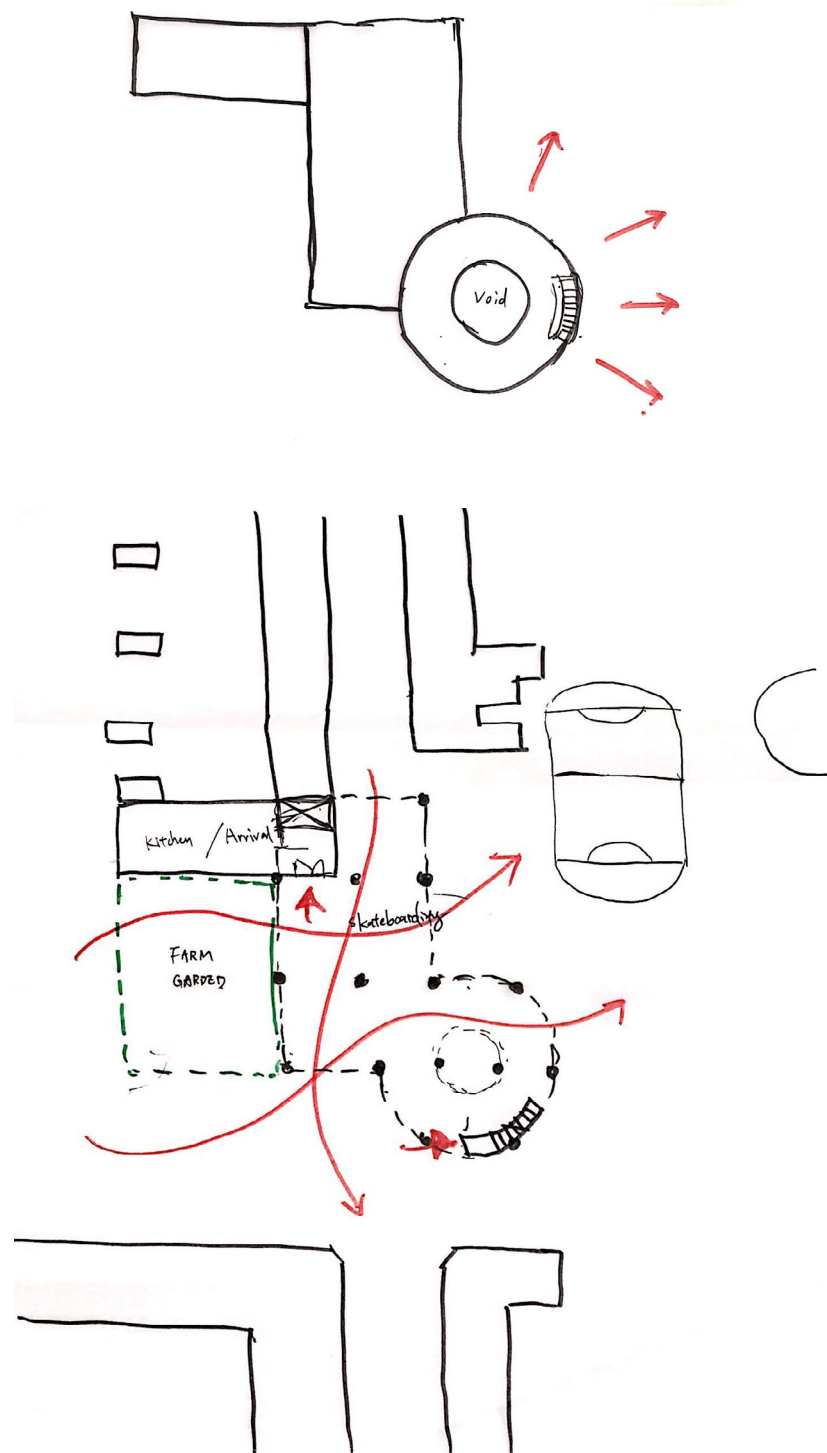
planar

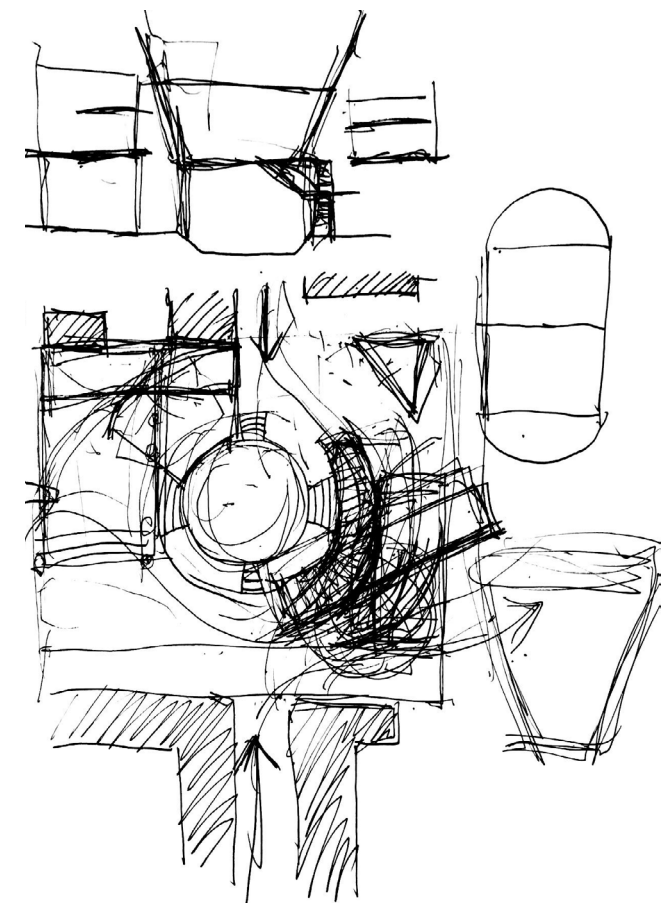
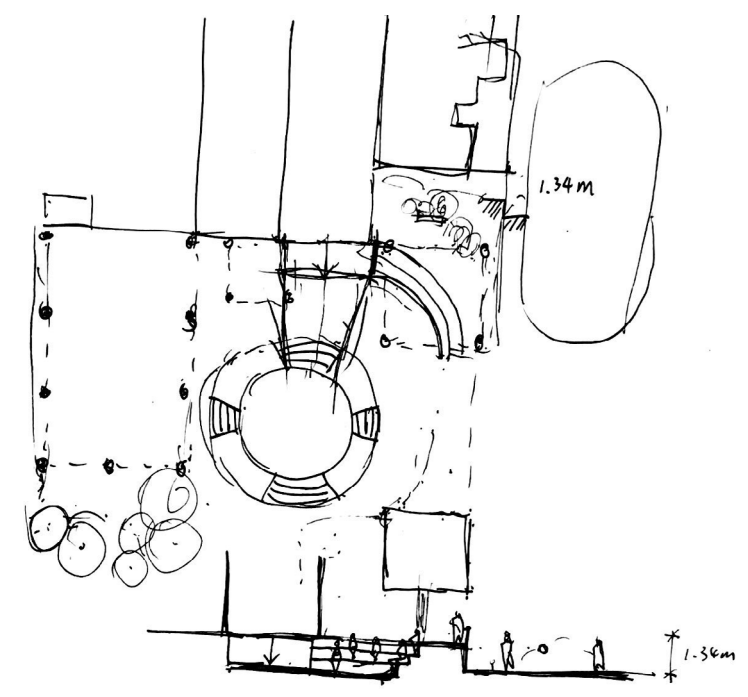
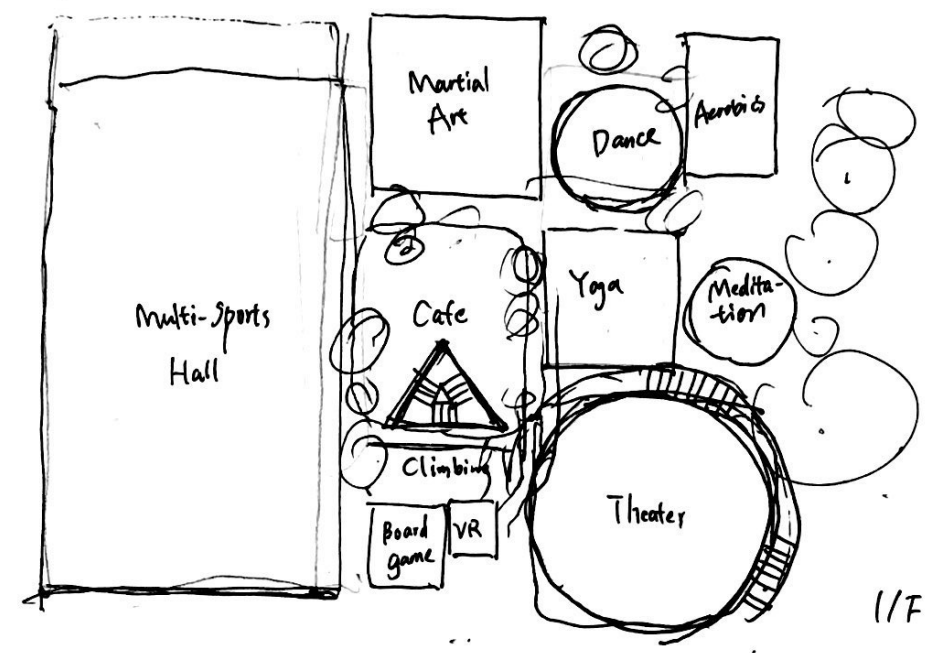
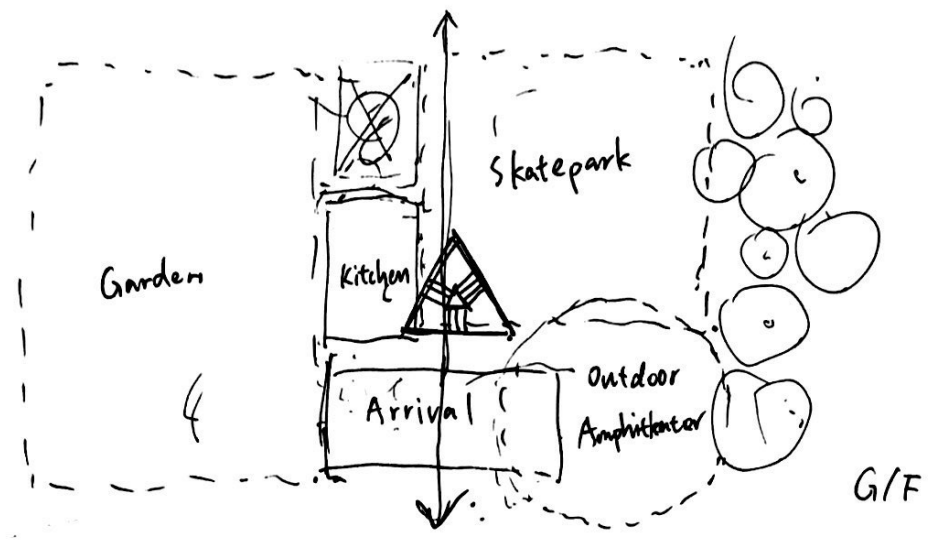


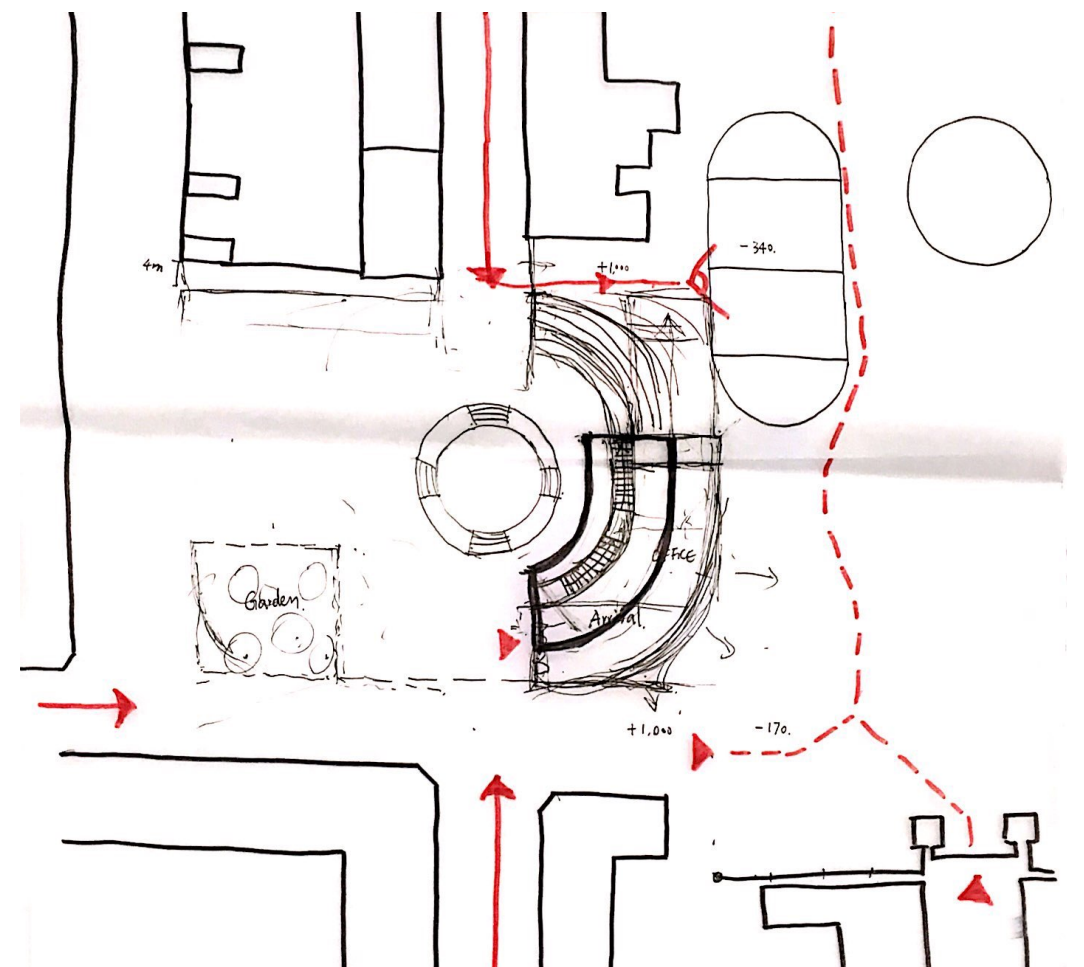
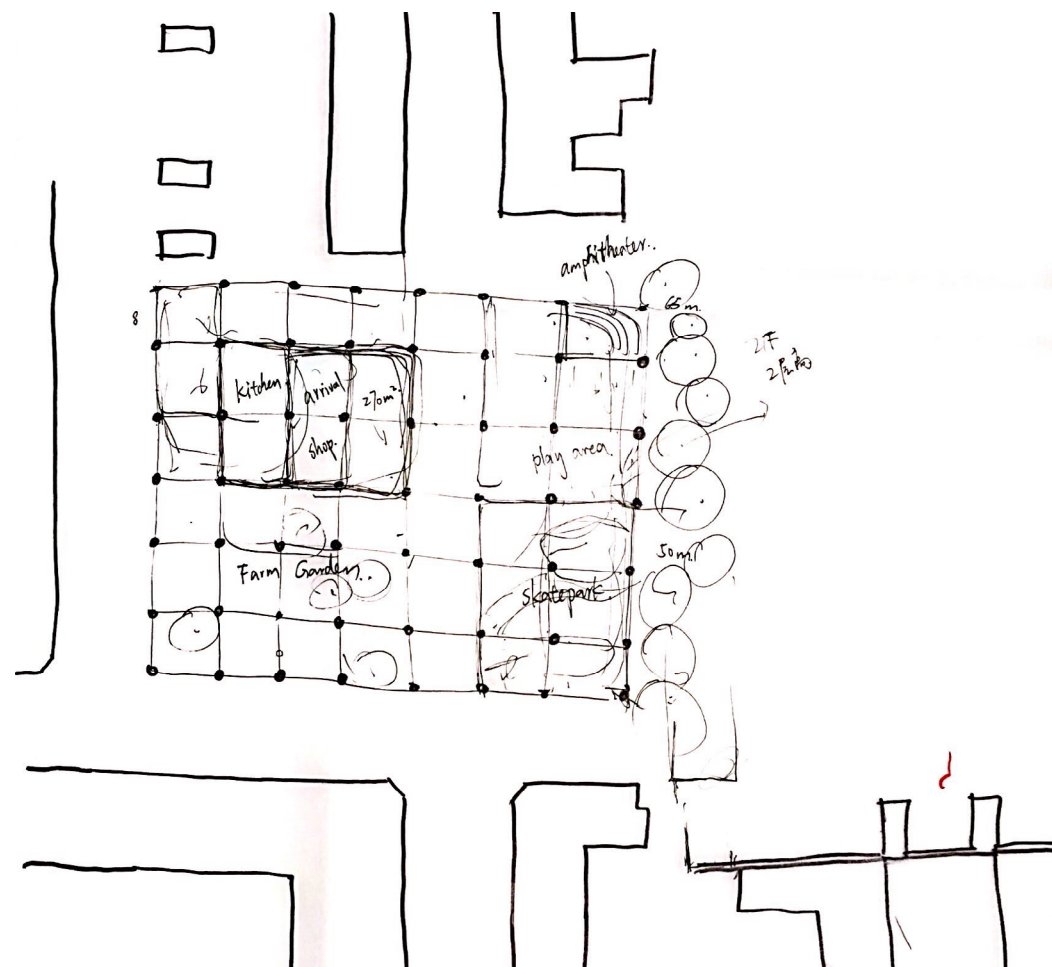
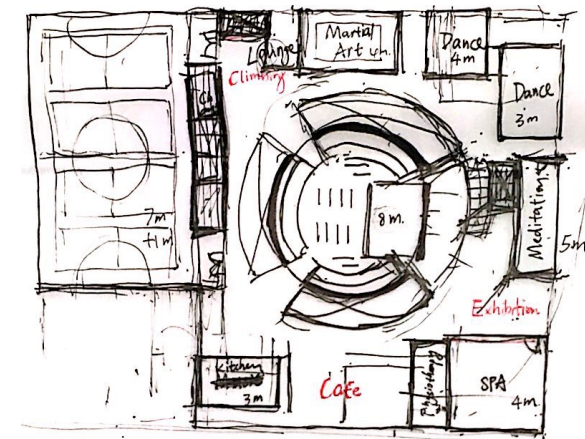
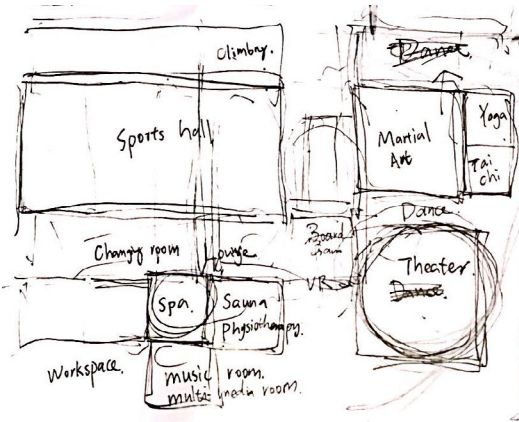
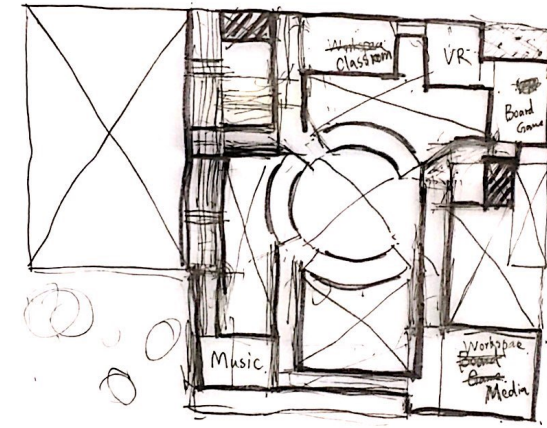
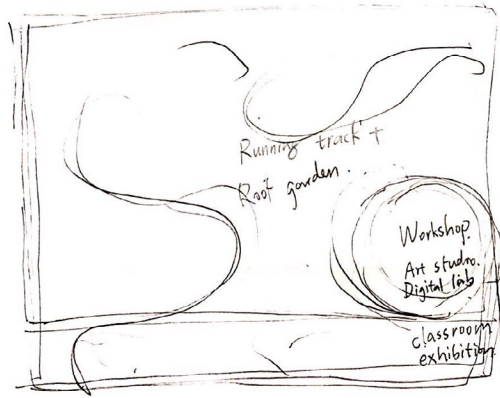
tangled

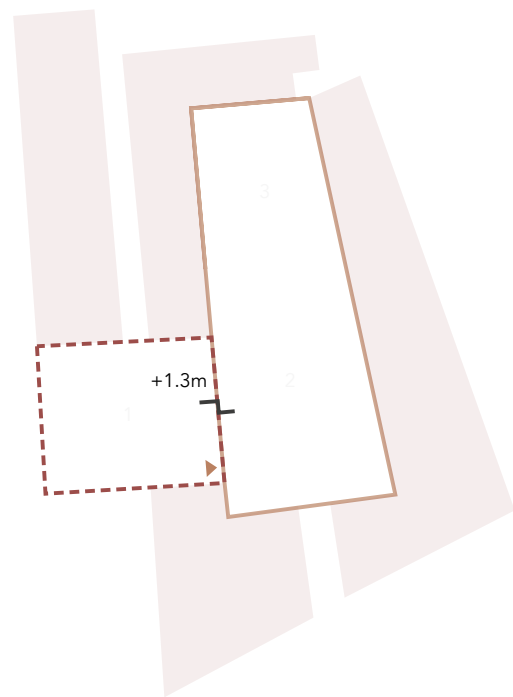
SPATIAL RELATION WITH ENCLOSURE



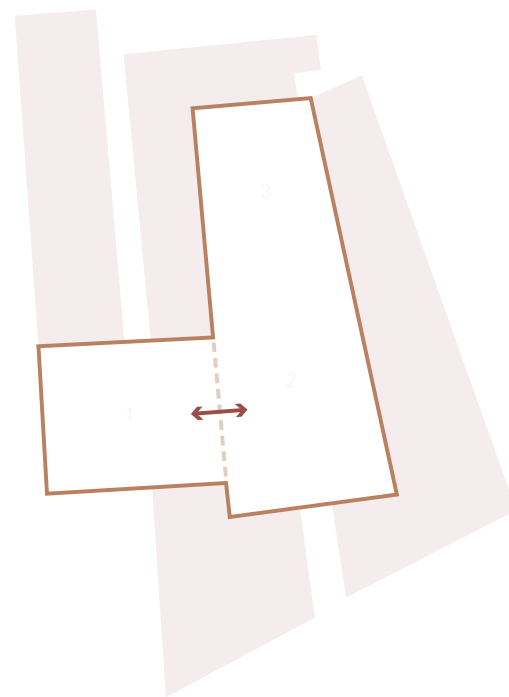




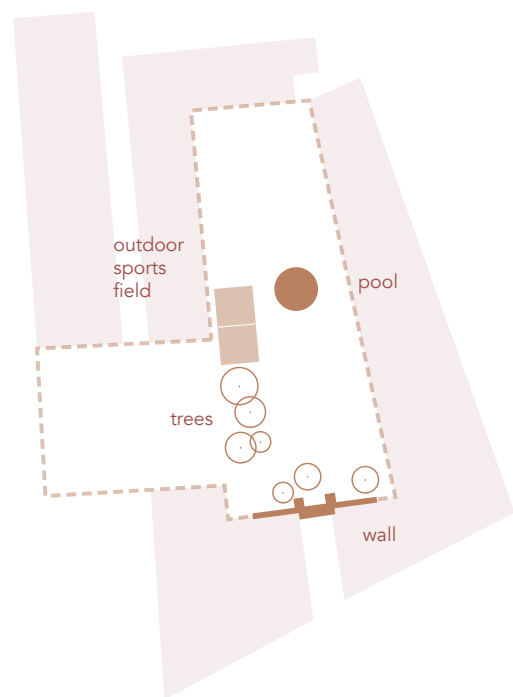




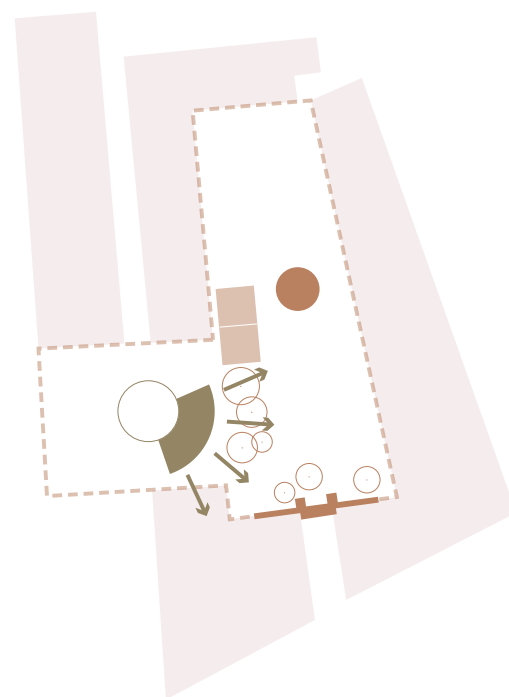
ISOLATION



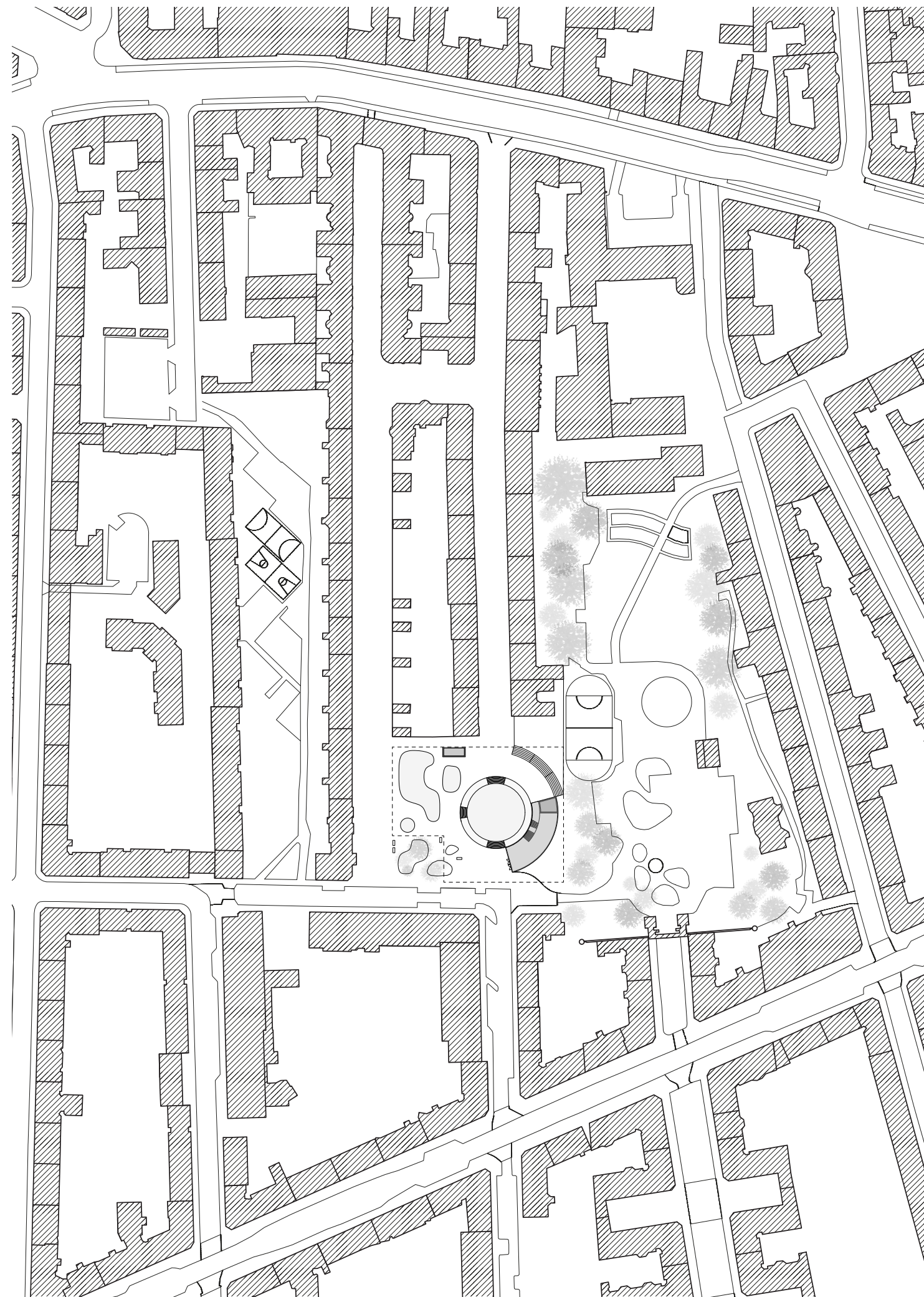
MERGE

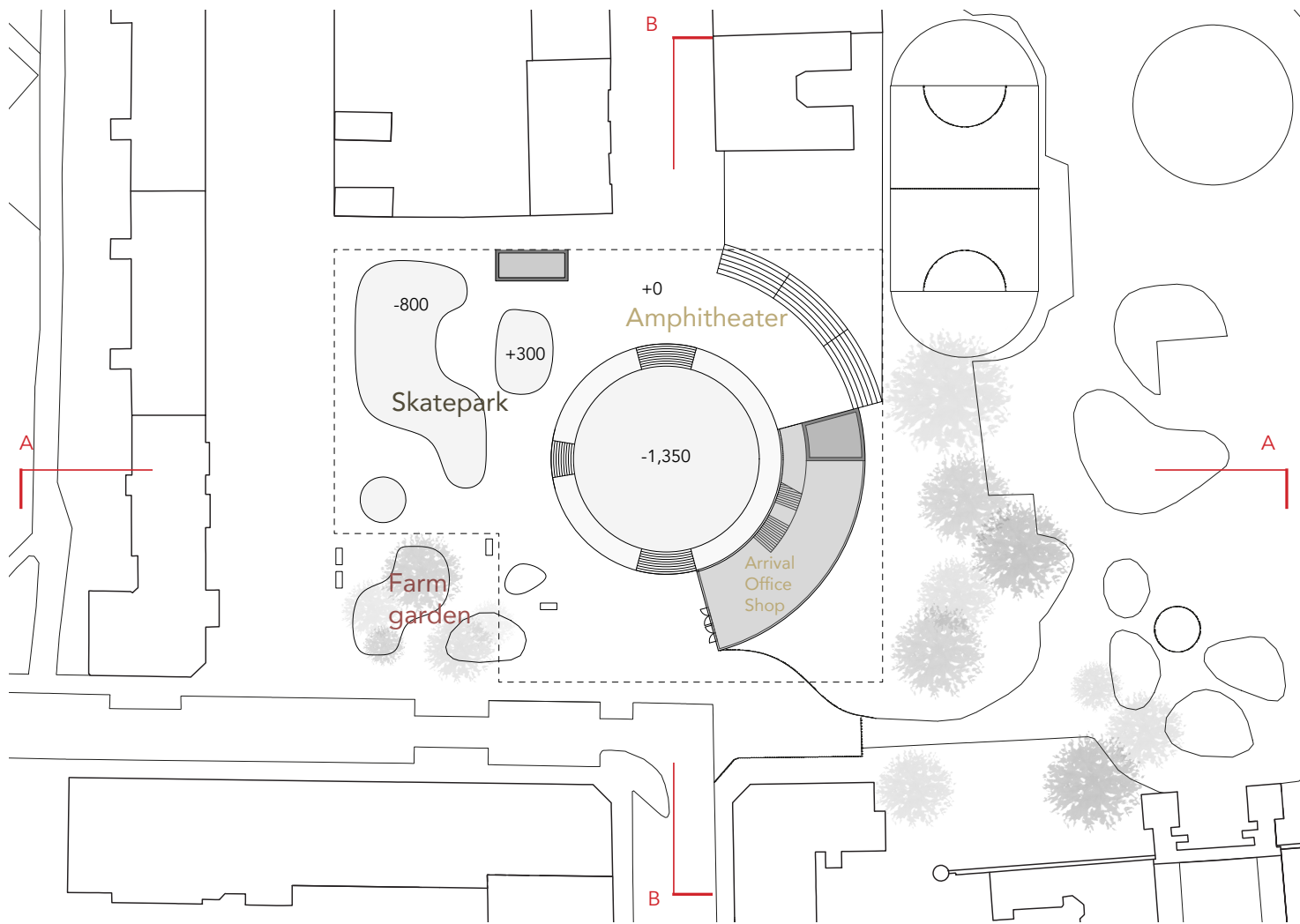


ELEMENTS IN PLAYGROUND

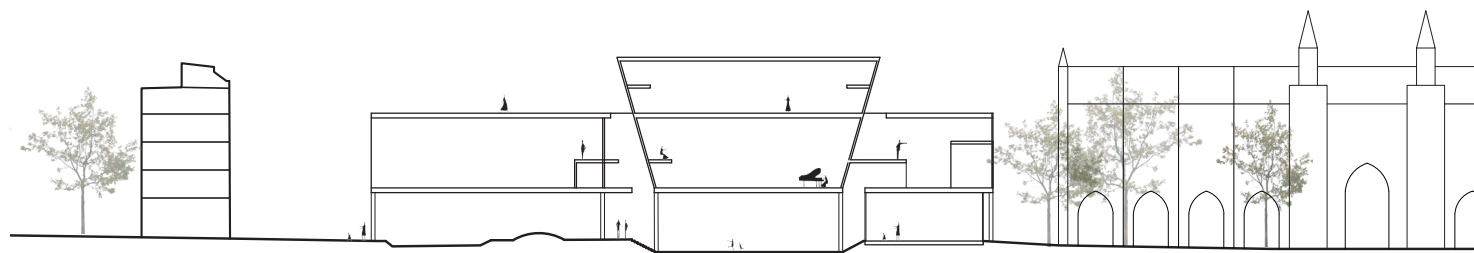


VISUAL CONNECTION

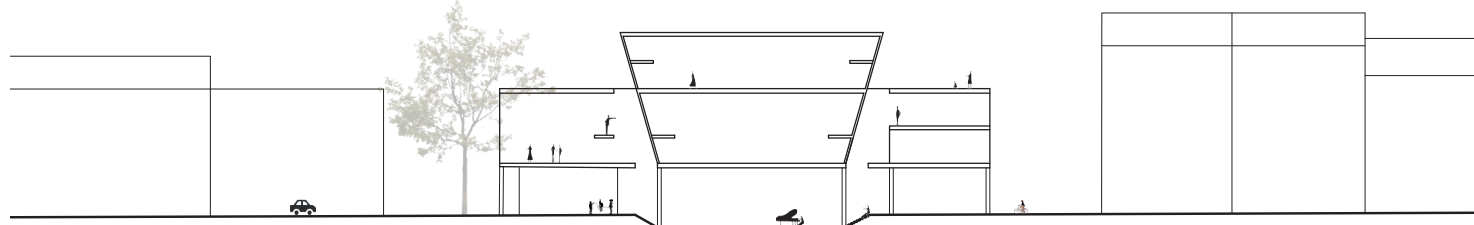




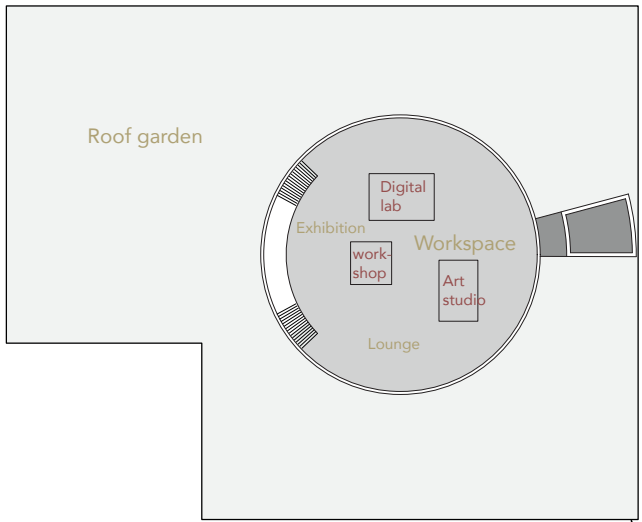
G/F PLAN



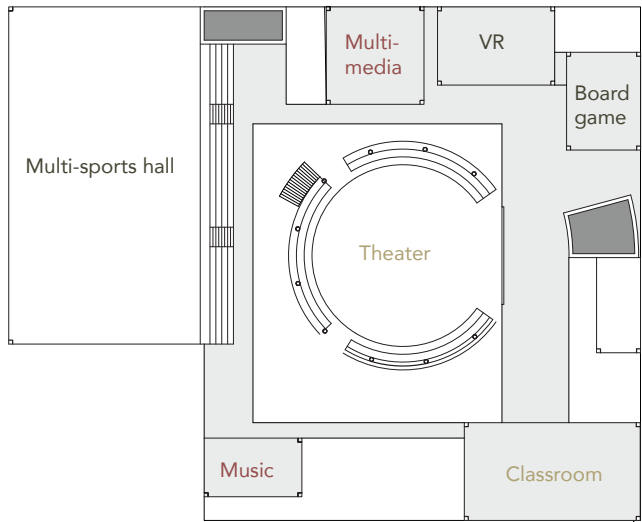
SECTION- A



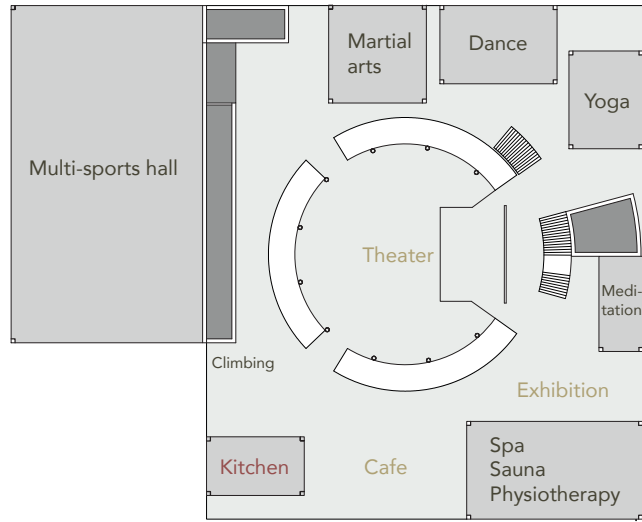
SECTION- B



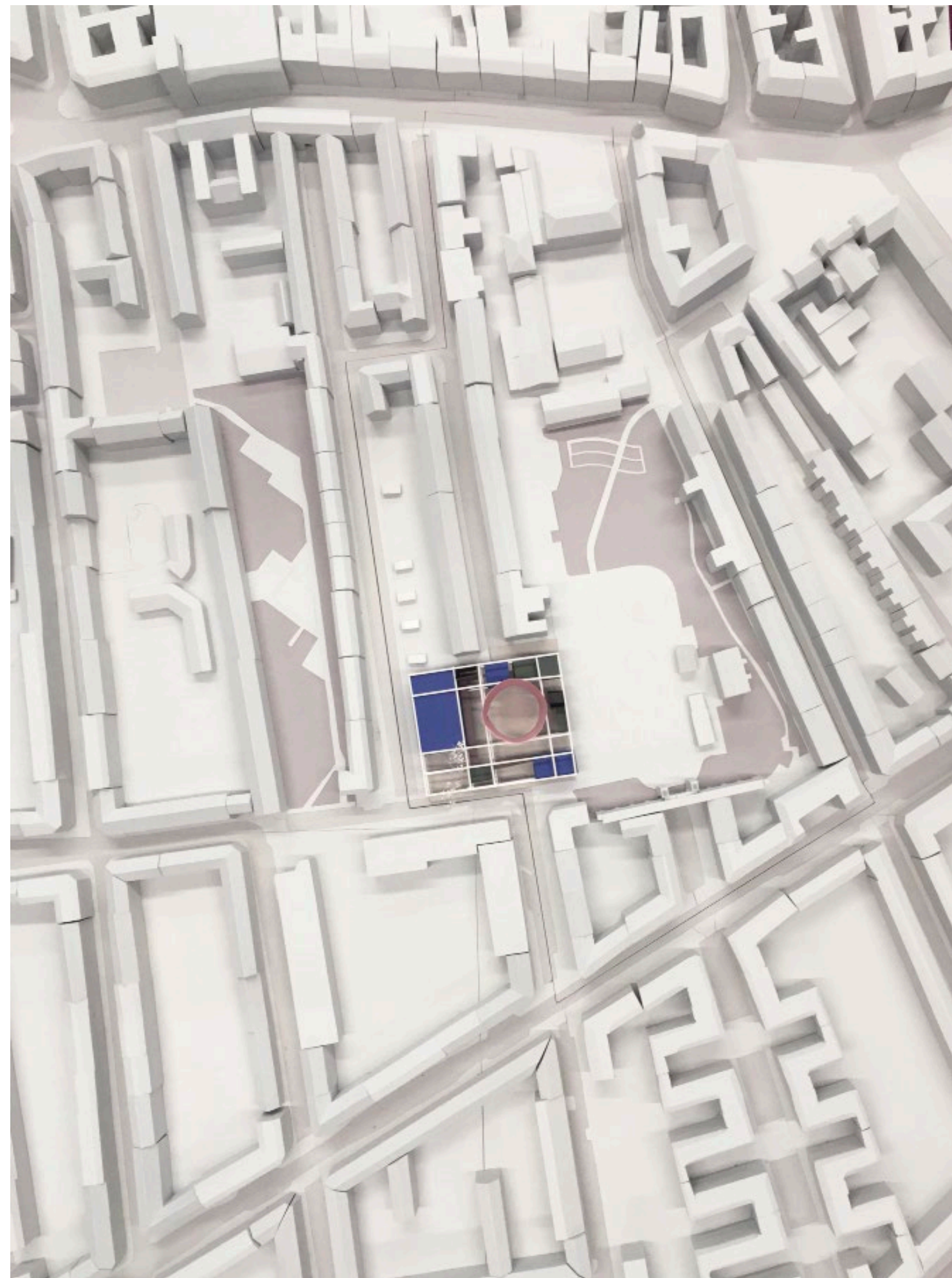
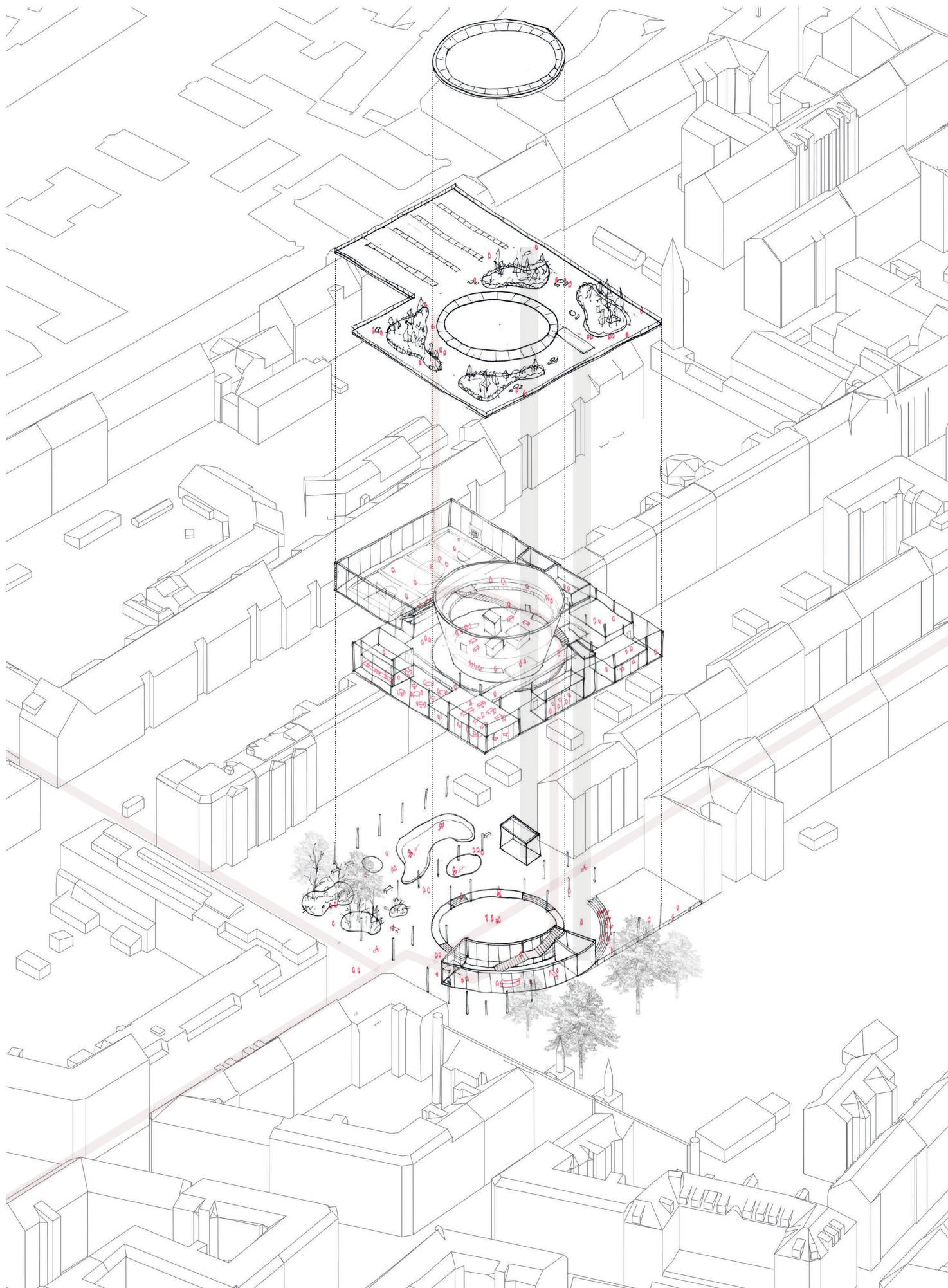
ROOF PLAN

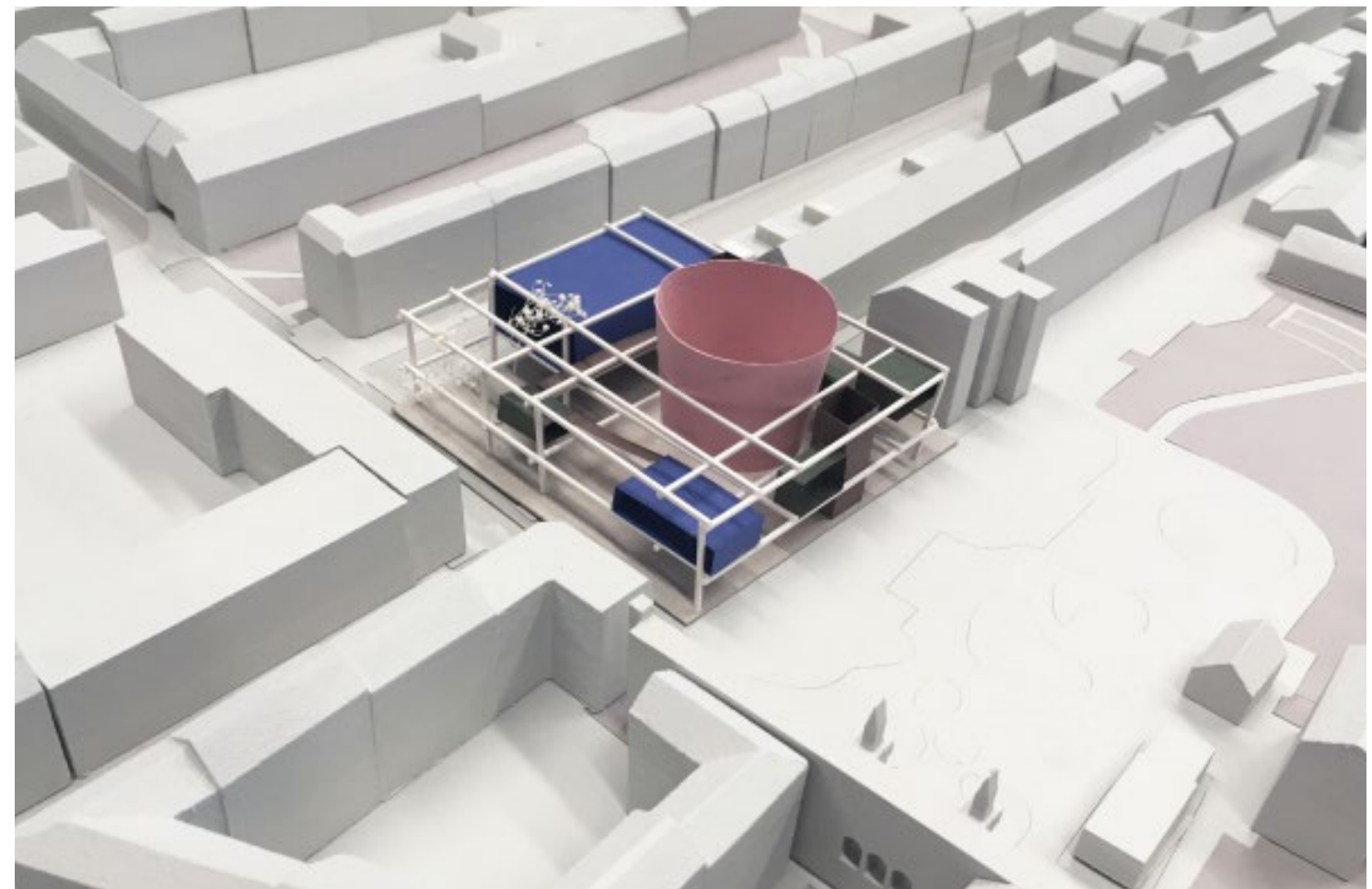
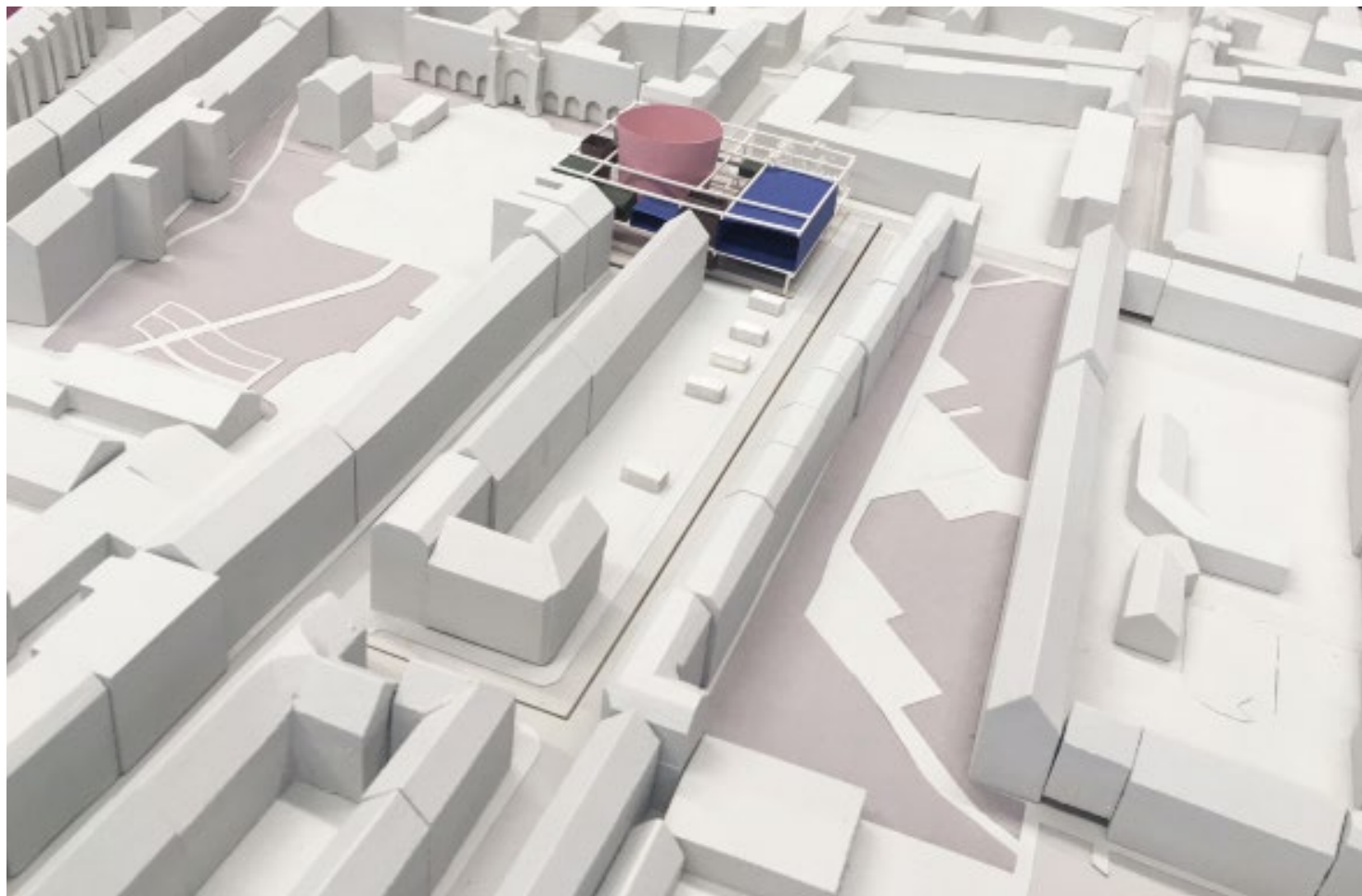
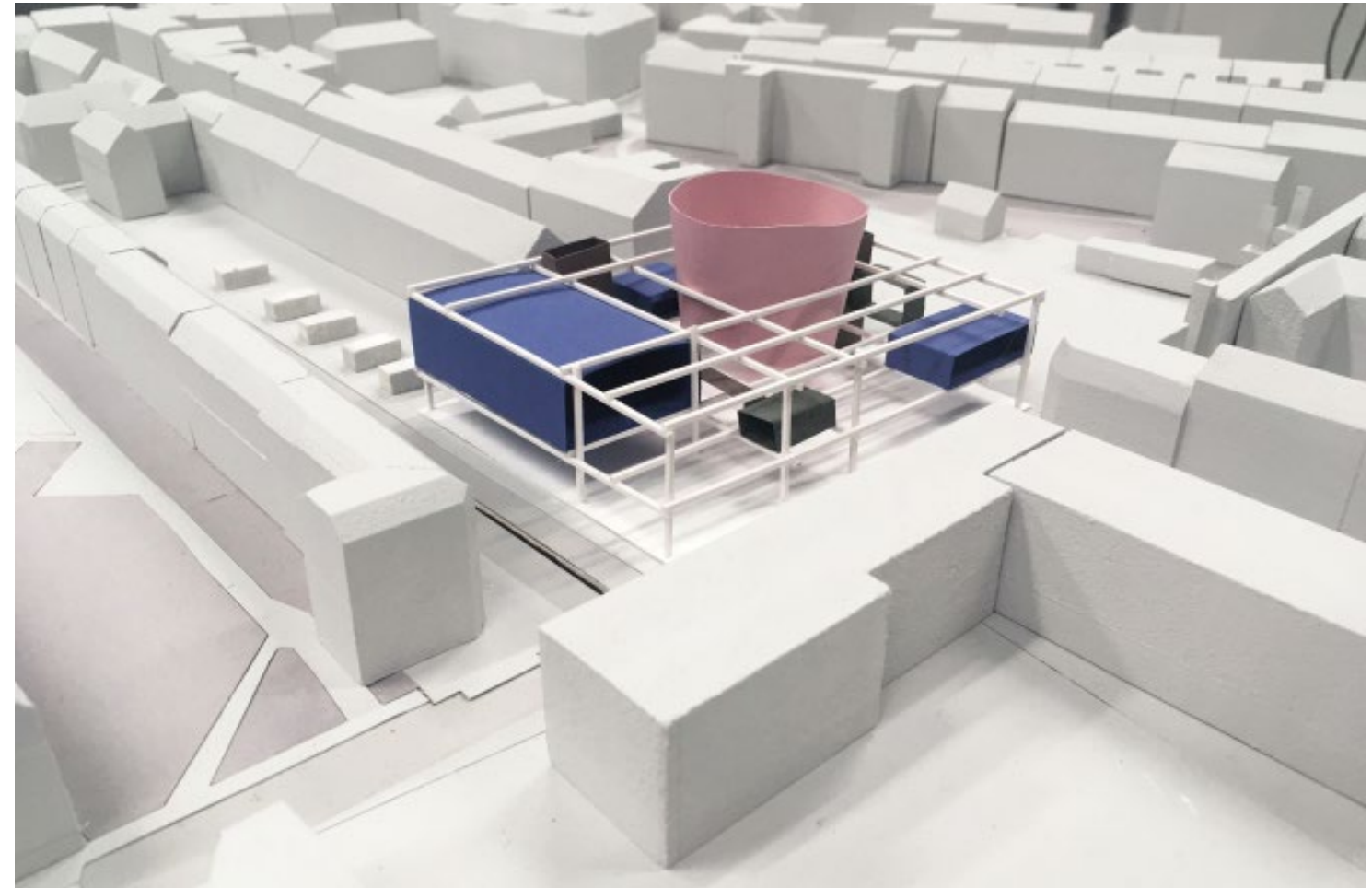
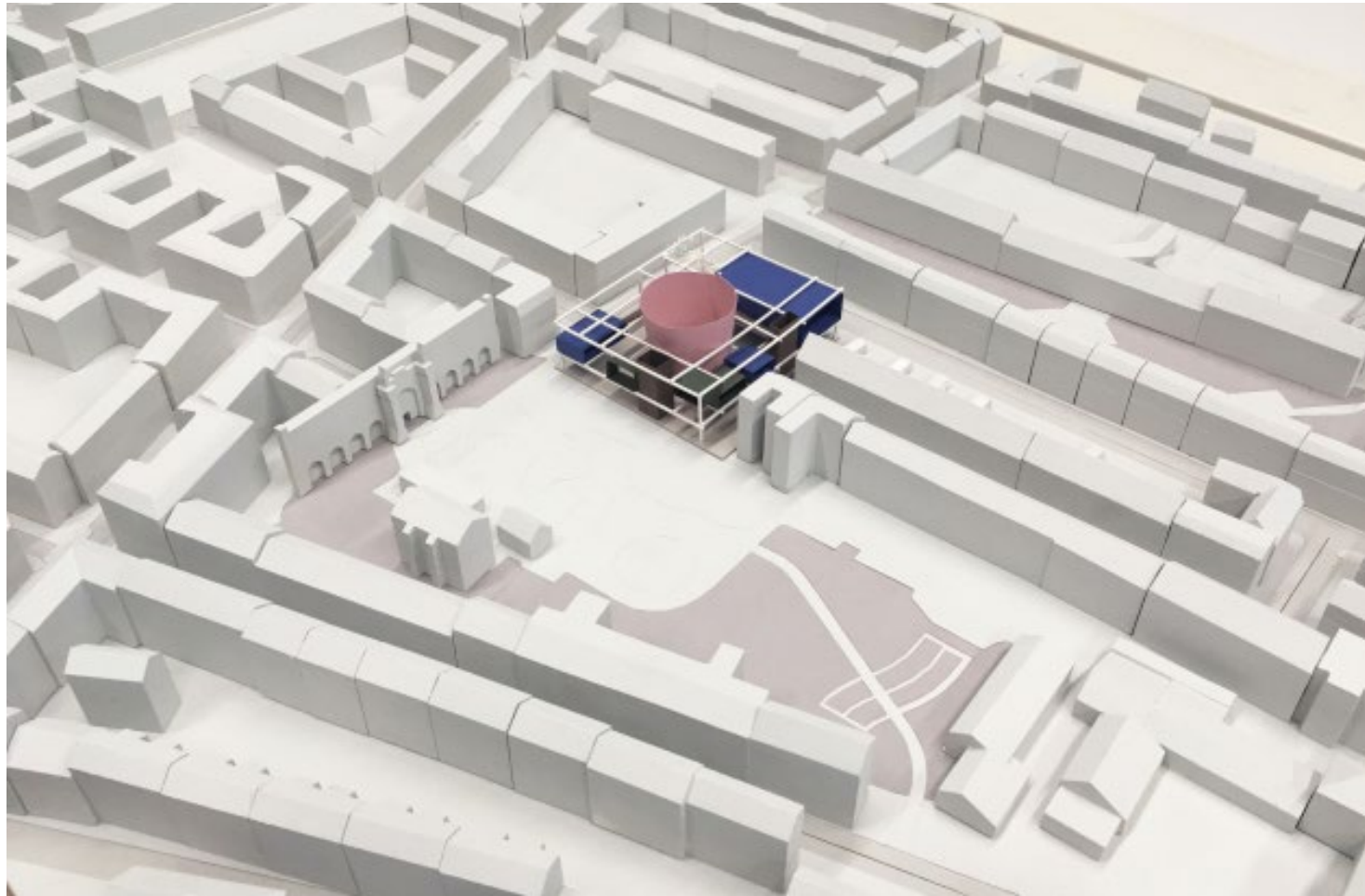


2/F PLAN



1/F PLAN



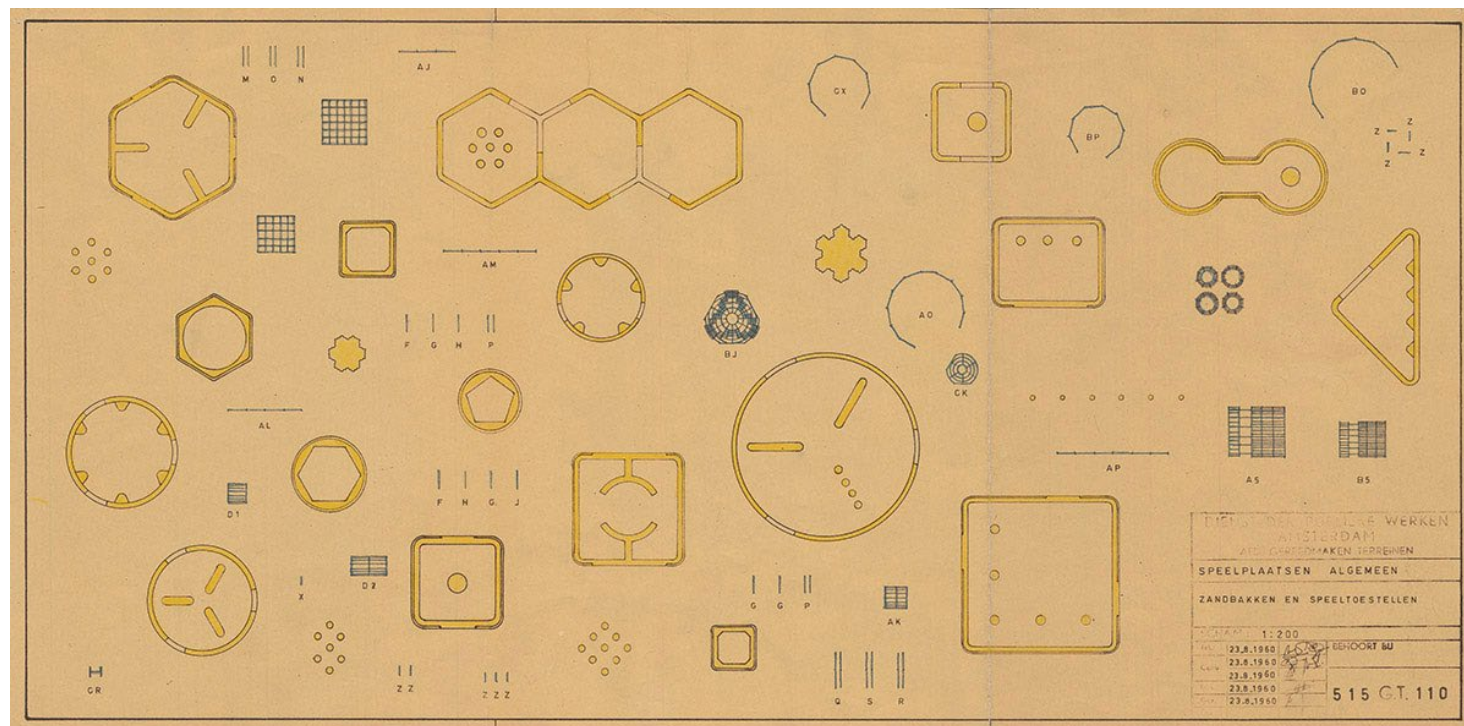
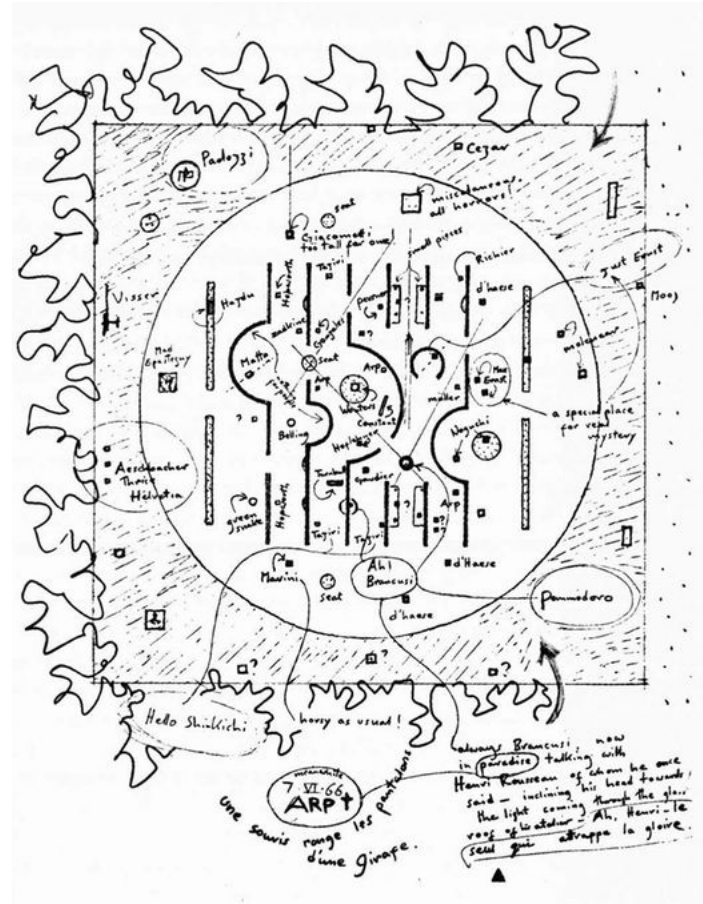


ALDO VAN EYCK'S PLAYGROUND

Throughout his career, Van Eyck looked for a way to connect contemporary design to atemporal shapes derived from the observation of people movement and interaction with space in different epochs. These shapes are abstract and reduced while capable to form terrains able to richly support inhabitants activities and never influencing them too rigidly. Van Eyck recognized and implemented a connection between an archaic system of forms and the research of avant-garde artists into abstraction and archetypes.

The vocabulary of the playgrounds is based on geometric concrete sandpits, which appear like small archipelagos and groups of stepping stones, both massive and anchored in the ground, and lighter structures, arches, domes and frames made of tube steel resonating with archetypes of architecture. The arrangement of the elements in the playgrounds is always non-hierarchical and based on a careful compositional balance which is able to create tension and intensity between the objects while allowing a multiplicity of paths around the forms.

The playgrounds constitute a terrain for imagination which put into tension the universal human activity of play with permanent geometrical structures and physical system of organization found in far-away cultures and in different moments in time.



NEW BABYLON

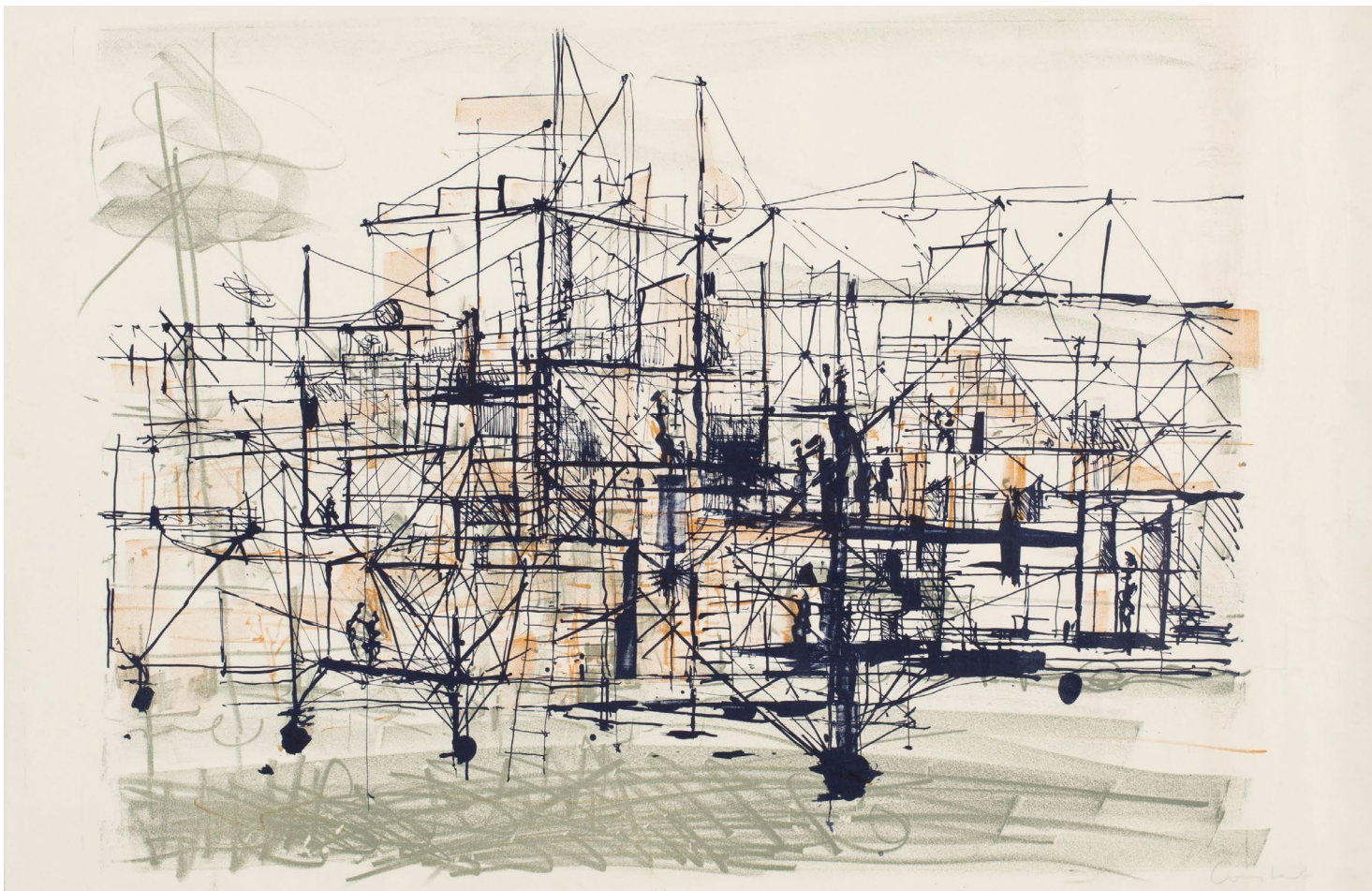
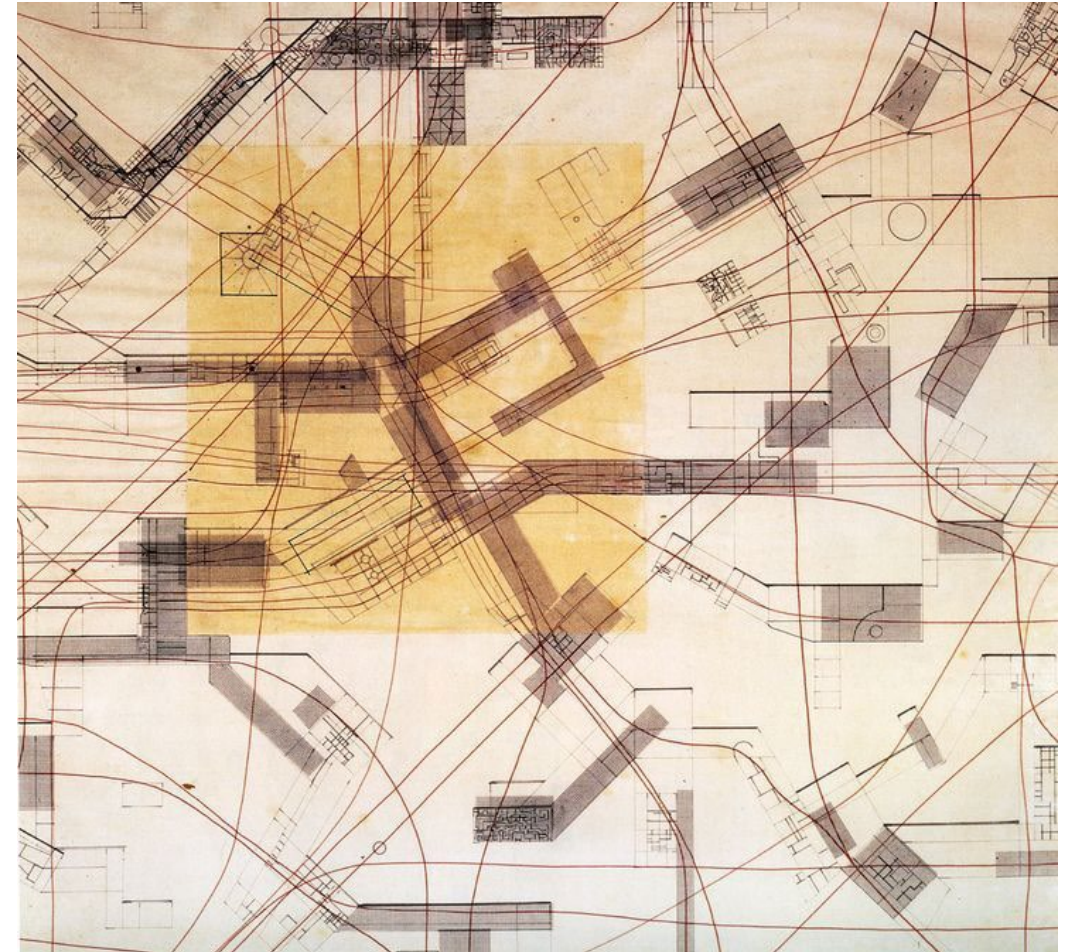
Constant Nieuwenhuys

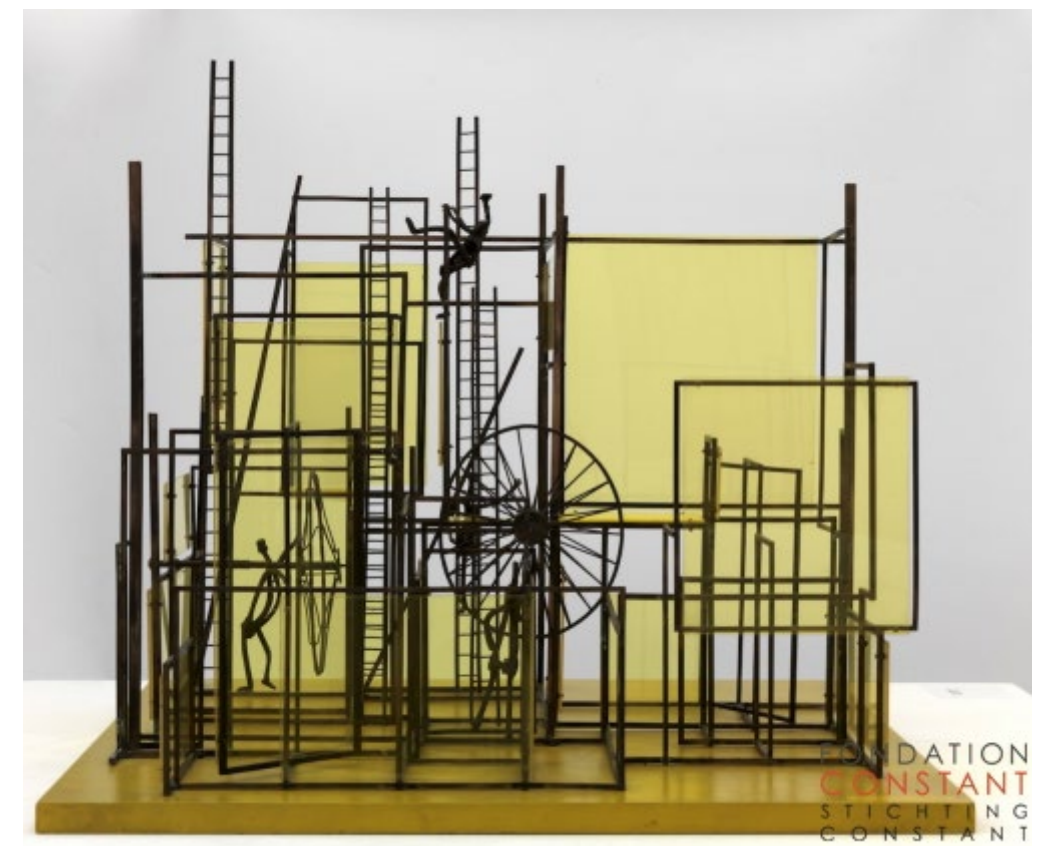
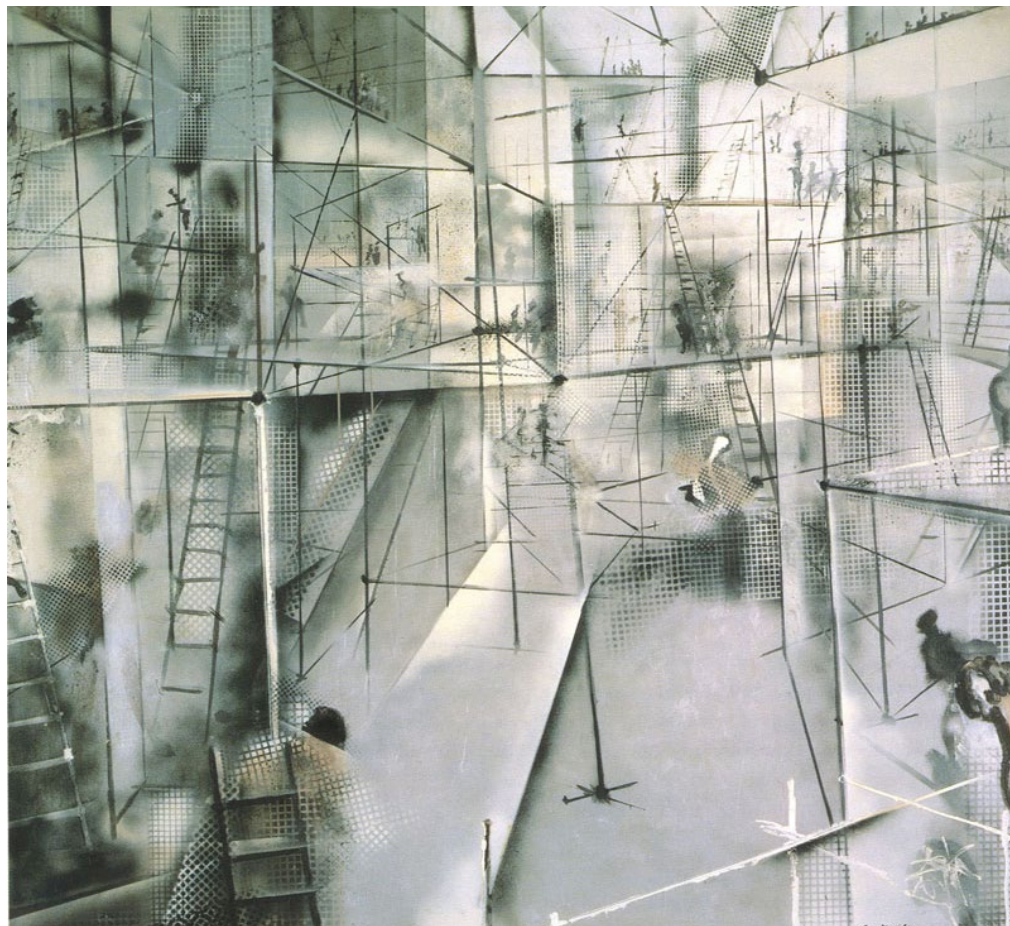
After he leaves the SI Constant Nieuwenhuys continues to work on his New Babylon project. Inspired by the book *Homo Ludens* by Johan Huizinga he designs models for cities with the playful and creative human being at the center. Cities in which man is liberated from manual labor, where man can dedicate himself fully to the development of creative ideas. He focuses on the question which role art plays in intensifying a daily life filled with creative expression? He abandons painting to dedicate himself fully to the New Babylon project. He works on the project from approximately 1959 to the New Babylon exhibition in 1974.

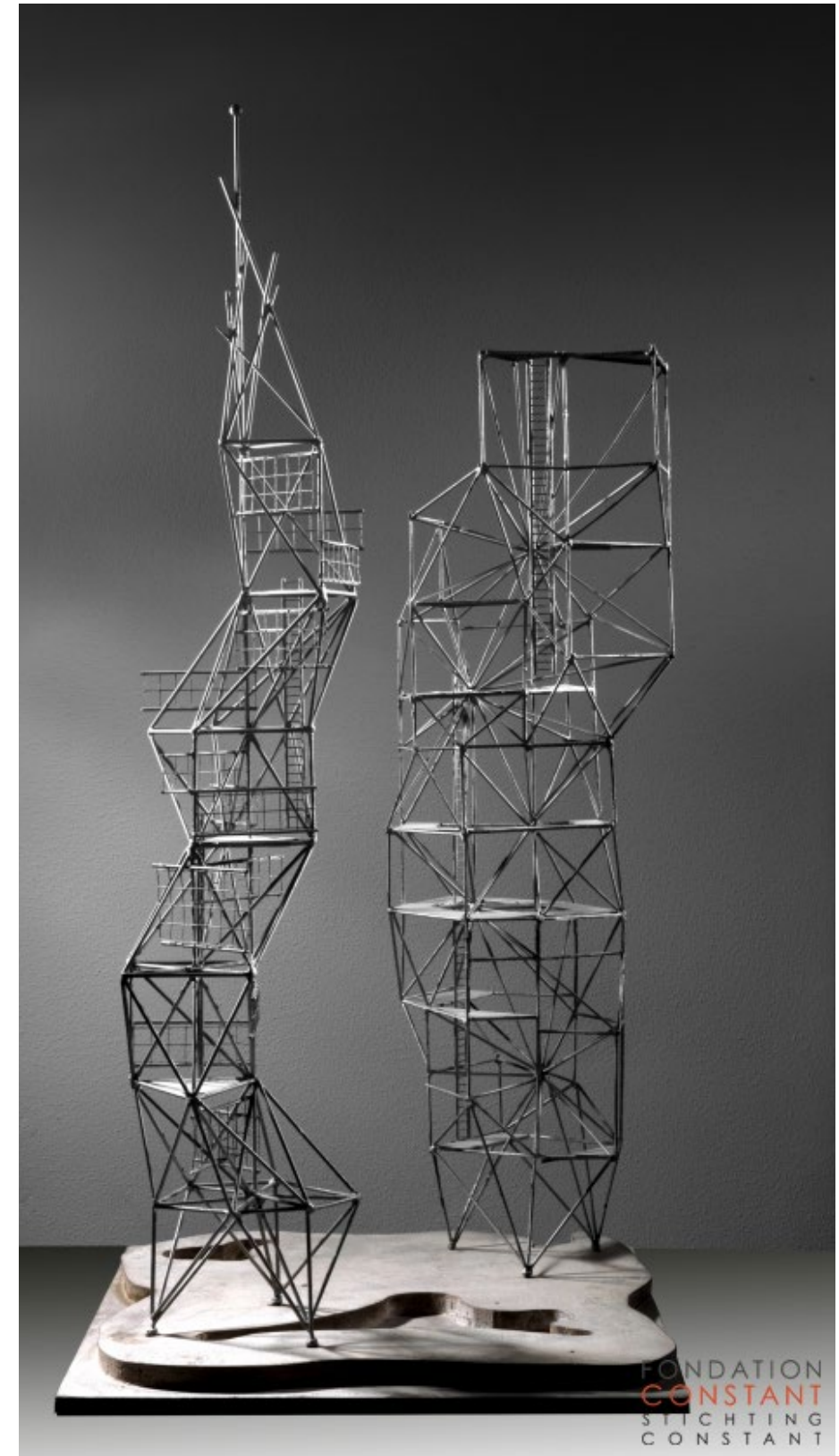
With New Babylon he creates a vision of a worldwide network of connected cities of the future. Land is collectively owned and labor fully automated. The need to work is replaced by a nomadic lifestyle of creative play. New Babylon is inhabited by homo ludens, who liberated from labor, has no need for art because he can be creative in his daily life. In Constant's own words: New Babylon offers only minimal conditions for a behaviour that should remain as free as possible. Every limitation of movement, of the creation of mood and atmosphere should be inhibited. Everything should remain possible, everything should be able to happen. The environment is created by the activities of life not the other way around.

*A world without
borders or
constraints.
People freed
from work and
able to play and
travel at will.*

With the help of assistants Constant produces models of plexiglass, stainless steel, aluminum, iron wire and wood. The models stretch out over geographical maps of the Netherlands, Europe and the world in connected sectors. The project encompasses models, constructions, paintings, drawings, collages, litho's, texts, readings and films. Constant doesn't merely consider New Babylon a design for a futuristic city but as "a design for a new culture". To finance the project he sells his collection of Cobra paintings.



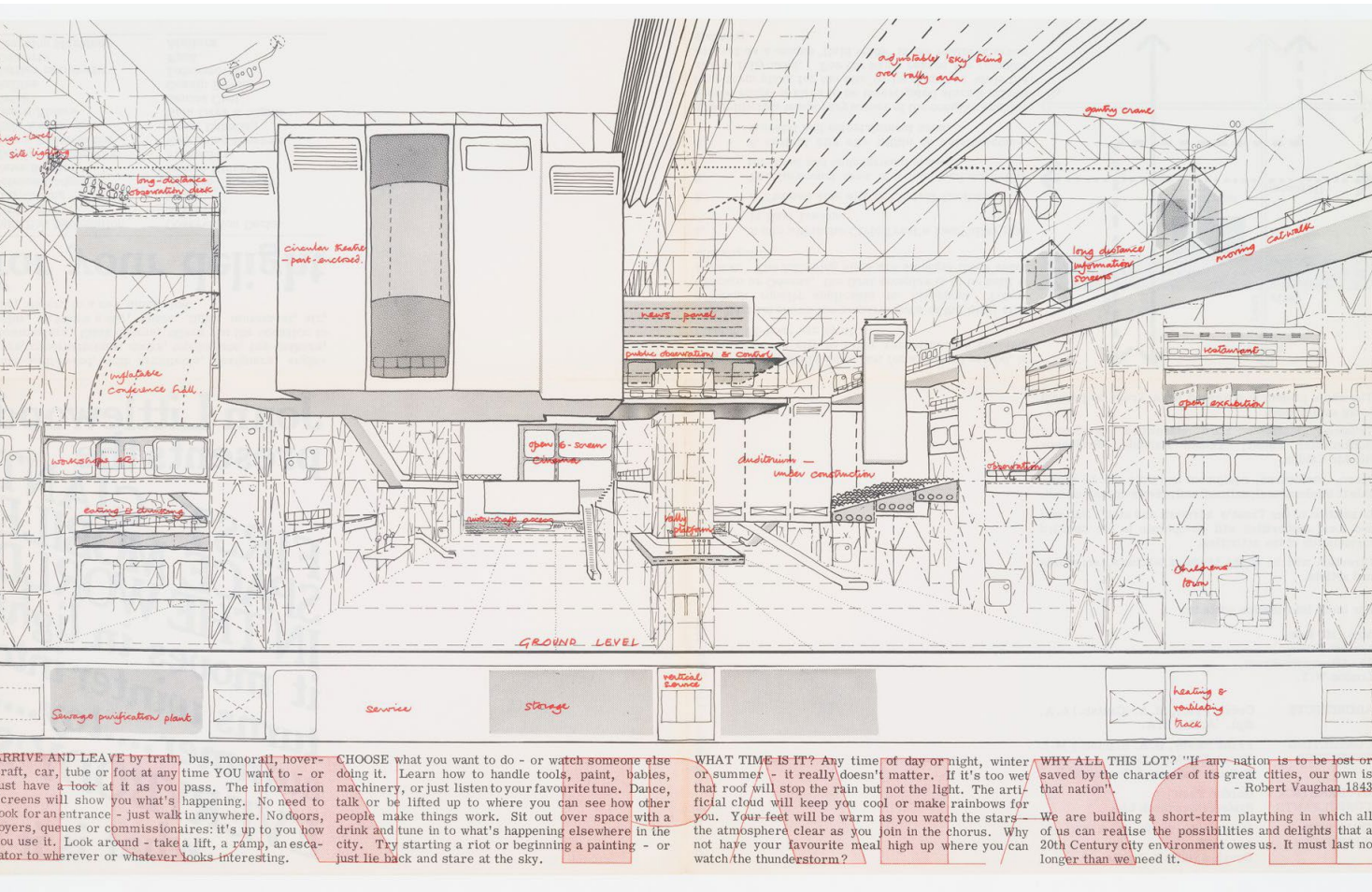
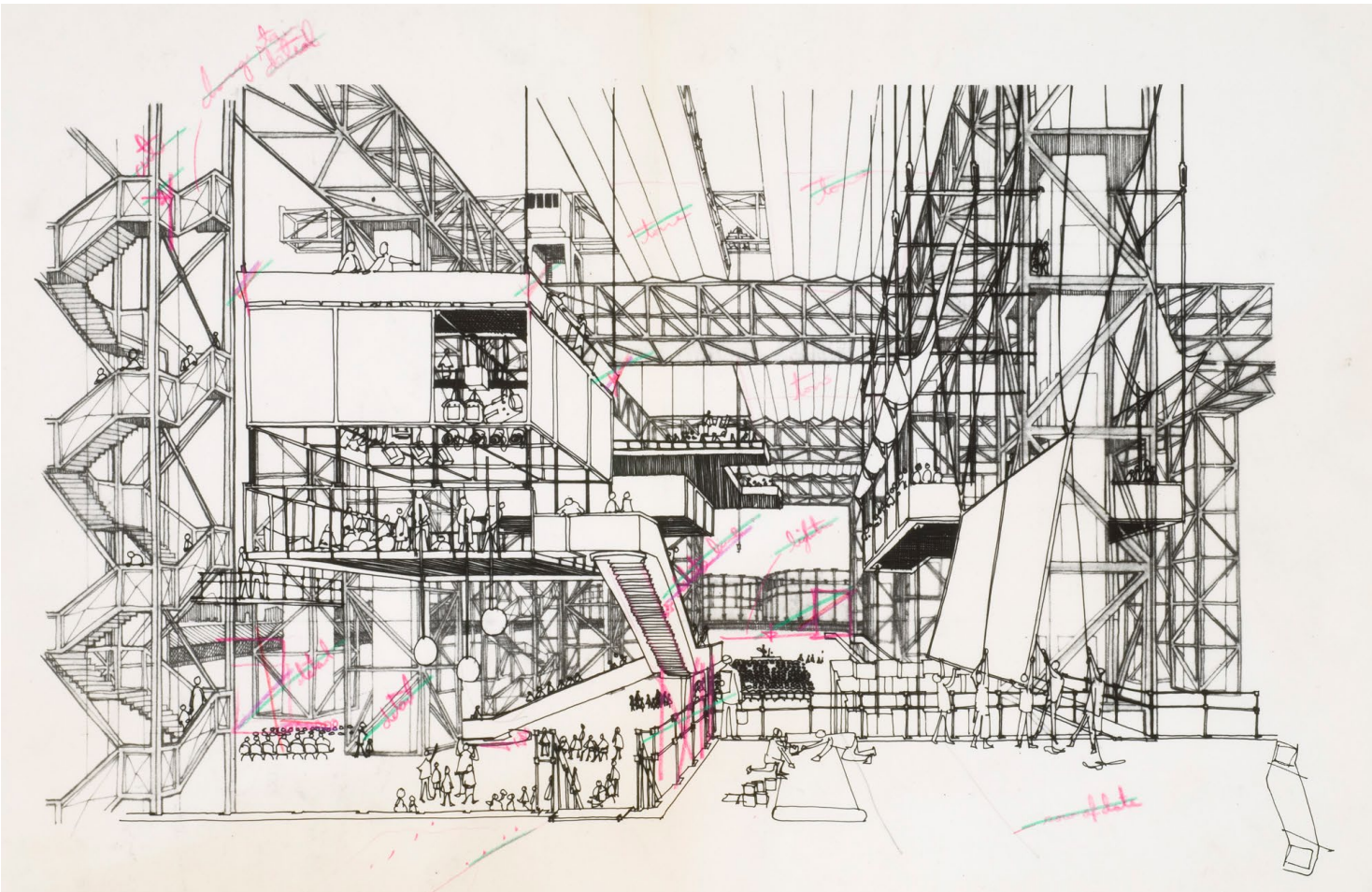
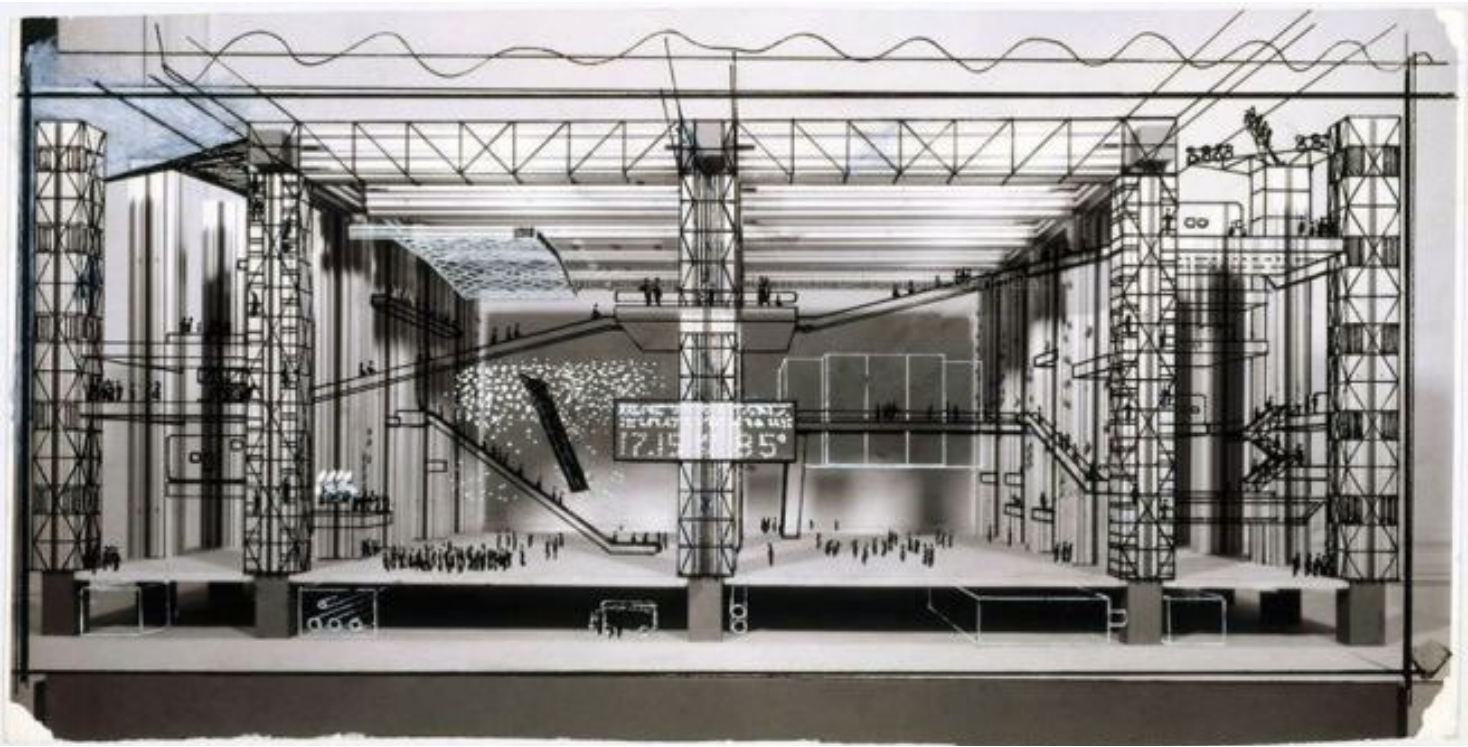




FUN PALACE
Cedric Price

Fun Palaces is an annual, free, nationwide celebration of culture at the heart of community, using arts, science, craft, tech, digital, heritage and sports activities as a catalyst for community engagement. This takes place over the first weekend in October every year. Fun Palaces are community events, created by and for local people. They are held in a variety of locations, ranging from libraries, shopping centres, schools, parks, village squares, community halls, swimming pools, etc. The original (never built) Fun Palace was the brainchild of celebrated theatre director Joan Littlewood and architect Cedric Price. Their never-realised vision was re-interpreted for the 21st century with the Fun Palaces campaign for cultural democracy, with community-led events in many locations.

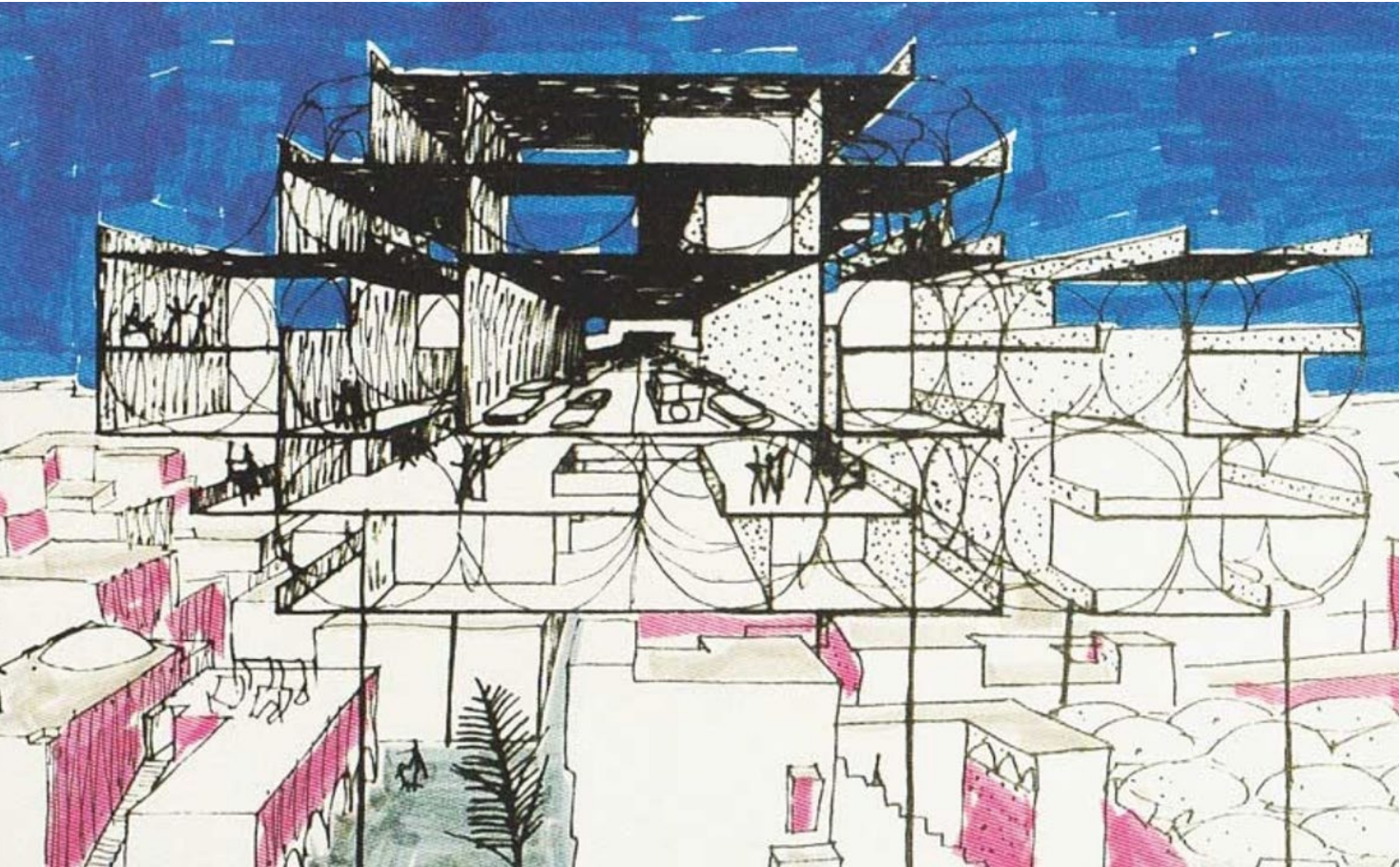
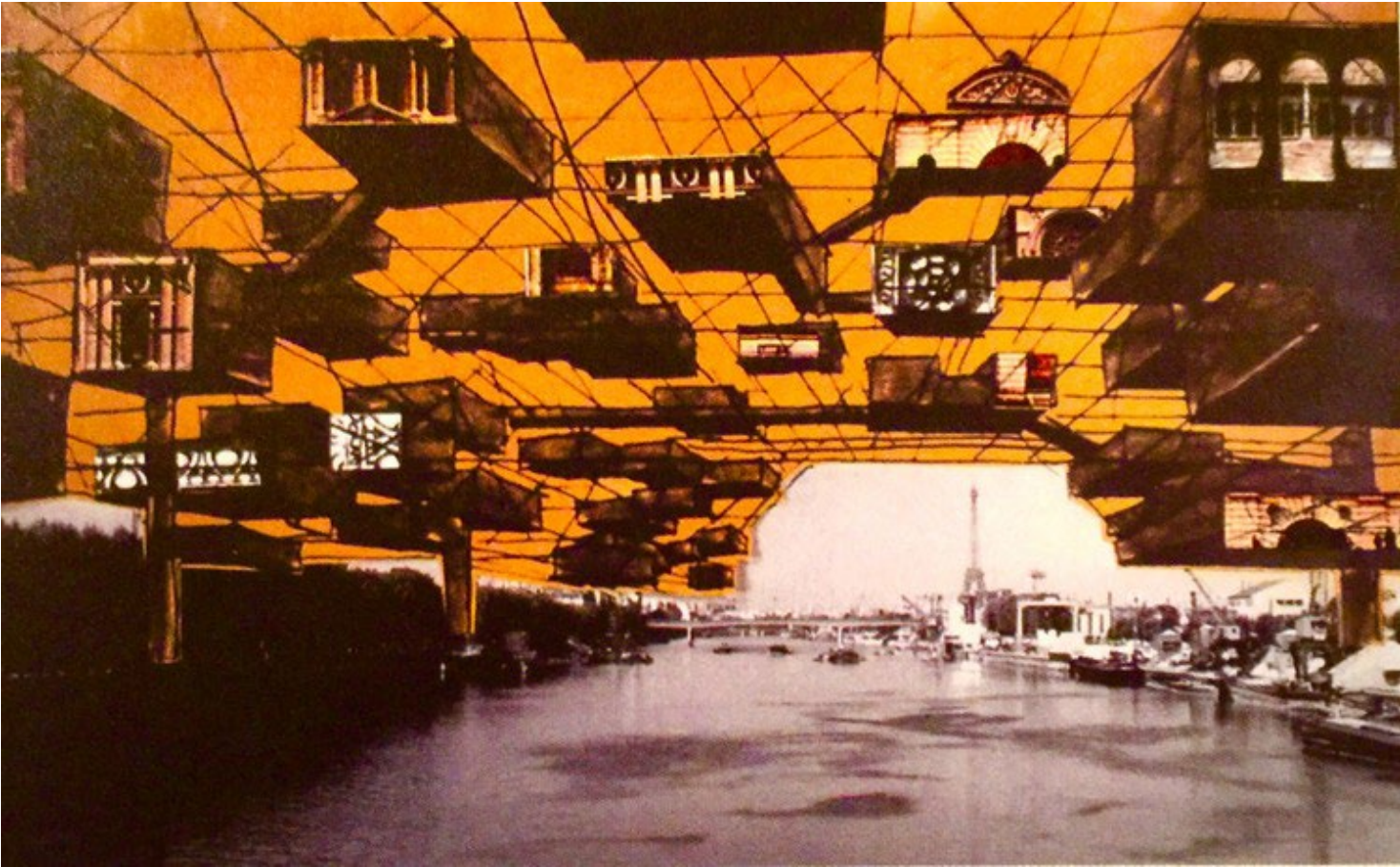
We believe in the genius in everyone, in everyone an artist and everyone a scientist, and that creativity in community can change the world for the better. We believe we can do this together, locally, with radical fun – and that anyone, anywhere, can make a Fun Palace.



SPATIAL CITY
Yona Friedman

The Spatial City is a unit that can be repeated ad infinitum. All of the structural elements connected to the individual user, such as walls, floor slabs, and partitions, are radically mobile, and the architecture deliberately avoids committing itself to any particular style or pattern of use. Versatile and free as Friedman’s composition is, however, it is contained by a superior order, on which it relies: the wide grid of pillars and slabs on which it stands. Friedman called this grid the “spatial infrastructure,” and designed it for collective use. The user’s determination was to play as important a role in it as the architect’s: “Mobile architecture looks for techniques which don’t impose a preconceived plan... It is the user who makes the project with a potential ‘designer’s participation.’”

The concept of mobile architecture was Friedman’s contribution to the tenth International Congress of Modern Architecture (CIAM) in Dubrovnik in 1956. It was during this session of the congress that modernism was famously called into question as an outdated, static scheme inappropriate for new global realities. Friedman’s concept highlighted the relationship between social dynamics and architecture in the proto-postmodern world, and suggested to architects how they could include that relationship in their thinking about the future.

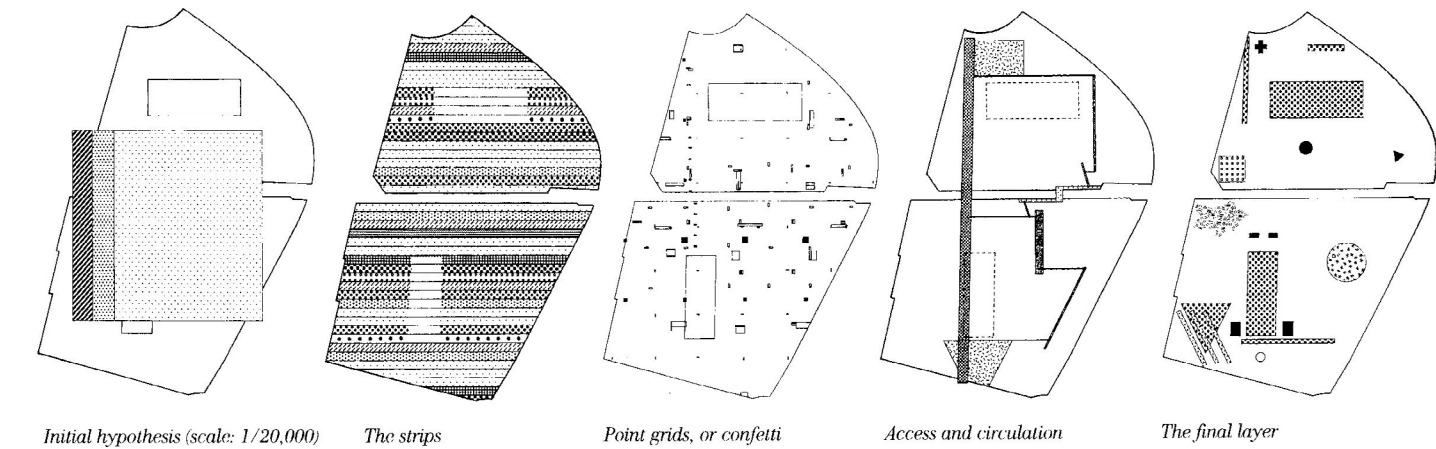
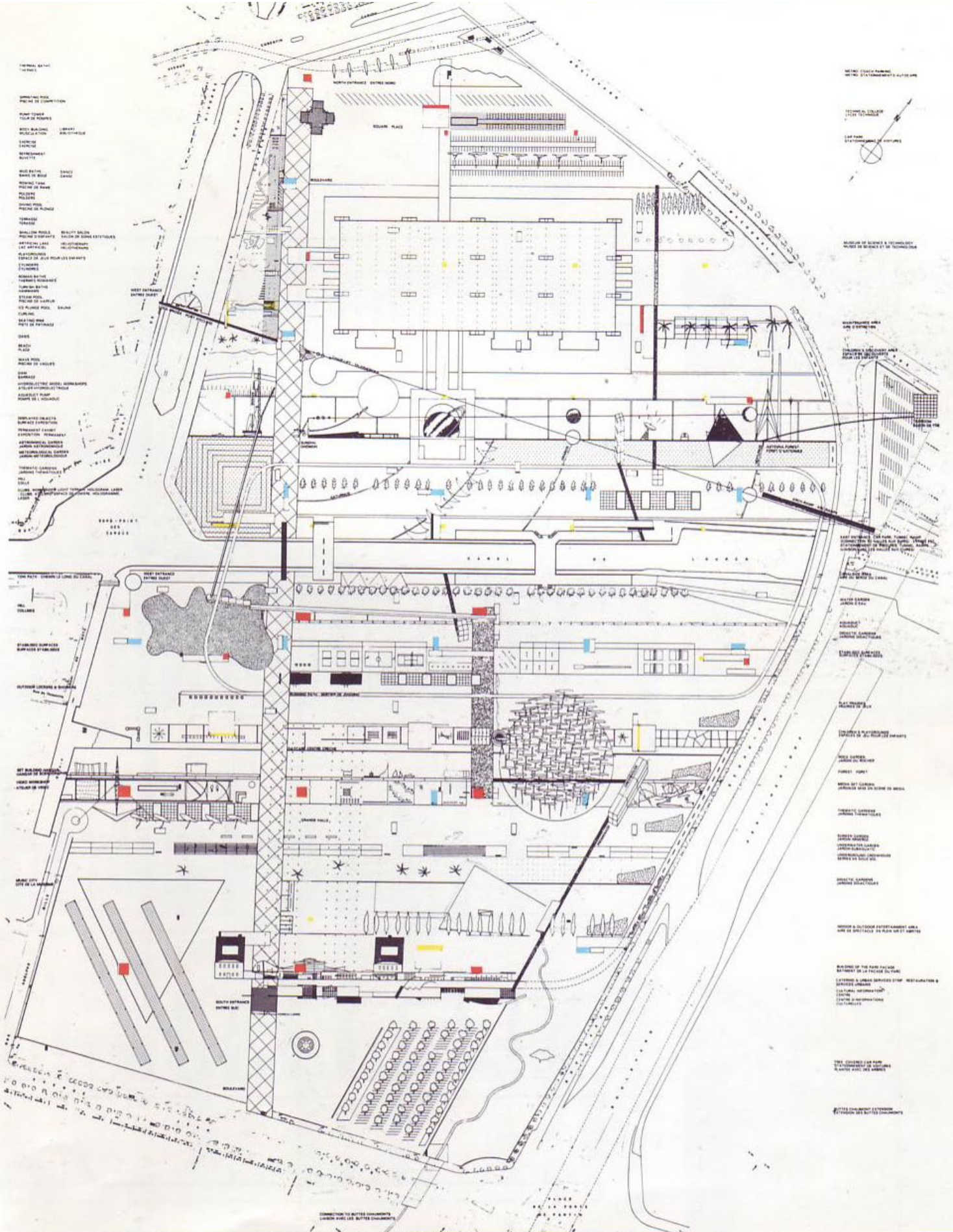
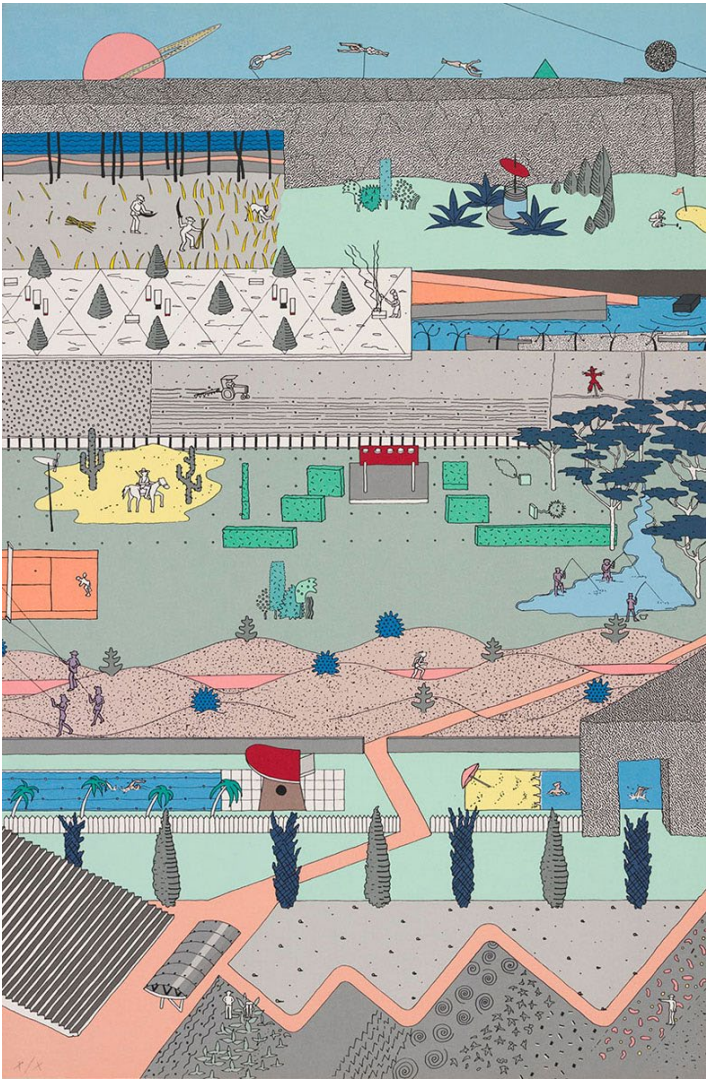


PARC DE LA VILLETTE OMA, 1982

During the life of the park, the programme will undergo constant change and adjustment. The more the park woks, the more it will be in a perpetual state of revision. Its ‘design’ should therefore be the proposal of a **method that combines architectural specificity with programmatic indeterminacy**. In other words, we see this schem not simply as a design but mostly as a tactical proposal to derive maximum benefit from the implantation on the site of a number of activities...The underlying concept allows any shift, modification, replacement, or substitution to occur without damaging the initial hypothesis.

- Rem Koolhaas, “Congestion without Matter: Parc de la Villette, Paris, France, 1982” in *S,M,L,XL*.

- The idea comprises 5 steps:
1. The major programmatic components are distributed in horizontal bands across the site, creating a continuous atmosphere in its length and perpendicular, rapid change in experience.
 2. Some facilities - kiosks, playgrounds, barbecue spots are distributed mathematically according to different point grids.
 3. The addition of a “round forest” as architectural elements.
 4. Connections
 5. Superimpositions



Initial hypothesis (scale: 1/20,000) The strips Point grids, or confetti Access and circulation The final layer

JUSSIEU LIBRARY
OMA, 1992 (unbuilt)

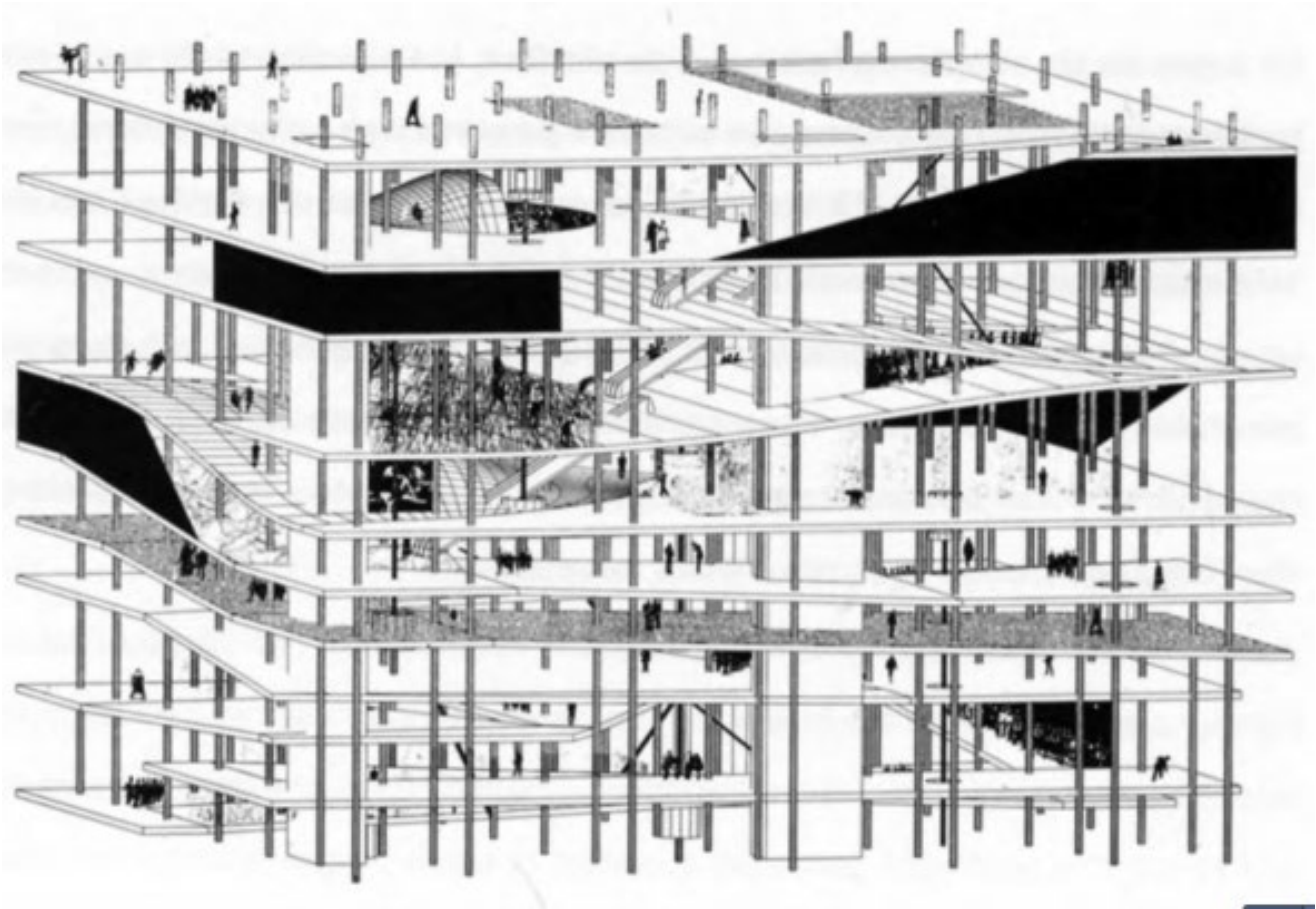
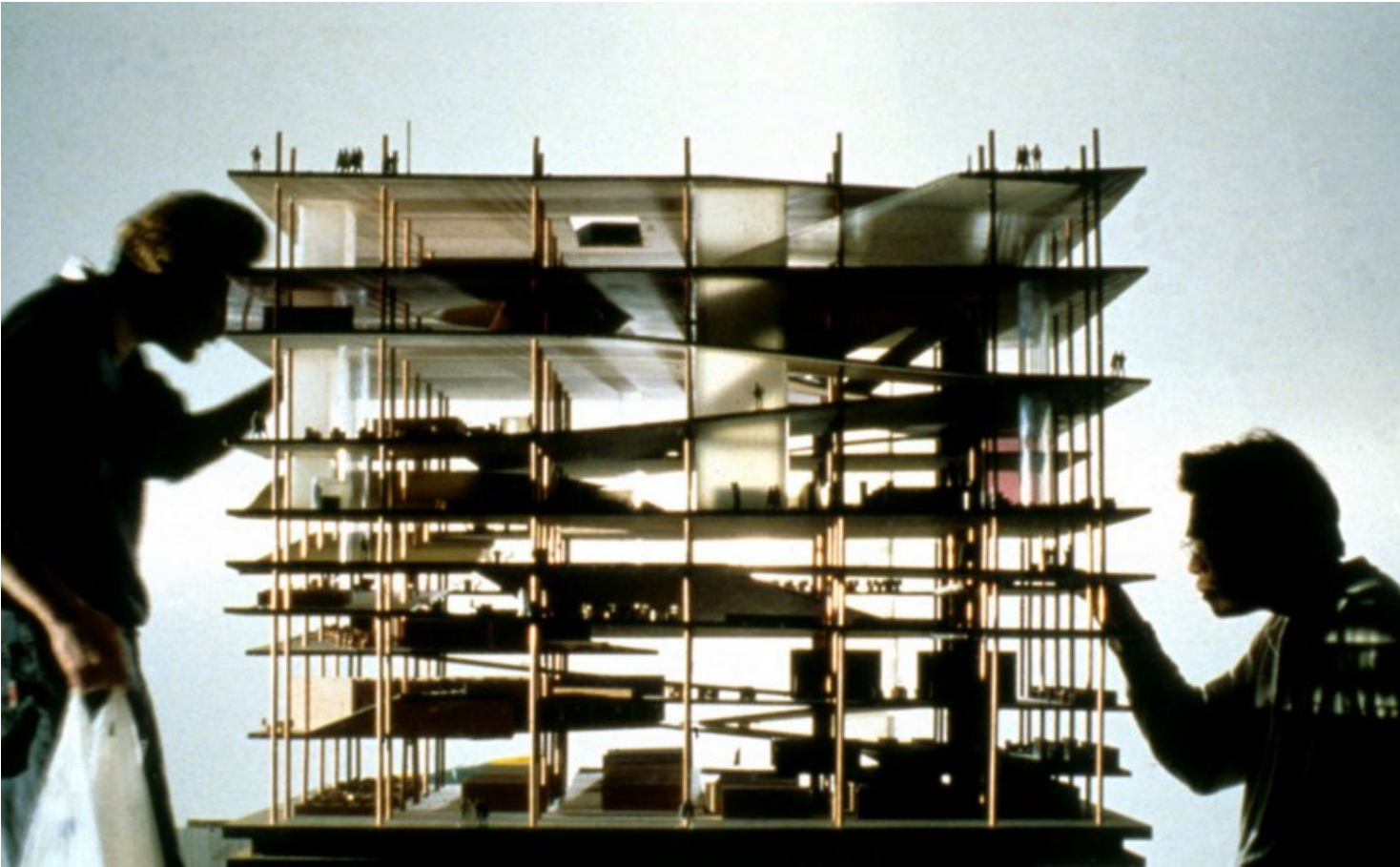
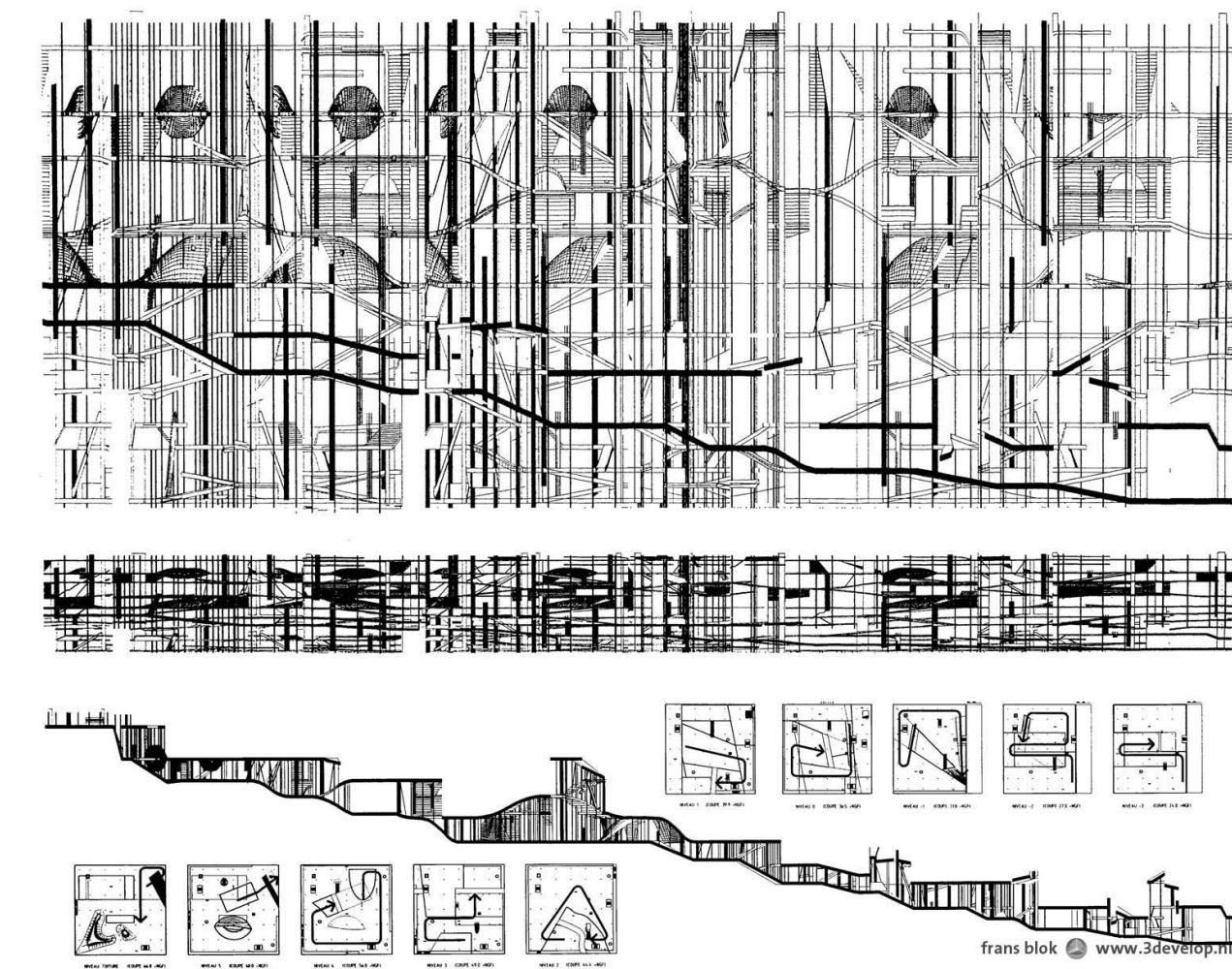
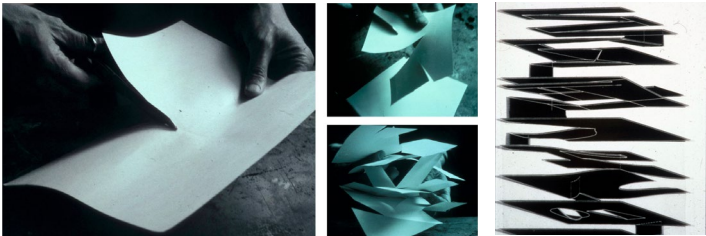
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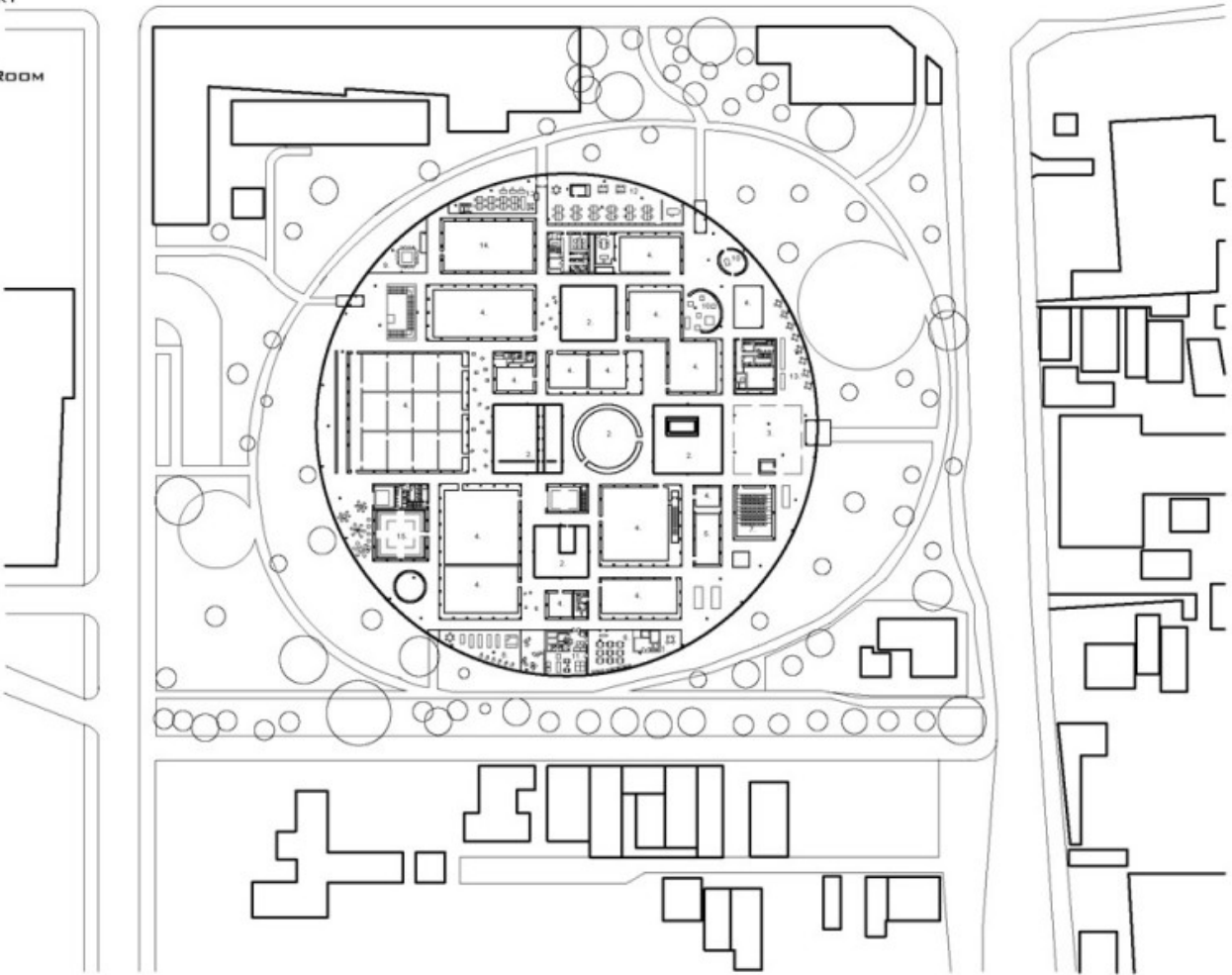
THE 21ST CENTURY MUSEUM
SANAA, 1999-2004

The 21st Century Museum of Contemporary Art is located in the center of Kanazawa, one of the nation's historical centers, on the north coast of Japan. The building contains community gathering spaces, a library, lecture hall, children's workshop, as well as museum spaces.

The variously proportioned rooms placed inside the circular building – the model based on a chain of islands or an urban space – signify the centers that generate values originating in the maldistribution of decentrism and polycentrism, and in remote regions. A walk inside along the curved glass of the exterior facade smoothly unfolds a 360 degrees panorama of the site. Four fully glazed internal courtyards, each unique in its character, provide ample daylight to the center and a fluent border between public zone and museum zone. The exhibition area is fragmented into numerous galleries that are all embedded in the circulation space; an approach that offers flexibility to the museum routing and, at the same time, specificity to the gallery spaces.



21ST CENTURY MUSEUM
OF CONTEMPORARY ART
MAIN FLOOR
LEGEND
1. BREAST FEEDING ROOM
2. COURTYARD
3. FOYER
4. GALLERY
5. KAPOOR ROOM
6. KID'S STUDIO
7. LECTURE HALL
8. LIBRARY
9. MEETING ROOM
10. MUSEUM SHOP
11. NURSERY
12. OFFICE
13. RESTAURANT
14. THEATER
15. TURRELL ROOM



MARINILLA EDUCATIONAL PARK

El Equipo de Mazzanti

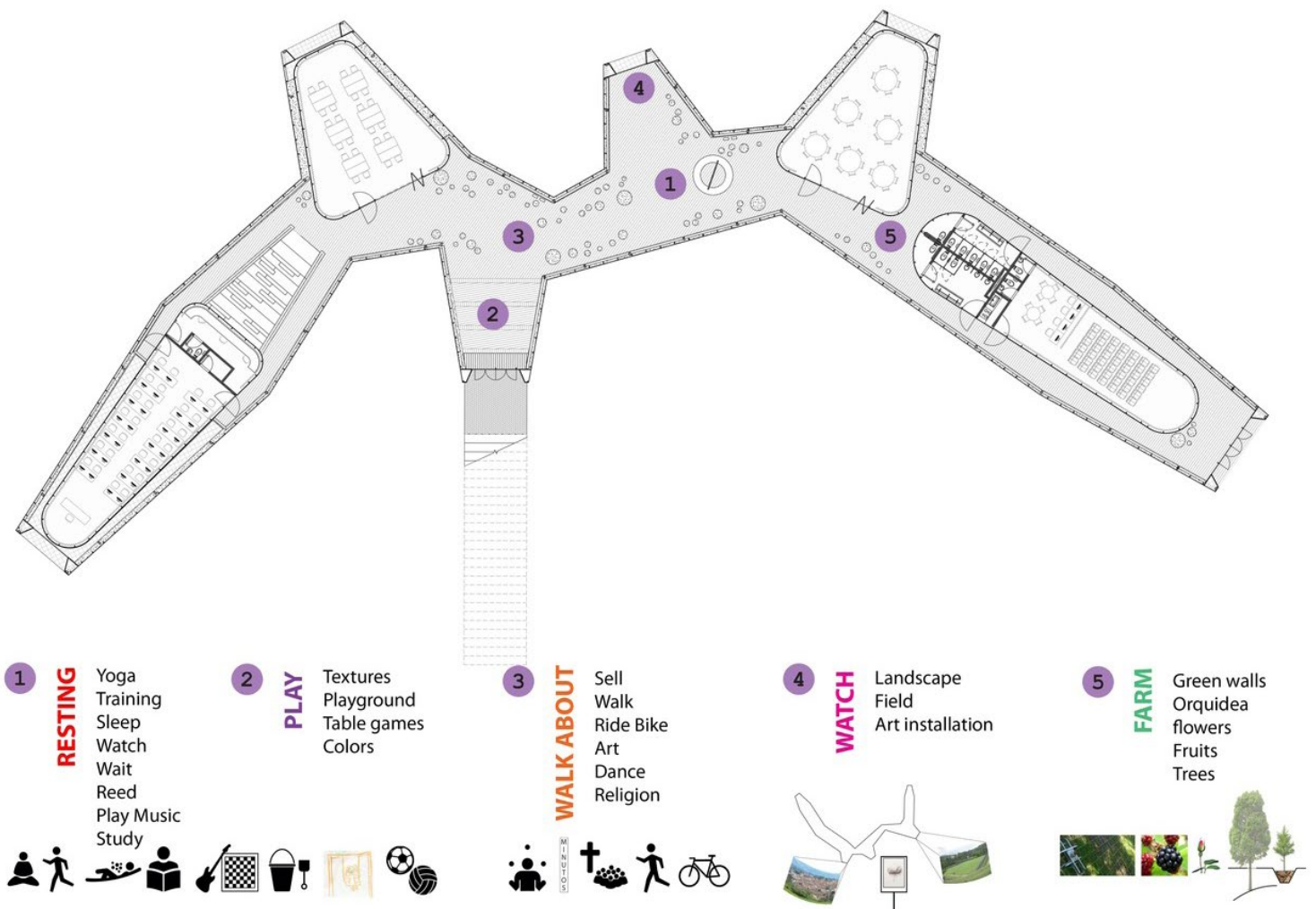
As well as the general form the materiality of the Marinilla Educational Park is perhaps what at first sight stands out the most because of the aluminum mesh that covers up all the building. The facades and the inferior and superior planes are solved with prefabricated panels of expanded mesh that are attached to the main structure of the building, making the assembly process quite simple. On the other hand, because its configuration is half-opened, the mesh works like the mechanism of permeable enclosure that - acting as the element that protects from the outside - it allows the building to have natural ventilation. In addition, due to the situation of the building, the mesh makes possible for users to take greater advantage of the view and to have contact with the nature that surrounds it and the activities of the outside.

A wood plastic composite (WPC) decking was used for the interior floor to make the place warmer and cozy without breaking with the tonality of the set. On the contrary, with the use of the red covering of the outer faces of the classrooms it was longed to emphasize these points within the great space that is the building; to emphasize the activity nodes.



The structure is another essential aspect of the formal project, because although it is conceived like an exposed skeleton, it manages to be present without being invasive; not only a question of chromatic uniformity but of harmony between the skin and its frame.

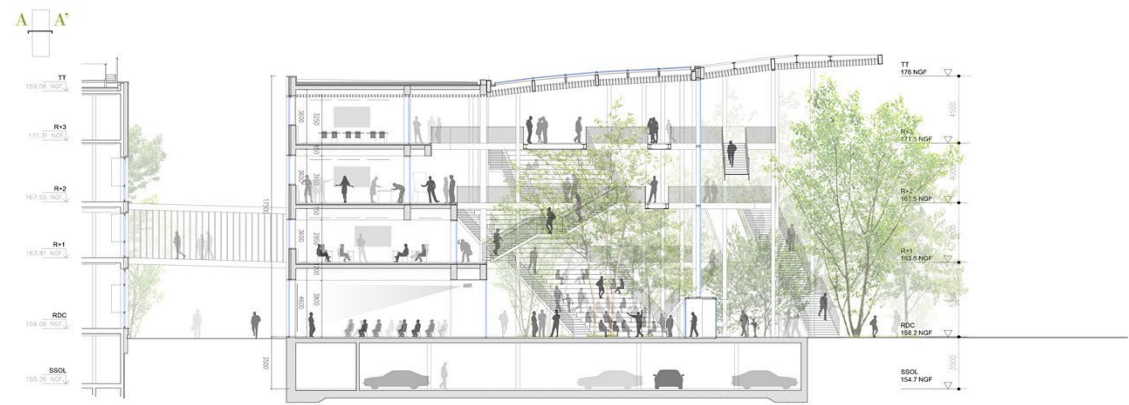
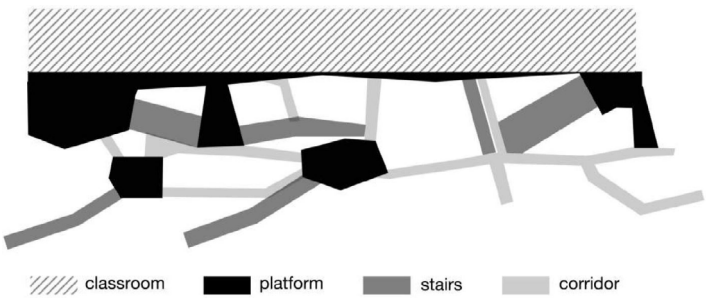
Finally it is worth to mention the “vegetation” component, for which a system of creepers is intended to raise along the perimeter of the building, adding vitality and color to the place as they grow. Besides the idea is that this it generates appropriation on the part of the users, who will be able to take care of and to interact with the flowers.



**NEW LEARNING CENTRE OF THE ECOLE
POLYTECHNIQUE**
Sou Fujimoto, 2015

The 10,000-square-meter building will provide for 150 staff and welcome 2,000 students with programs ranging from lecture halls and classroom, to “distance learning rooms,” collaborative project areas, a cafeteria and relaxation spaces.

“Opening up to the linear park in front, the Learning Center is invaded by nature,” describes the team, commenting on the design’s intention to be an extension of the landscape. “Inside, a wide atrium is inhabited by the light vegetation and a series of walkways and staircases creating numerous informal spaces for teachers, students and visitors allowing new places to meet or work. These platforms, the ‘spontaneous amphitheaters’ and the classrooms are united under one roof providing promiscuity and privacy in an intimate relationship with nature.” People won’t pass each other in corridors anymore, but meet in vivid places, in a unique space bathed in soft light, with surprising and changing views. The large transparent facade of the Learning Center opens to the West on the ‘Green,’ a vast public space covered by lawns and partly wooded.

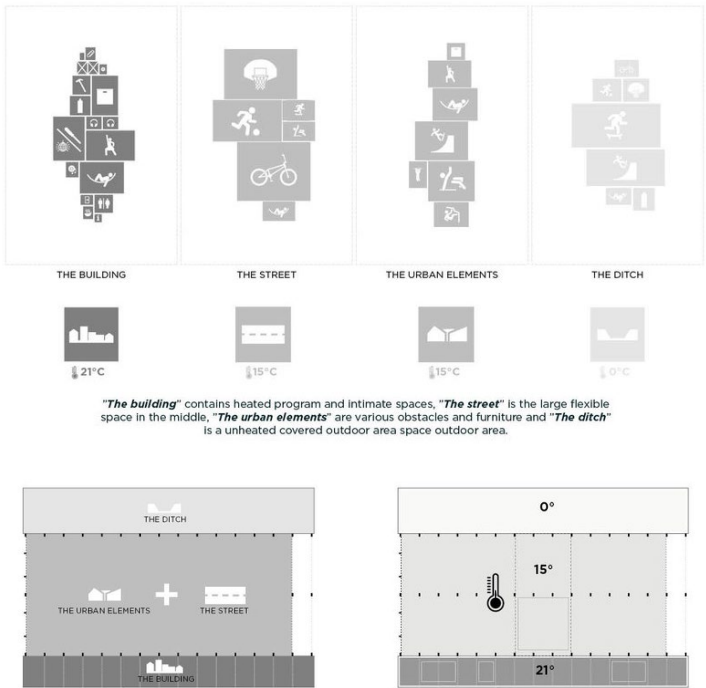


GAME STREETMEKKA VIBORG EFFEKT, 2017-2018

It is a pioneering project on how to bring new life to one of the many vacant industrial buildings by transforming it into a new vibrant culture house for street sports, street culture and street art.The existing building originally served as a windmill factory. Typically constructed from prefabricated concrete panels or corrugated steel, industrial leftovers are perceived as having little to none historic, cultural and architectural value.

We propose to open up the opaque and introverted industrial building, and transform the impressive central factory space to a new kind of interior space: A covered streetscape opening up to the outside. Second, the existing building, (with its uninviting and worn out prefabricated concrete panel facade) is wrapped in new performative translucent skin, giving the appearance of a light and welcoming building. And last, the building is filled with new functions for both trial, parkour, basket, skate, bouldering, dance and also customized workshop areas for DJing and music production, an animation studio, maker lab and artist studios. Social spaces and designated hangout zones are strategically interweaved into the functional program and distributed throughout the building.

The surrounding landscape is filled with various street sports and street cultural functions placed within a recreational string of greenery connecting to the main city-pathway of the area.



LOCHAL Braaksma & Roos, CIVIC Architects, 2014-2018

Lochal is the new public city forum of Tilburg. The building houses the public library, co-working spaces, conference rooms, spaces for arts education and a large city hall for public events, exhibitions and debates. Lochal is located in a former locomotive shed in the railway zone next to Central Station; an area that is gradually being transformed into a new heart of the city.

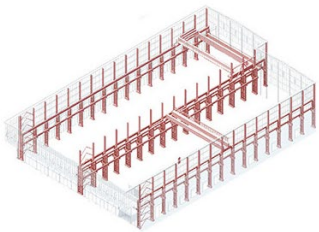
Large open spaces and floor fields are in line with the heritage value of the monumental hall and the idea of an ‘open’ library. Six mobile and space-high canvases make it possible to insulate large and small workspaces or to transform the stairs into a theater or lecture space.

The open library section can be divided into different zones. Upon entering, the visitor enters a large central hall where he will get a unique impression of the former lochal. This courtyard is followed by a series of stairs and terraces that provide spaces for reading, working, discussing and performing. These terraces provide access to the co-working floor, which is surrounded by meeting rooms. On the last floor, wide corridors offer space for more intimate workplaces. These corridors open onto a public winter garden with a view over the city.

◆ Locomotive hall

The hall of Nedraim's historic Locomotive Hall forms the basis for the architecture. All traces of use have been retained. They set the key-note for the new architecture.

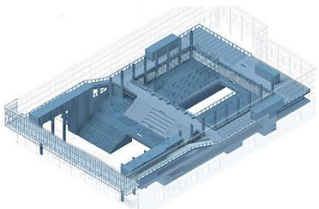
- Braaksma & Roos Architectenbureau



◆ Interwoven architecture

The solid architecture coincides with the hall and makes the lochal an impressive public place. An open knowledge workshop with various labs and space for events.

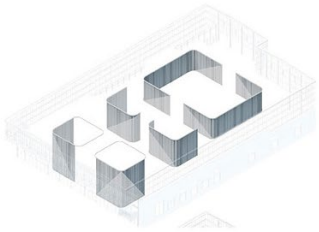
- Civic Architects
- Braaksma & Roos Architectenbureau
- Inside Outside / Petra Blaisse



◆ Movable textiles

Six massive movable screens make it possible to divide the hall and stairwell into different zones for lectures, events and exhibitions.

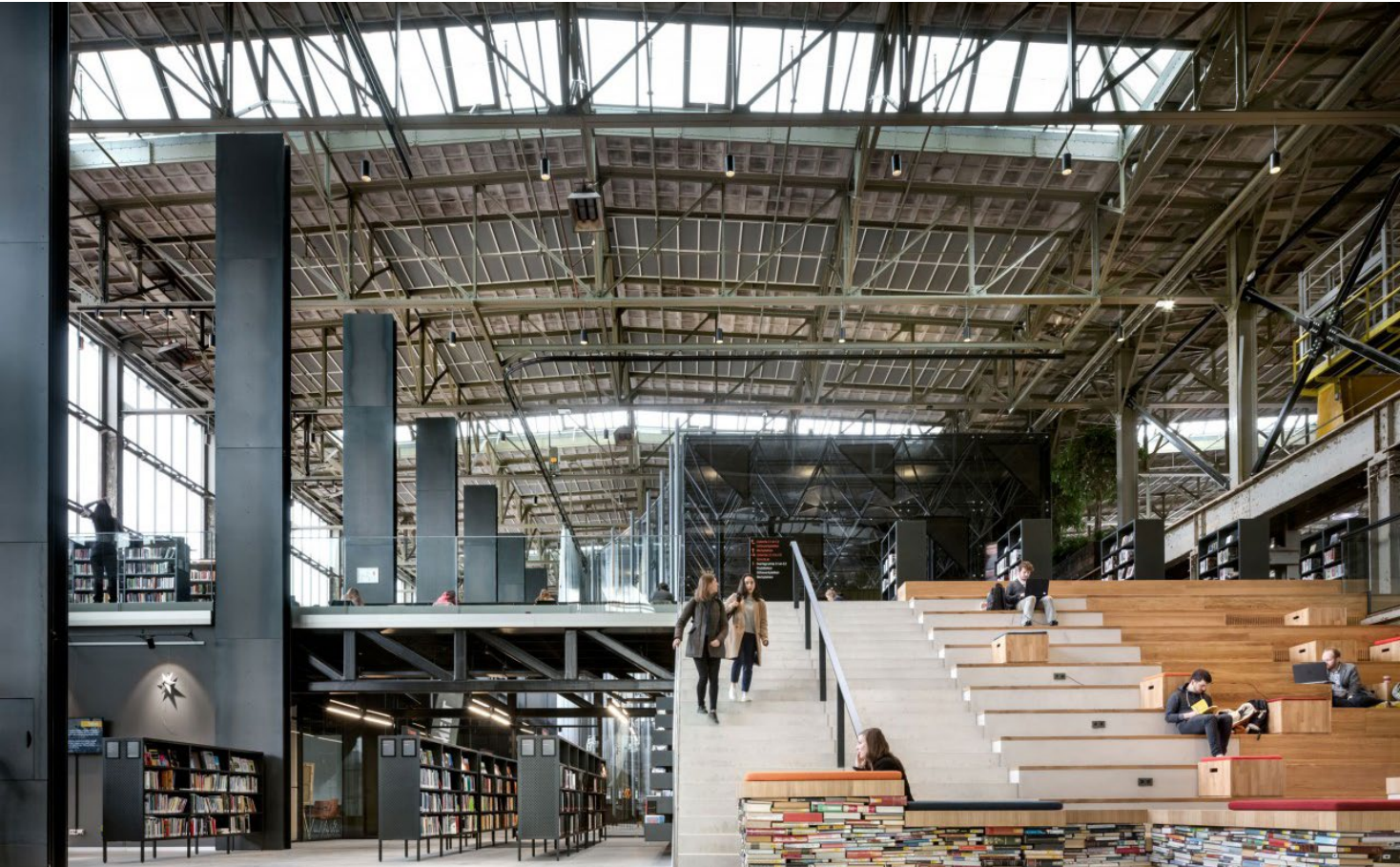
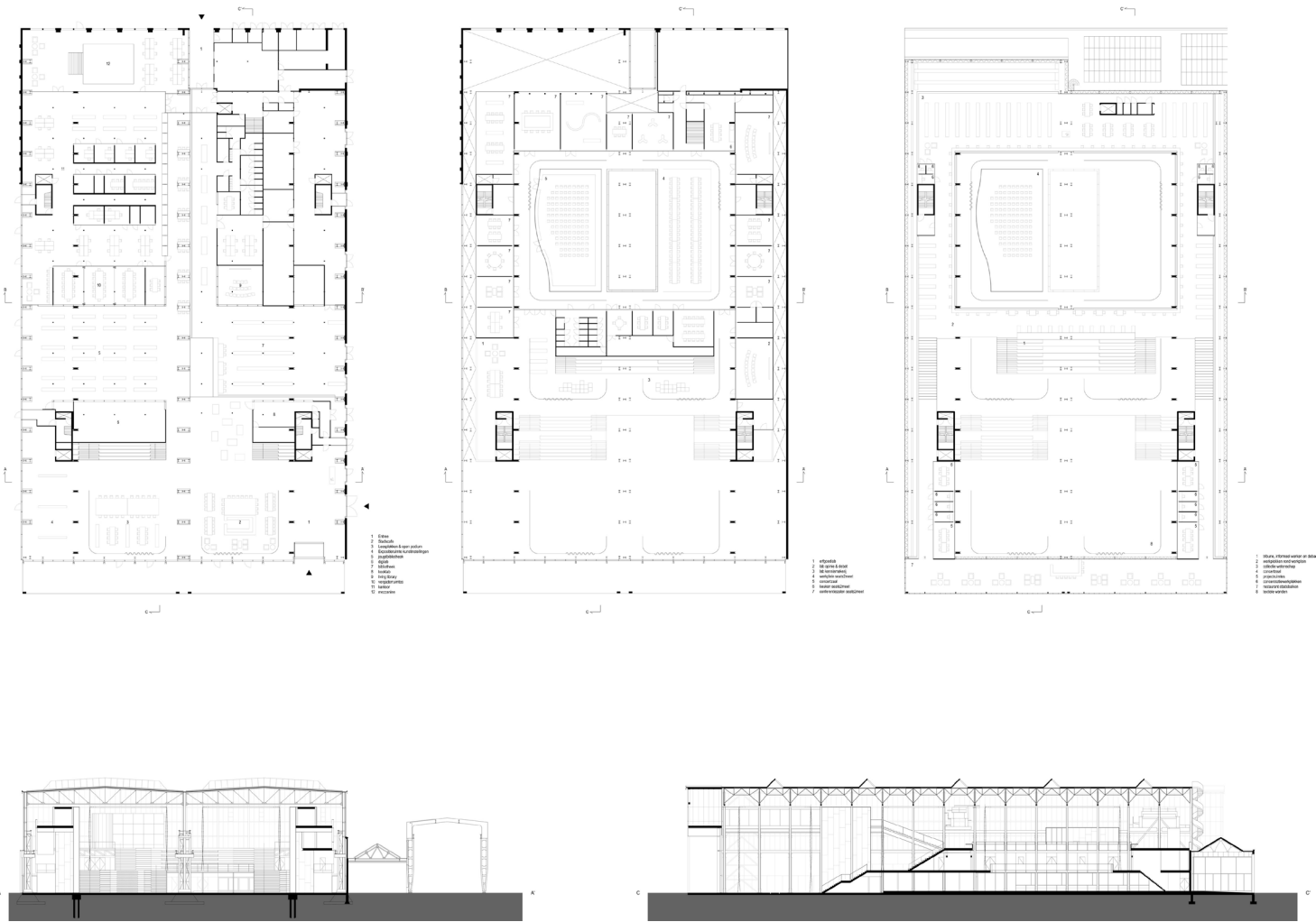
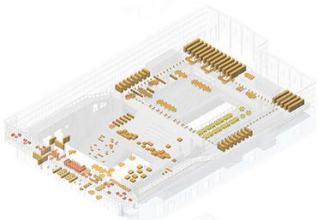
- Inside Outside / Petra Blaisse
- Textellab



◆ Colorful life

Many different activities and target groups are located side by side in the hall, with different design themes. An interior that is full of diversity.

- Mecanoo
- Academy of architecture Tilburg

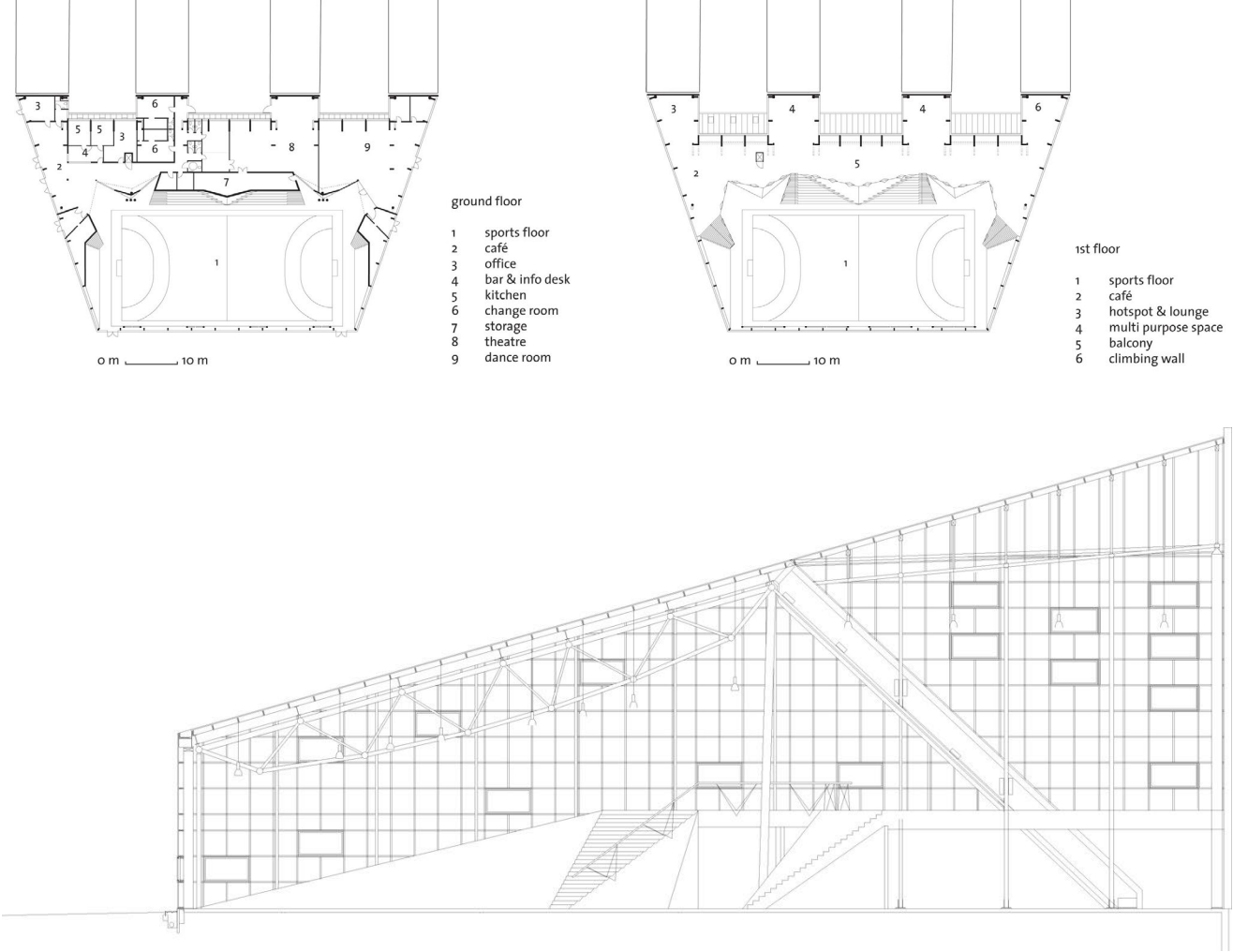
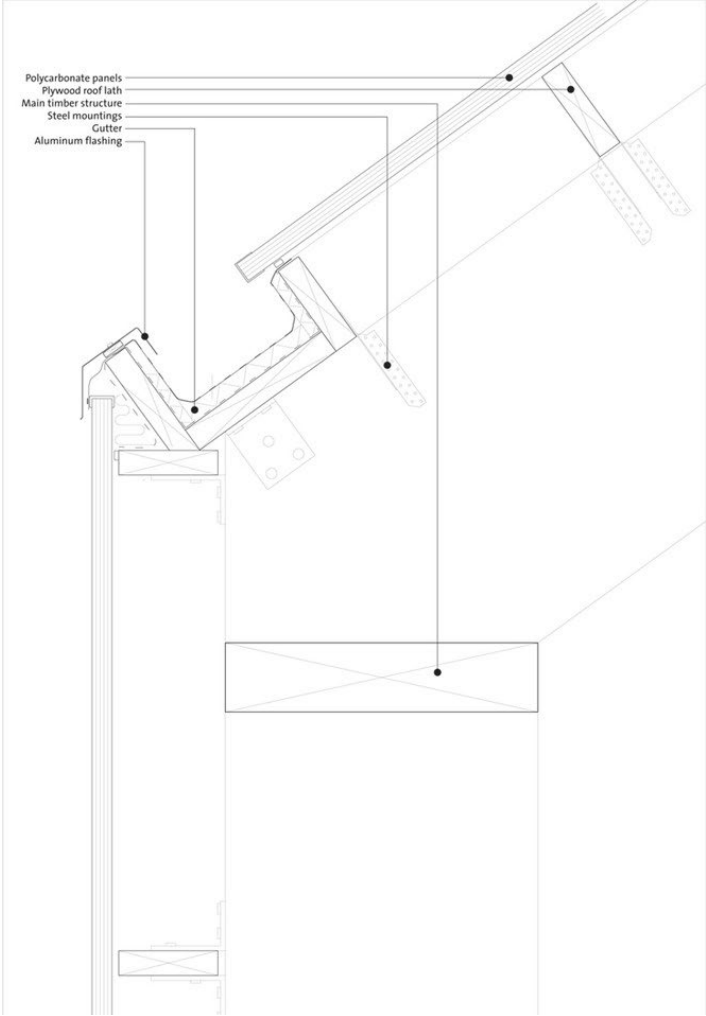
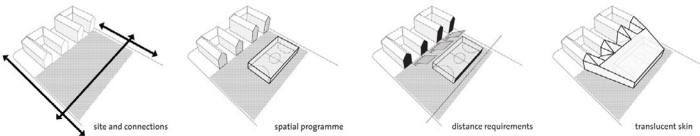


SPORTS & CULTURE CENTRE

Dorte Mandrup,Brandlhuber+Emde,Burlon,2006

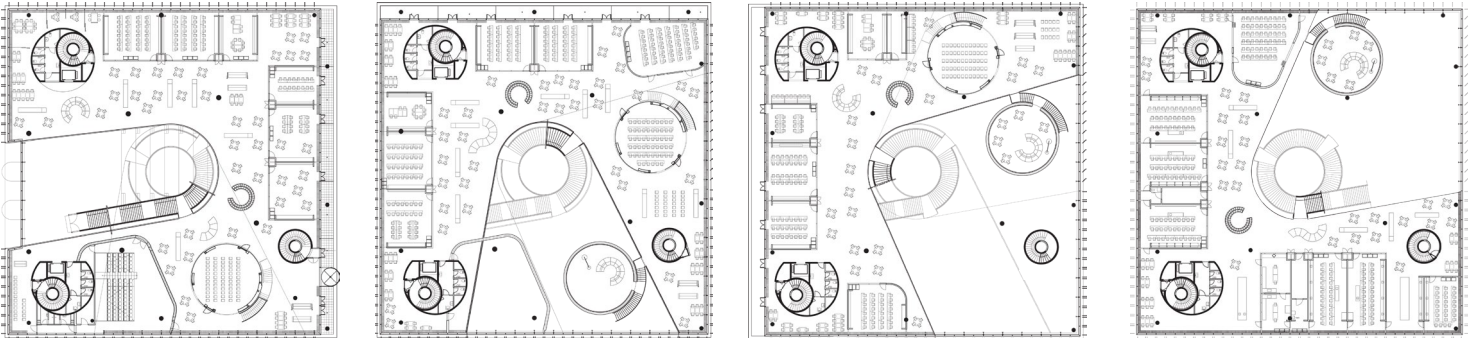
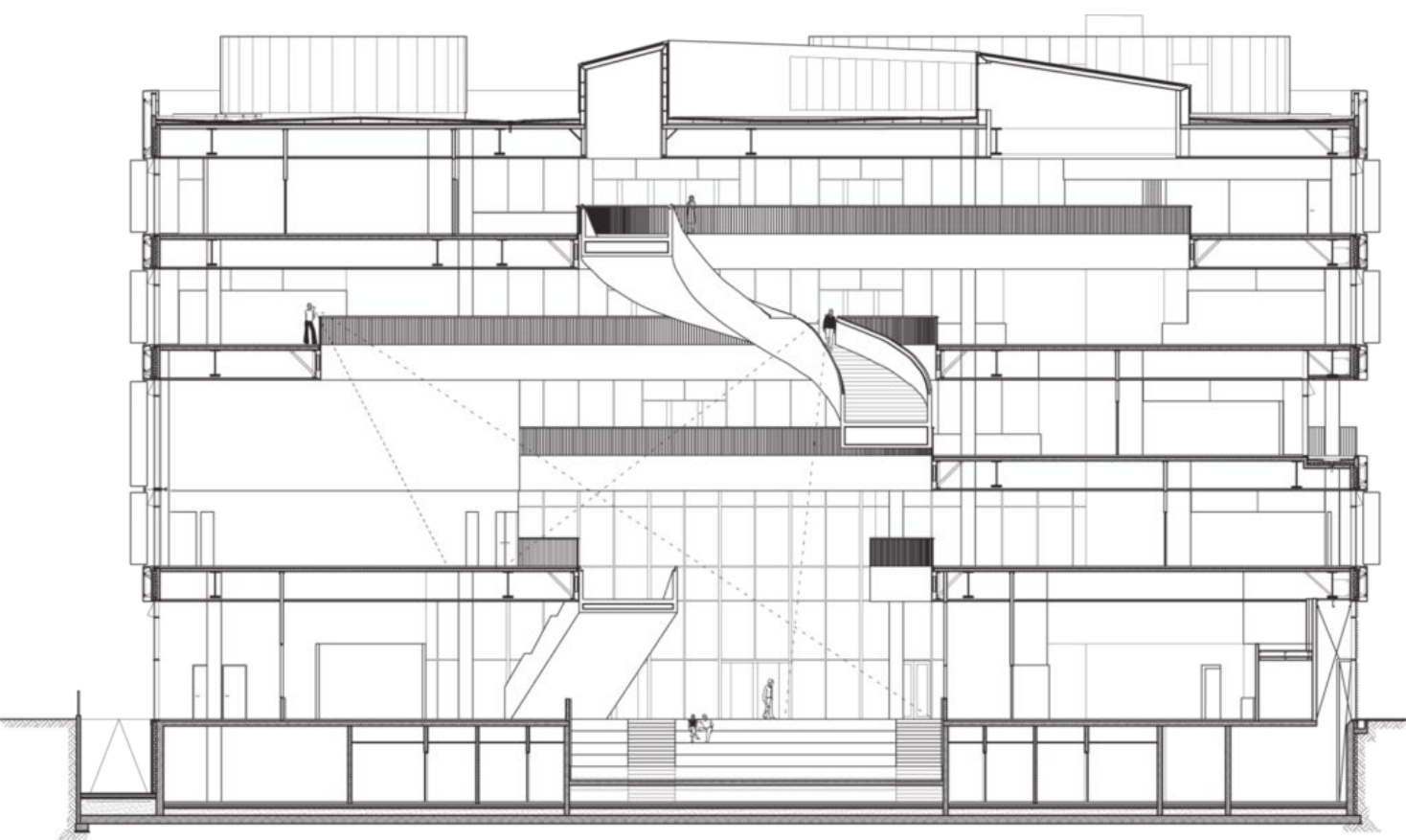
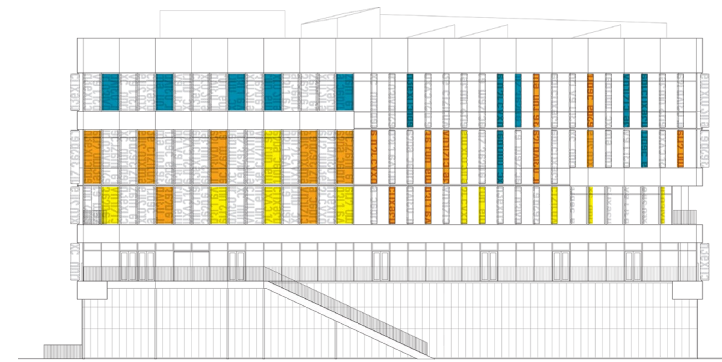
The schemes most pronounced feature is a large translucent membrane that stretches between the sports and culture centre arena, and the four characteristic end walls of the neighbouring public housing scheme.

The building’s structure is composed of steel and timber covered with opalescent polycarbonate panels with a low U-value. This translucent cover offers excellent daylight conditions and at night the structure appears as a glowing crystal. The building will be used for a variety of daily sport and cultural activities such as concerts and theatre performances. The dynamic landscape inside allows for various activities to take place on different levels in visual contact with each other.



ØRESTAD COLLEGE
3XN, 2007

Communication, interaction and synergy are key issues for the design of this public high school. The project displays a visionary interpretation of openness and flexibility regarding team sizes, varying from the individual to groups and assemblies, and reflects international ambitions to achieve a more dynamic and life-like study environment. The intention of the building is to promote the students' abilities to take responsibility for their own learning and the flexibility of the architecture truly allows the students to shape their own academic and social education.



JUSSIEU LIBRARY
OMA, 1992 (unbuilt)

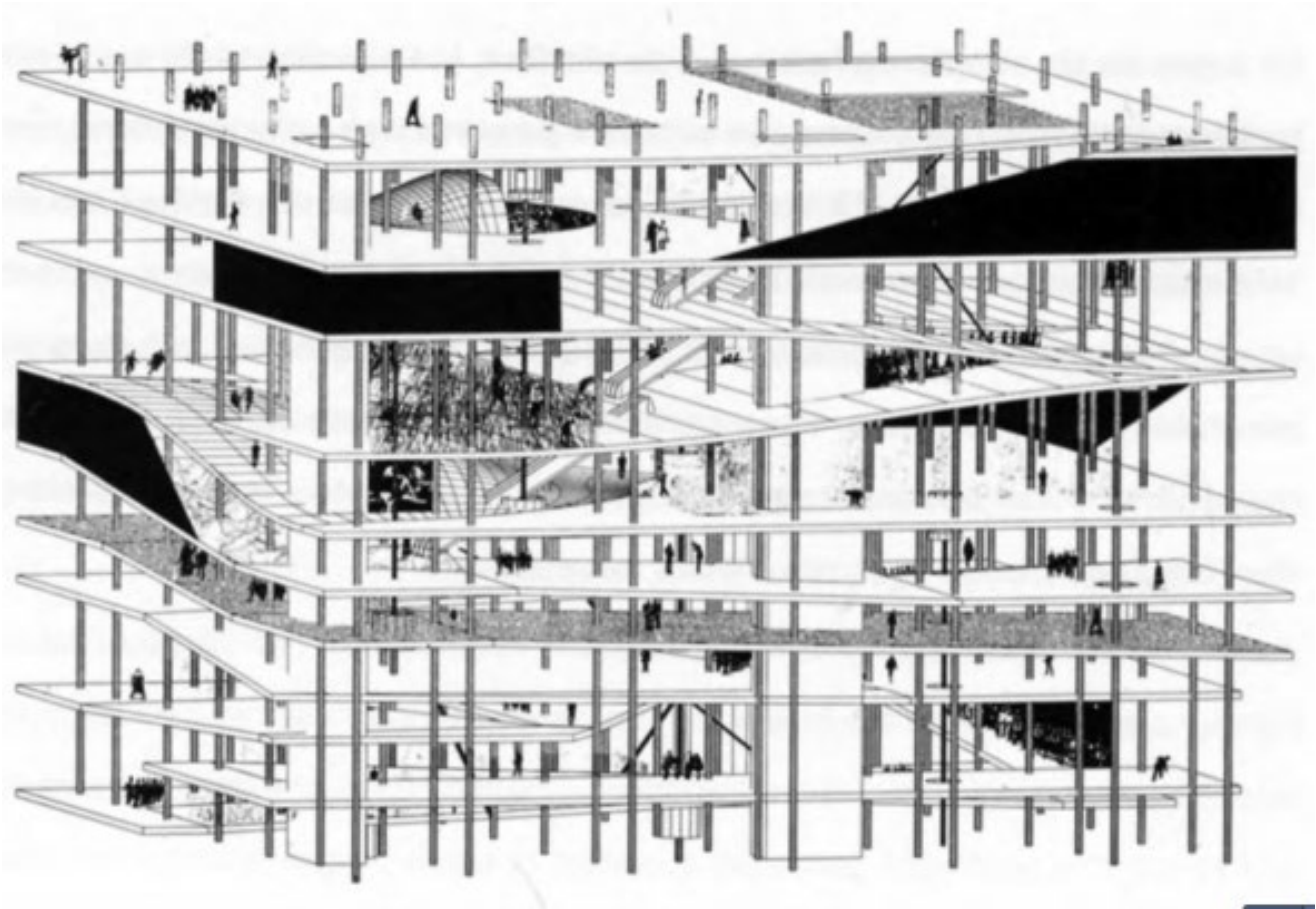
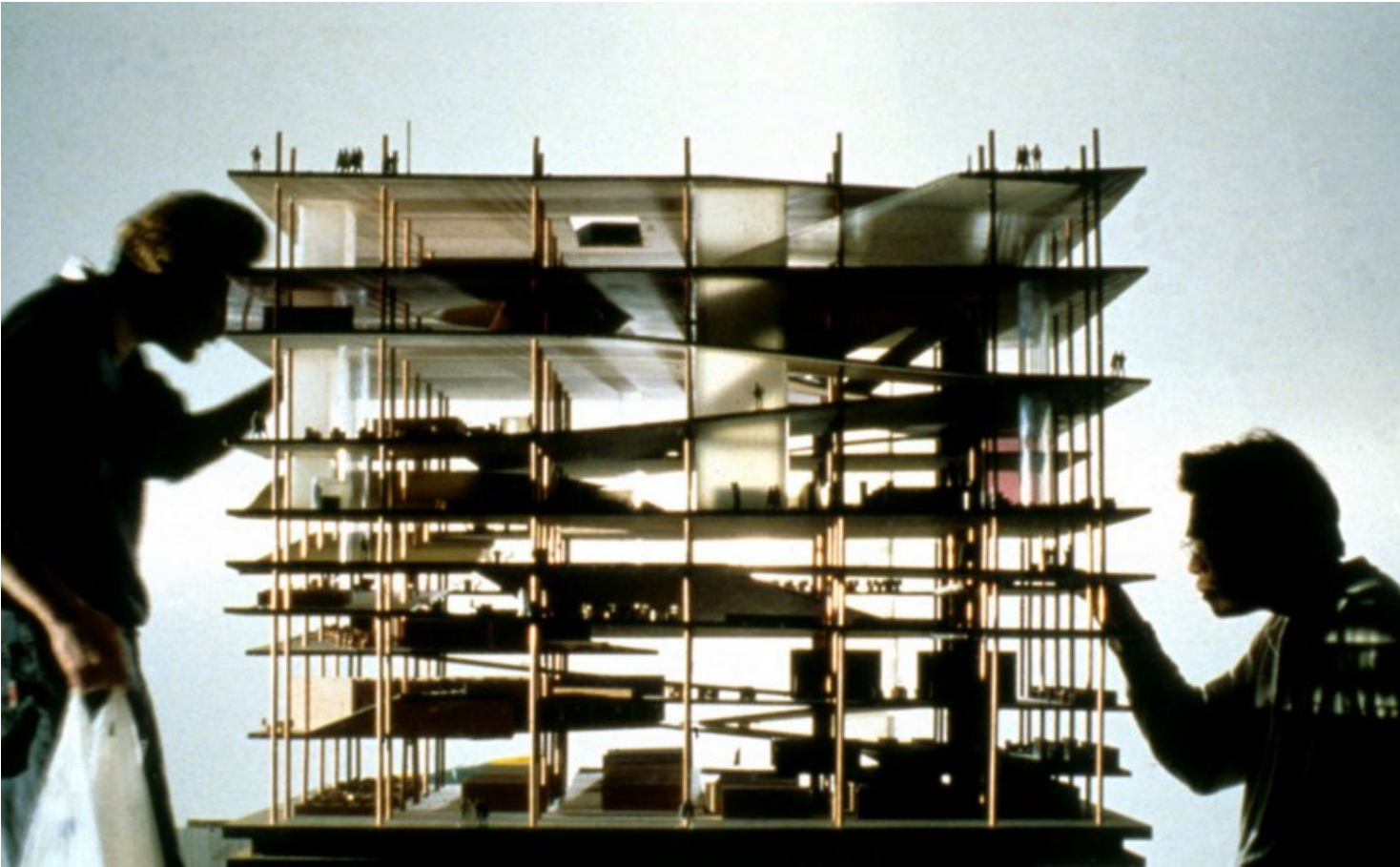
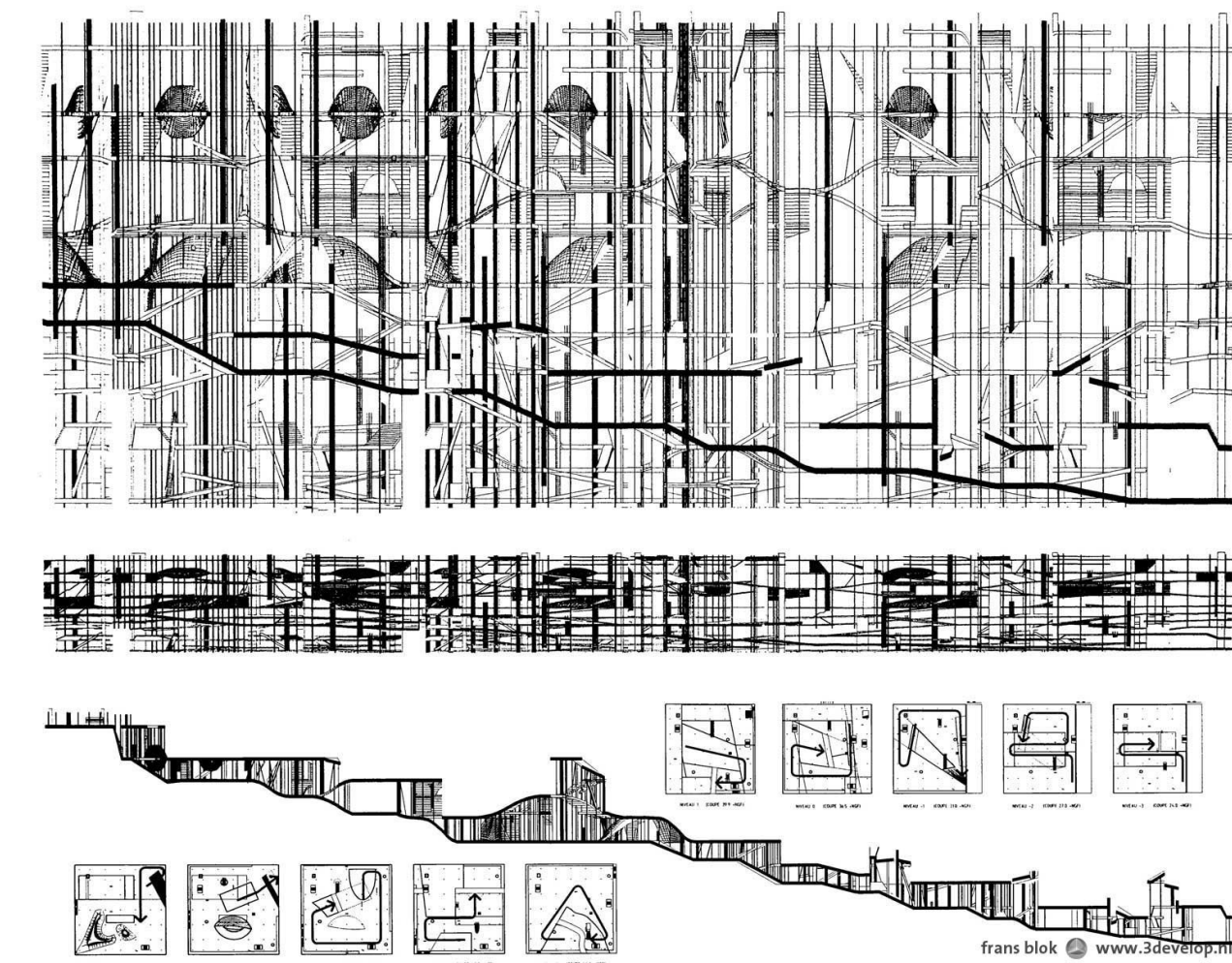
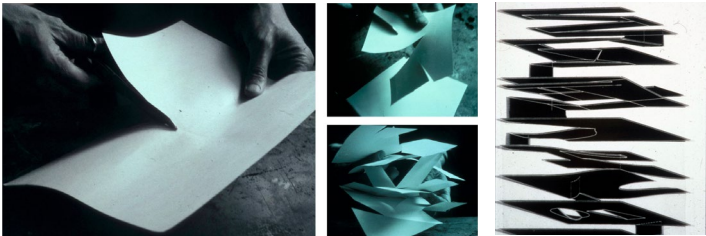
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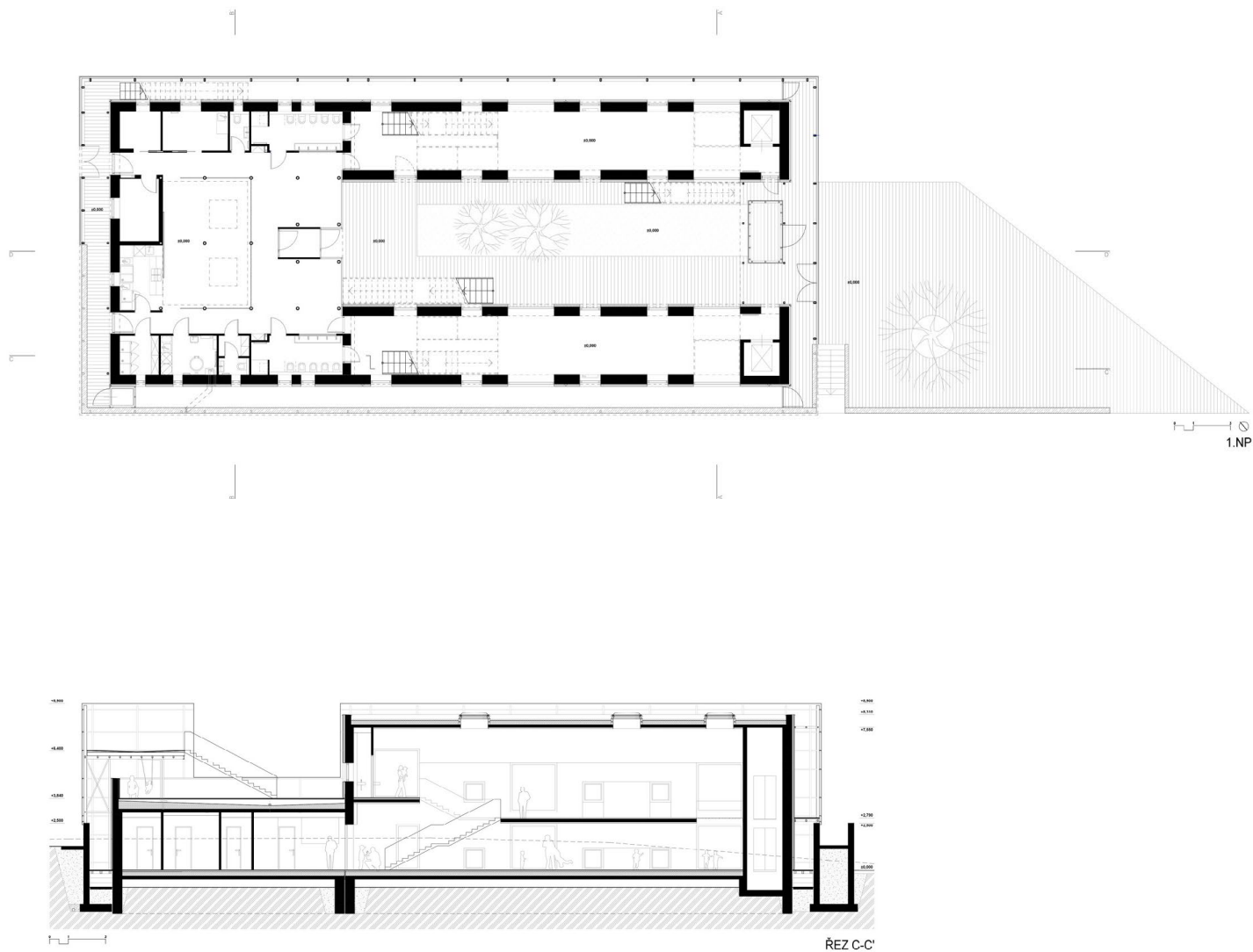
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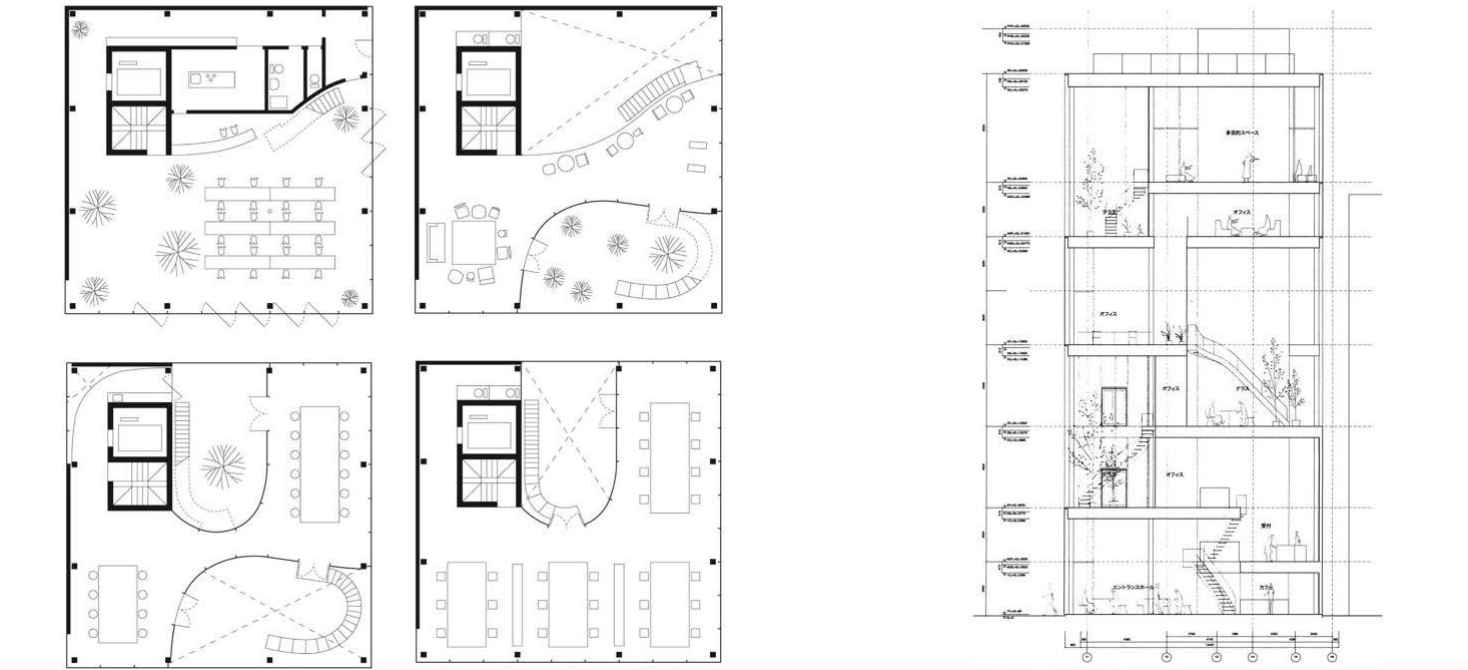
KINDERGARTEN NOVÁ RUDA

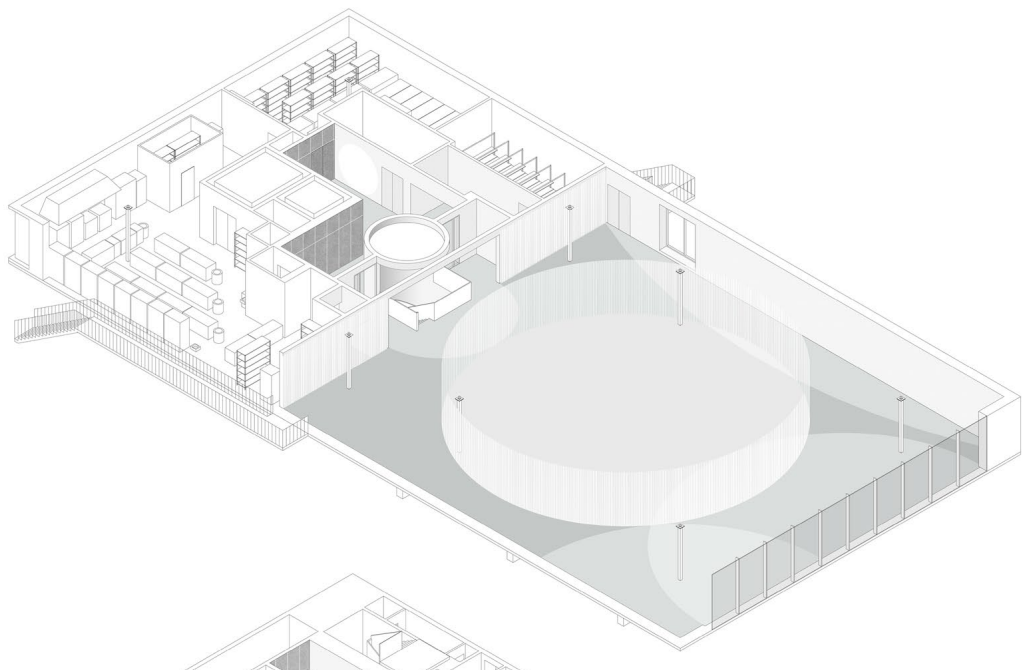
Vratislavice nad Nisou / Petr Stolín Architekt, 2018

The facility, thanks to its outdoor terraces and courtyard, allows for outdoors play in the sun. These areas are also equipped with outdoor storage for toys and utensils. The space that is in between the two main bodies of the kindergarten functions as a terrace and public space. This area is connected to the new parking and exterior wooden paving that is aligned to the axis of the building. The remaining terrain will be used as green space with various play elements required by the program. The materials and surfaces are chosen in light tones and are combined with glass and natural wood on the terraces. The kindergarten is designed as a brick building with a glass-fiber facade on a wooden grid. The whole building is embraced by the steel structure with two walking paths around the two main sections hidden from the street by another layer of trapezoidal fiberglass. This concept of transparency enhances the whole mass and creates a sense of security. The outer facade of the house is a soft veil that embraces all the inner world of the kindergarten. The house does not need a fence. The outer shell blends the two slim volumes of the two compartments, which are connected in the back by common and functional areas. Thus, this connection turns the inner atrium into a sheltered and pleasant space.



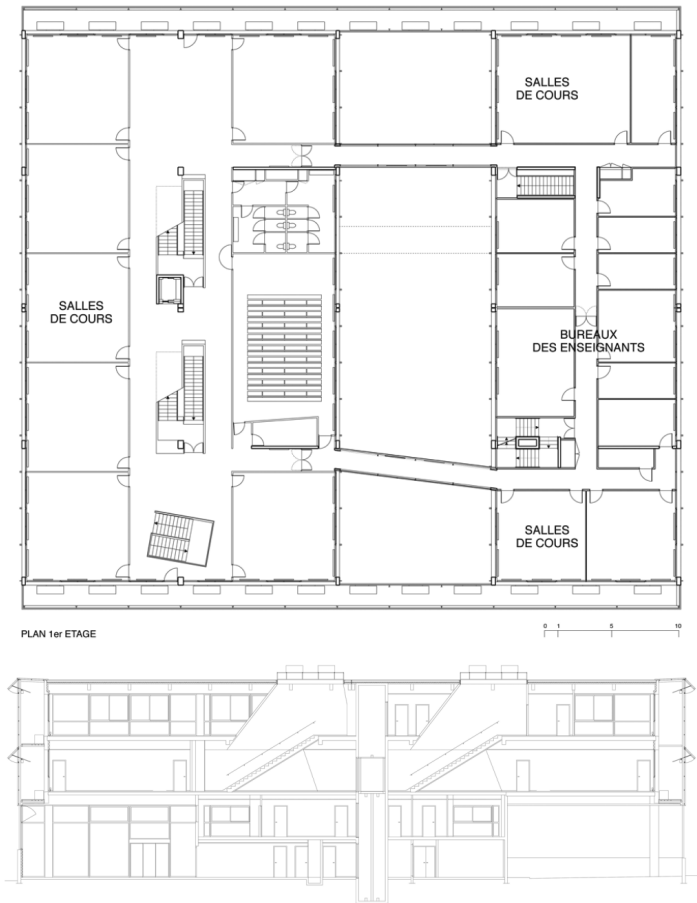
SHIBAURA HOUSE- SANAA



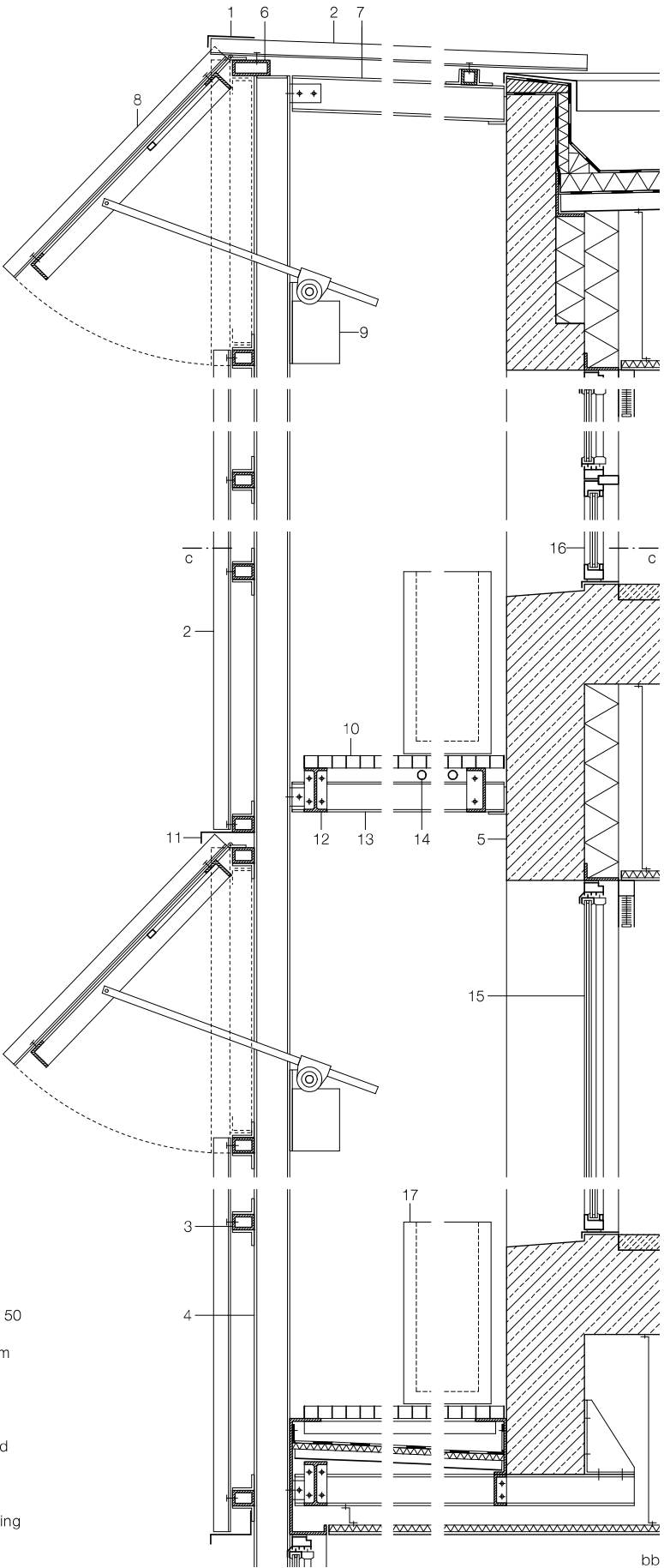


**UNIVERSITY OF ARTS & HUMAN SCIENCES,
GRENOBLE, FRANCE**

Lacaton & Vassal, 1995 & 2001



Section • Plan of
ground floor
scale 1:800
Horizontal section •
Vertical section
scale 1:20

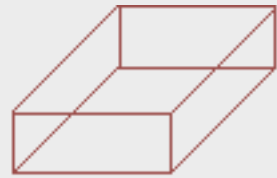


- 1 Edge trim, transparent polycarbonate with UV-resistant coating, hot-formed
- 2 Transparent polycarbonate corrugated sheet with UV-resistant coating, 175 x 51 x 3 mm
- 3 Supporting construction, steel rectangular hollow section, 70 x 50 x 4 mm, galvanised
- 4 Steel column, HEA 120, galvanised
- 5 Reinforced concrete beam
- 6 Steel rectangular hollow section, 100 x 50 mm
- 7 Steel beam, HEA 120, galvanised
- 8 Opening lights, corrugated sheet as in

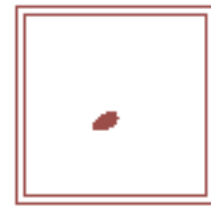
- No. 2, on steel angle frame, 50 x 50 x 5 mm, with steel square hollow section bracing, 20 x 20 x 2,3 mm
- 9 Electric drive for No. 8
- 10 Steel open grid flooring, 40 mm
- 11 Sheet steel flashing, galvanised
- 12 Steel beam, IPE 140, galvanised
- 13 Steel beam, HEA 100, galvanised
- 14 Heating pipes
- 15 Sliding aluminium window with double glazing
- 16 Spandrel panel with double glazing
- 17 Container for plants



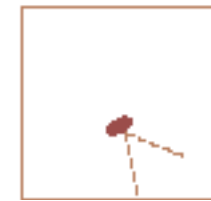
FIXED BOUNDARY



VOLUMN



OPAQUE



TRANSPARENT

- Sauna
- VR room
- Multi-media room

- Spa
- Physiotherapy
- Music room

- Multi-sports hall
- Martial Art
- Dance
- Yoga
- Meditation

CHANGEABLE BOUNDARY



UNDEFINED SPACE



PENETRABLE

- Theater
- Communal Kitchen
- Classroom
- DIY workshop
- Digital lab
- Art studio

NO BOUNDARY

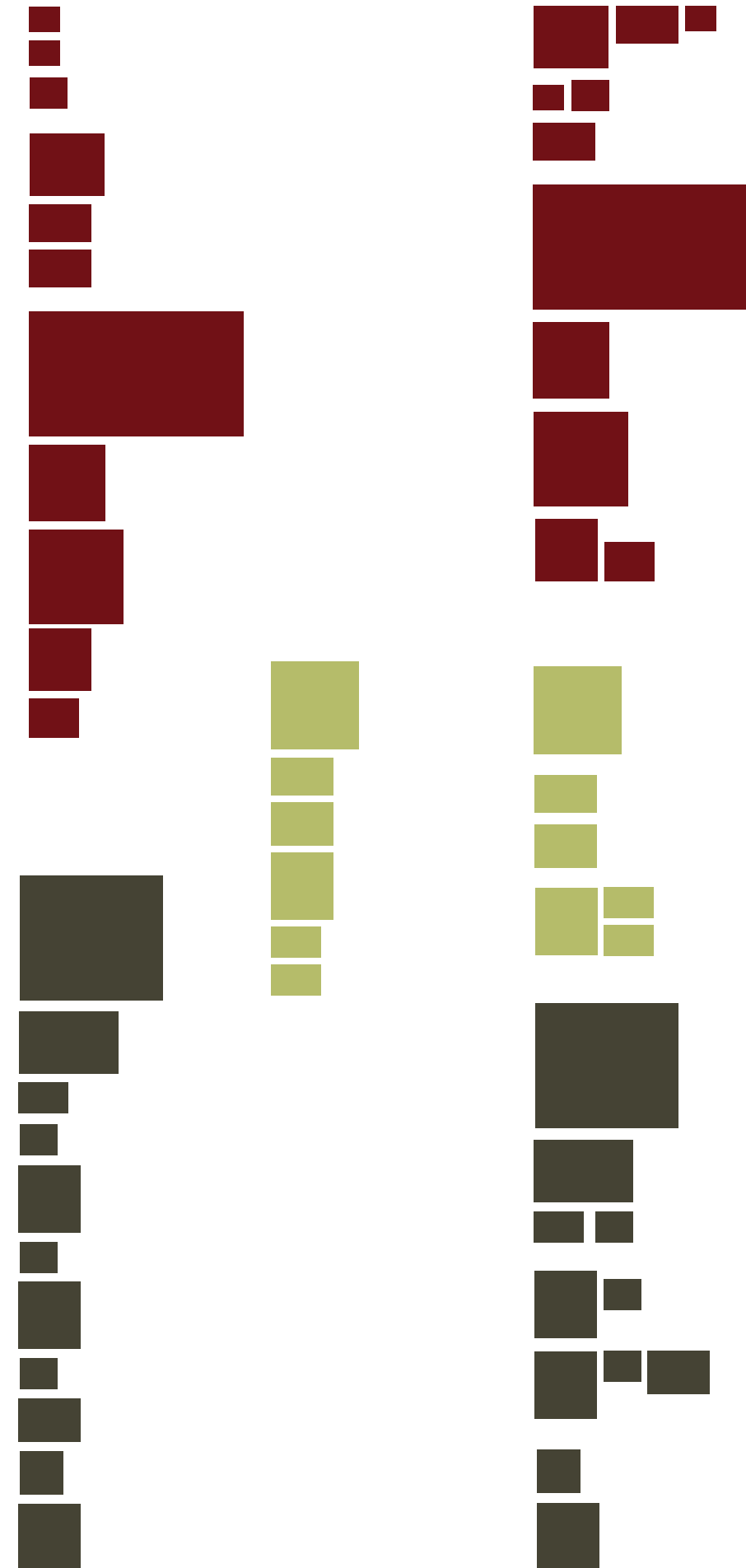


PLATFORM



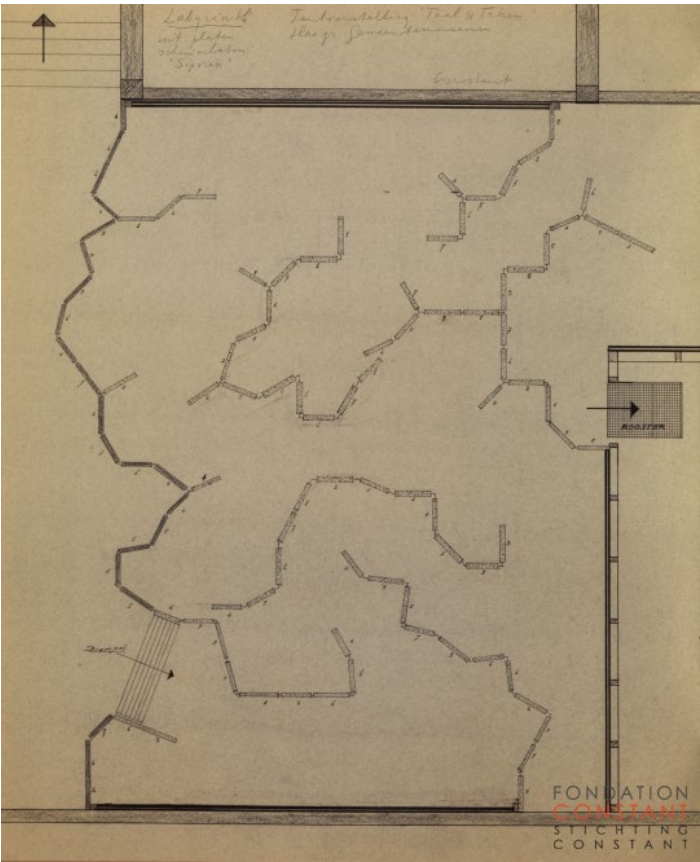
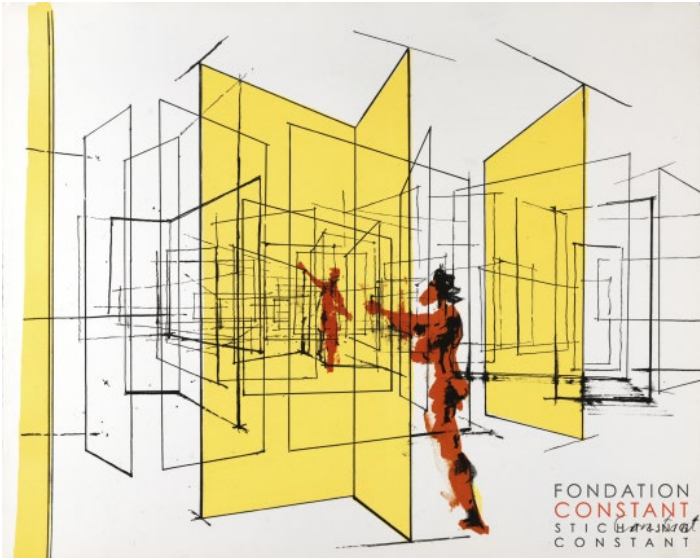
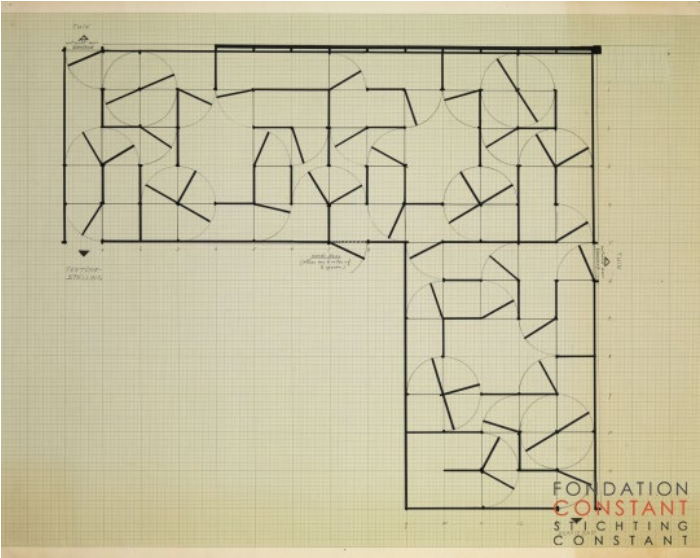
OPEN

- Interactive play area
- Skatepark
- Climbing
- Board game
- Workspace
- Lounge
- Cafe
- Shop
- Exhibition
- Outdoor amphitheater
- Farm garden

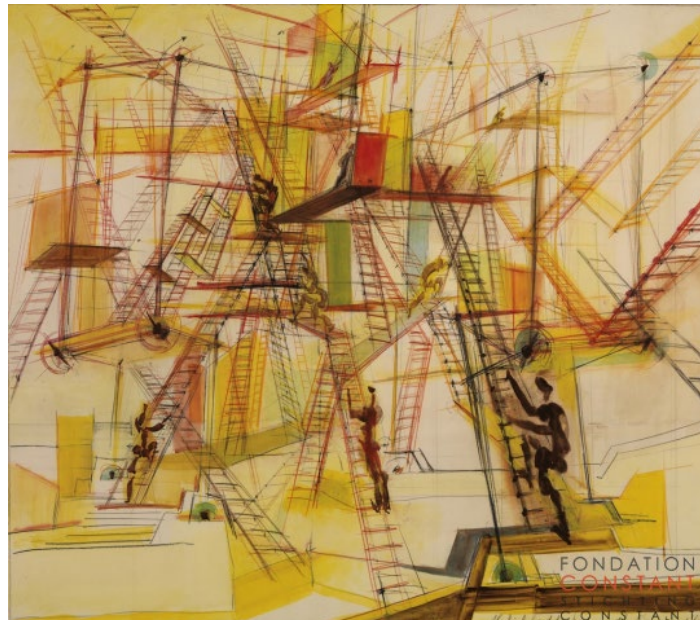
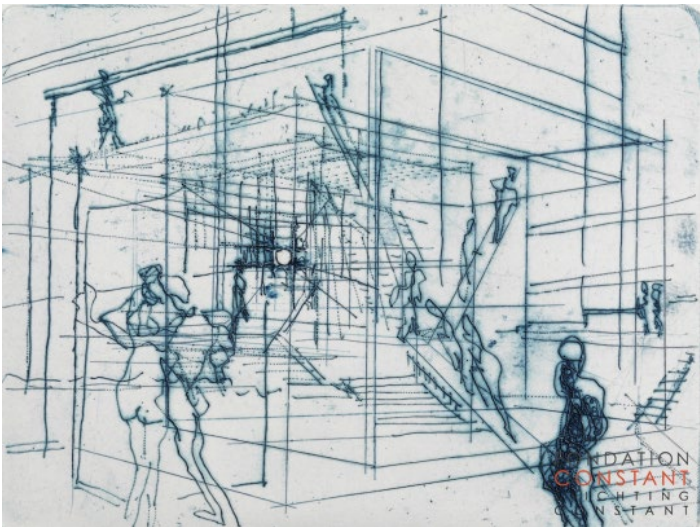


UNDEFINED SPACE

CONSTANT'S LABYRINTH



Floorplan Labyrinth from sheets of foam concrete 'Siporex' for the exhibition Taal en Teken, circa 1965



MOVABLE PARTITION

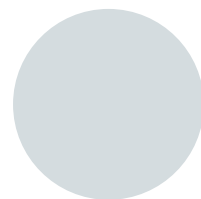
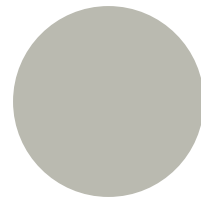
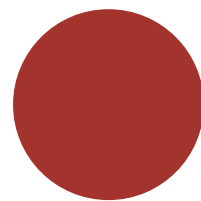
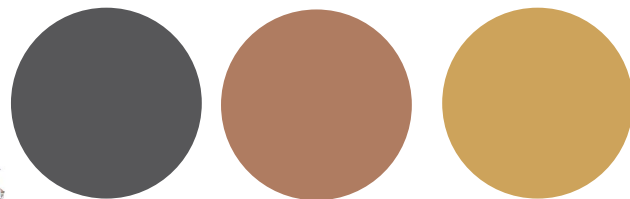
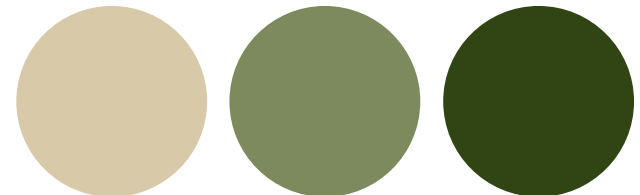


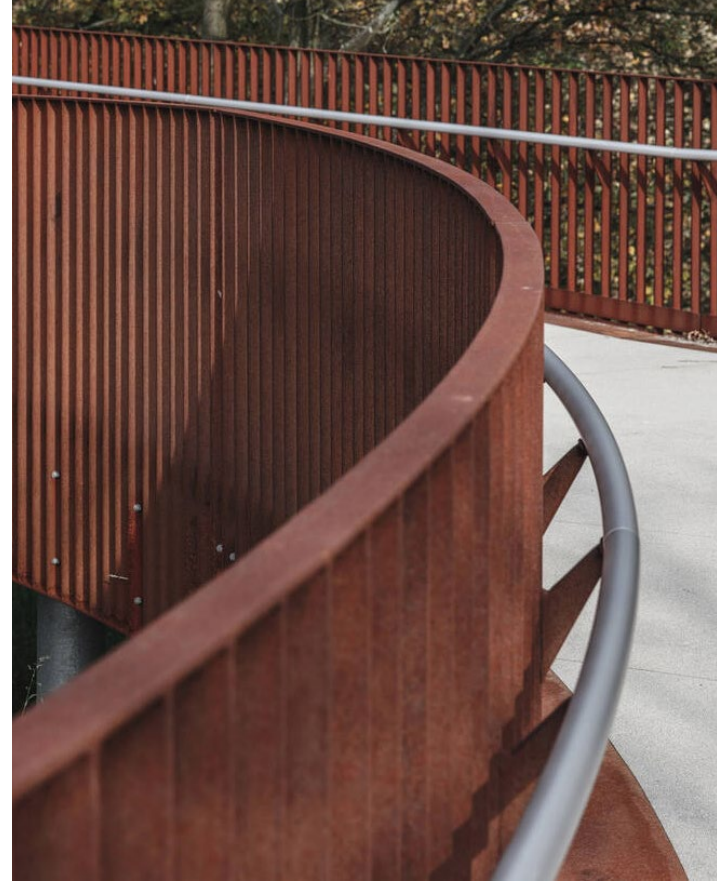
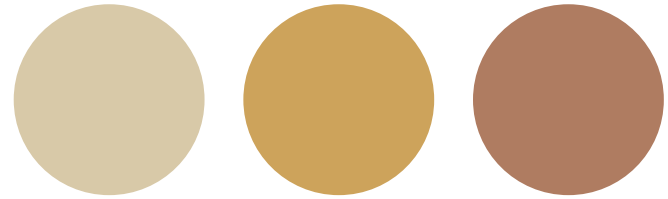
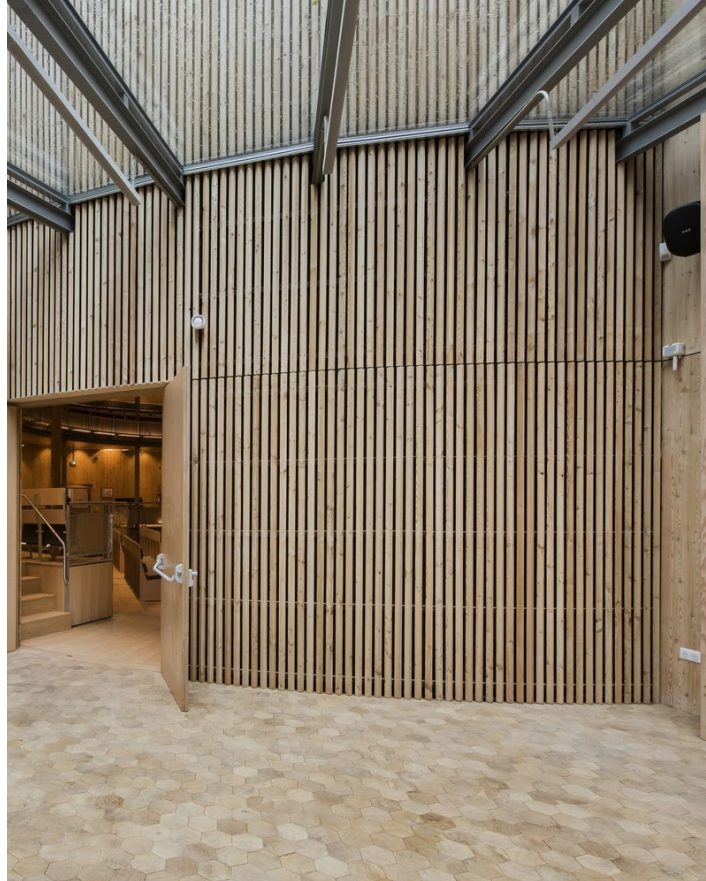
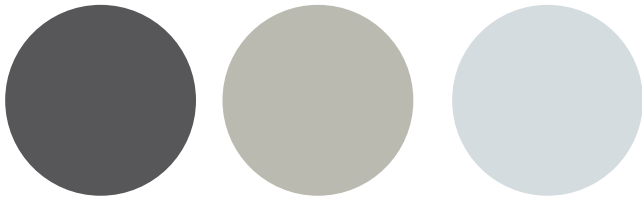
TEXTILE

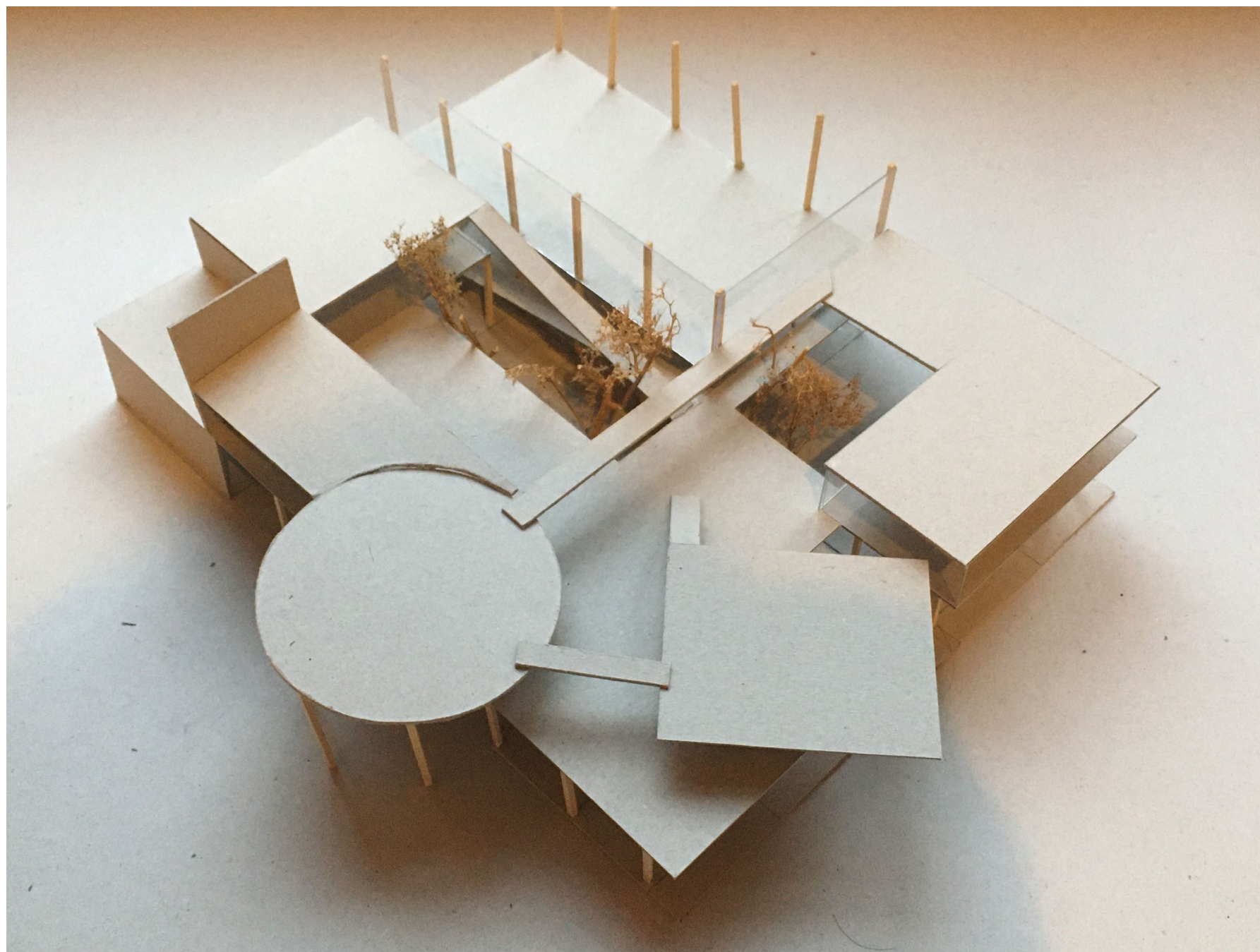


STRUCTURE

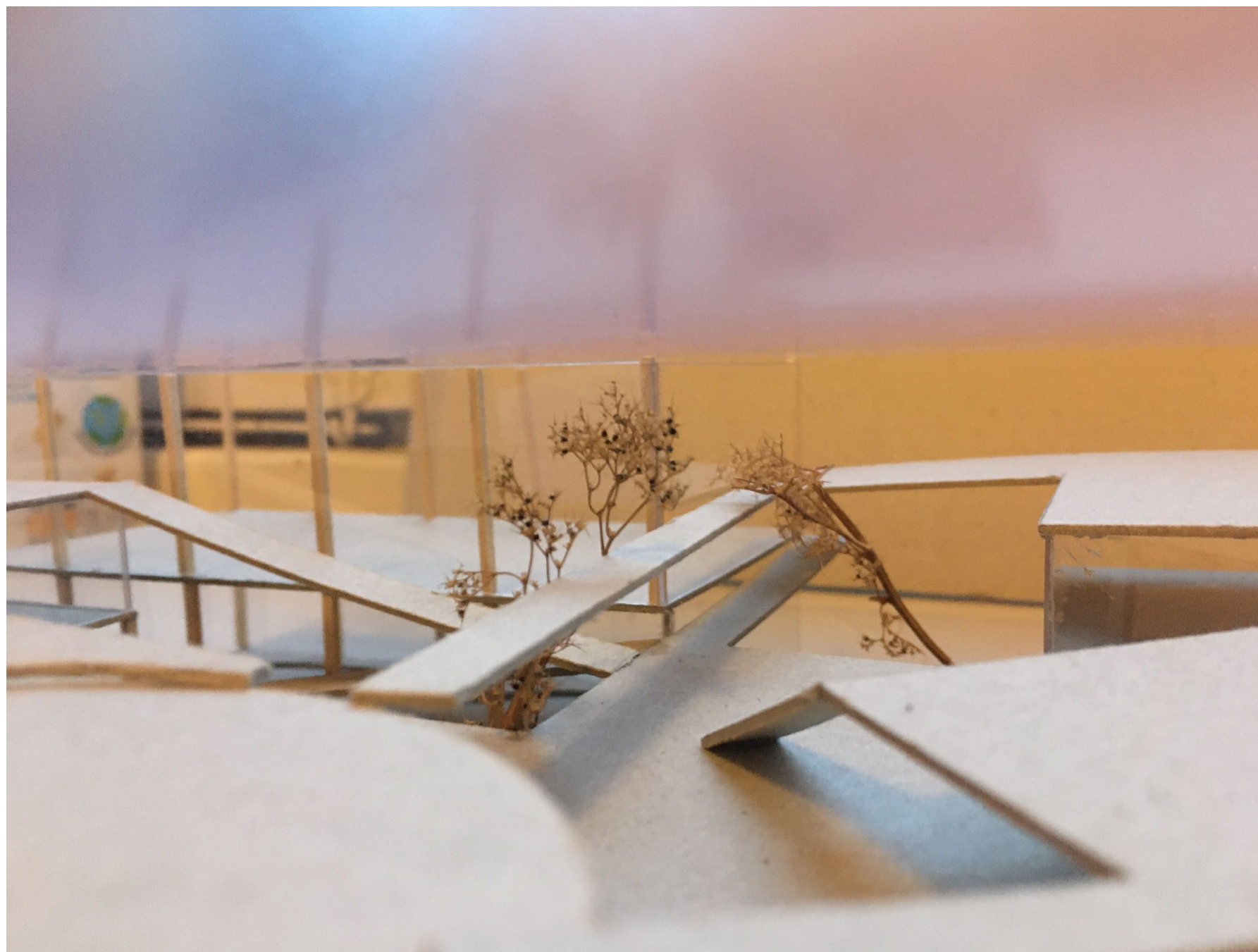


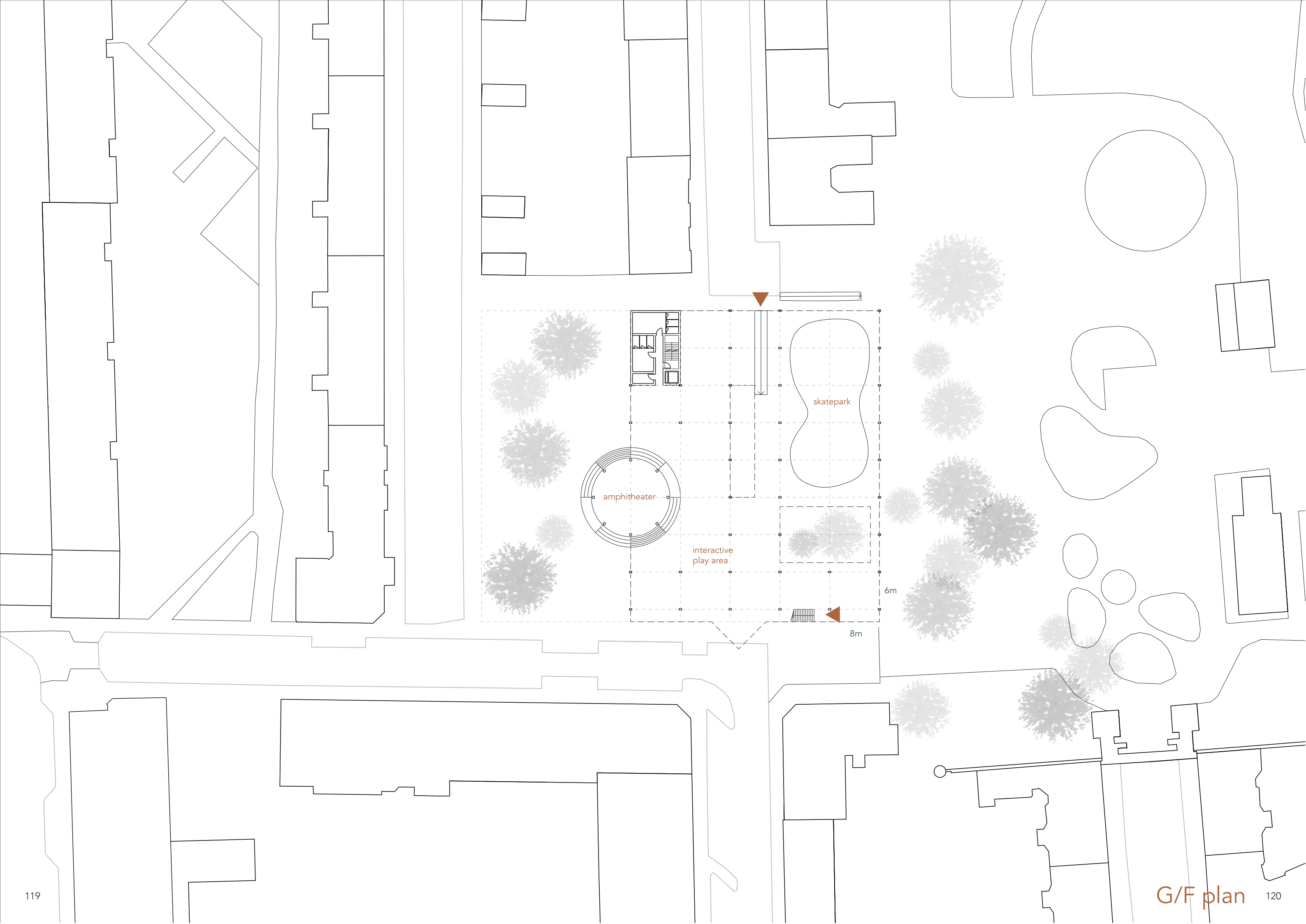




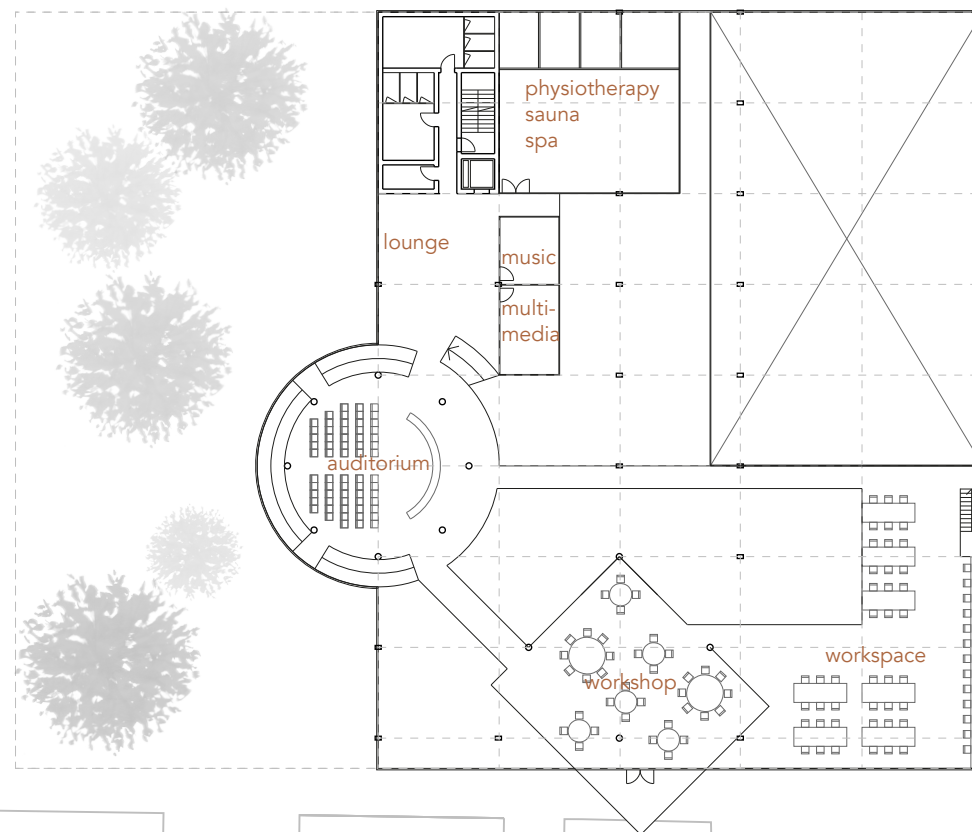


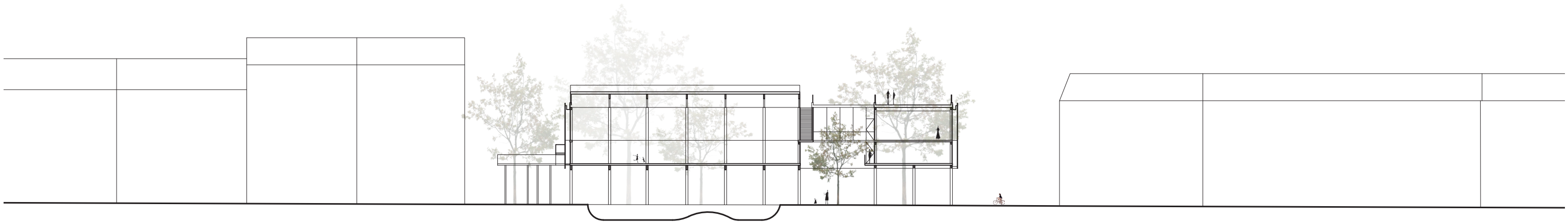
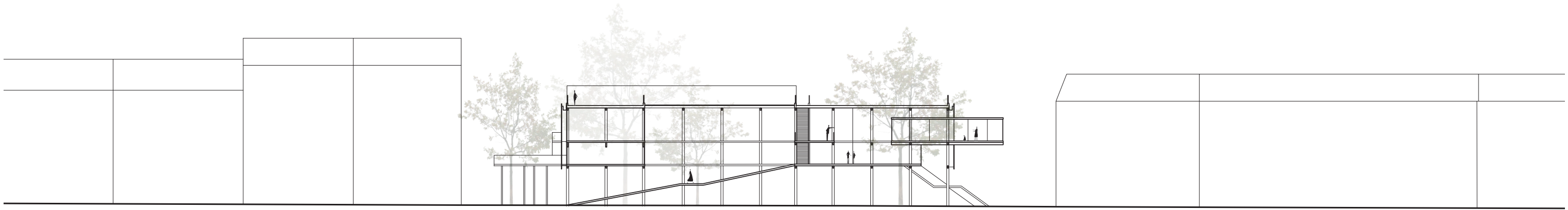
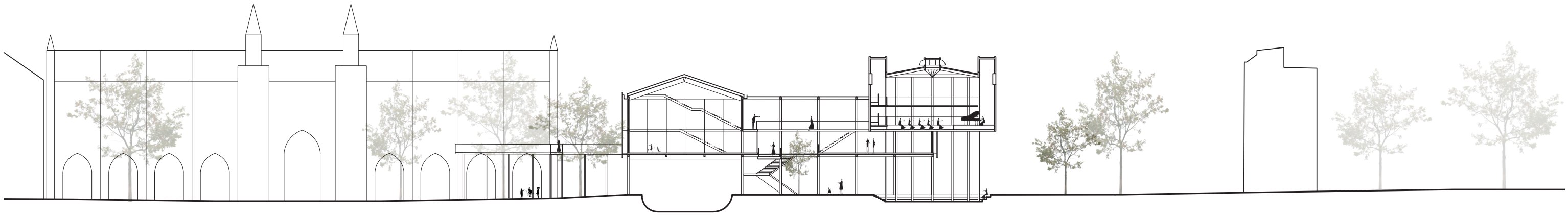


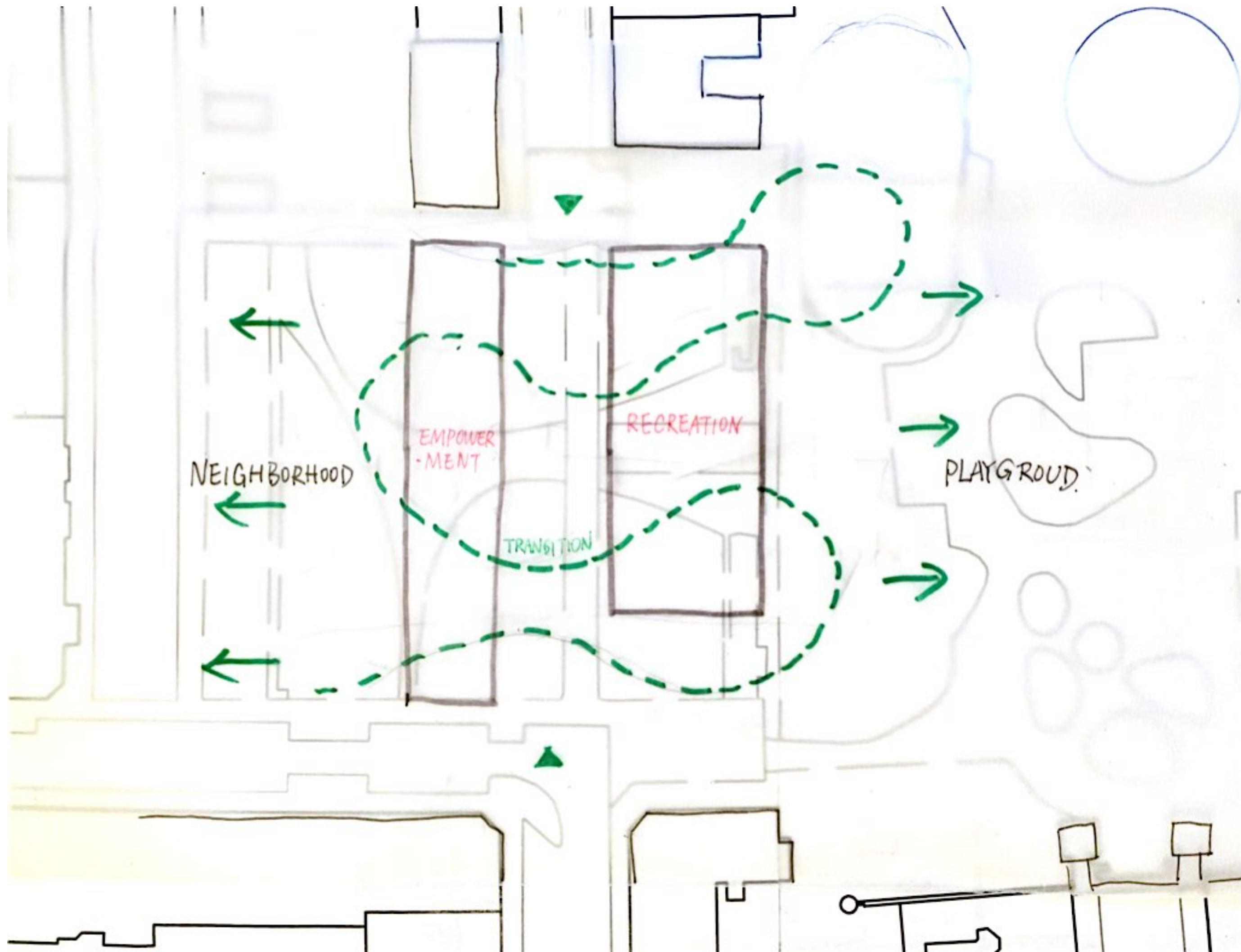


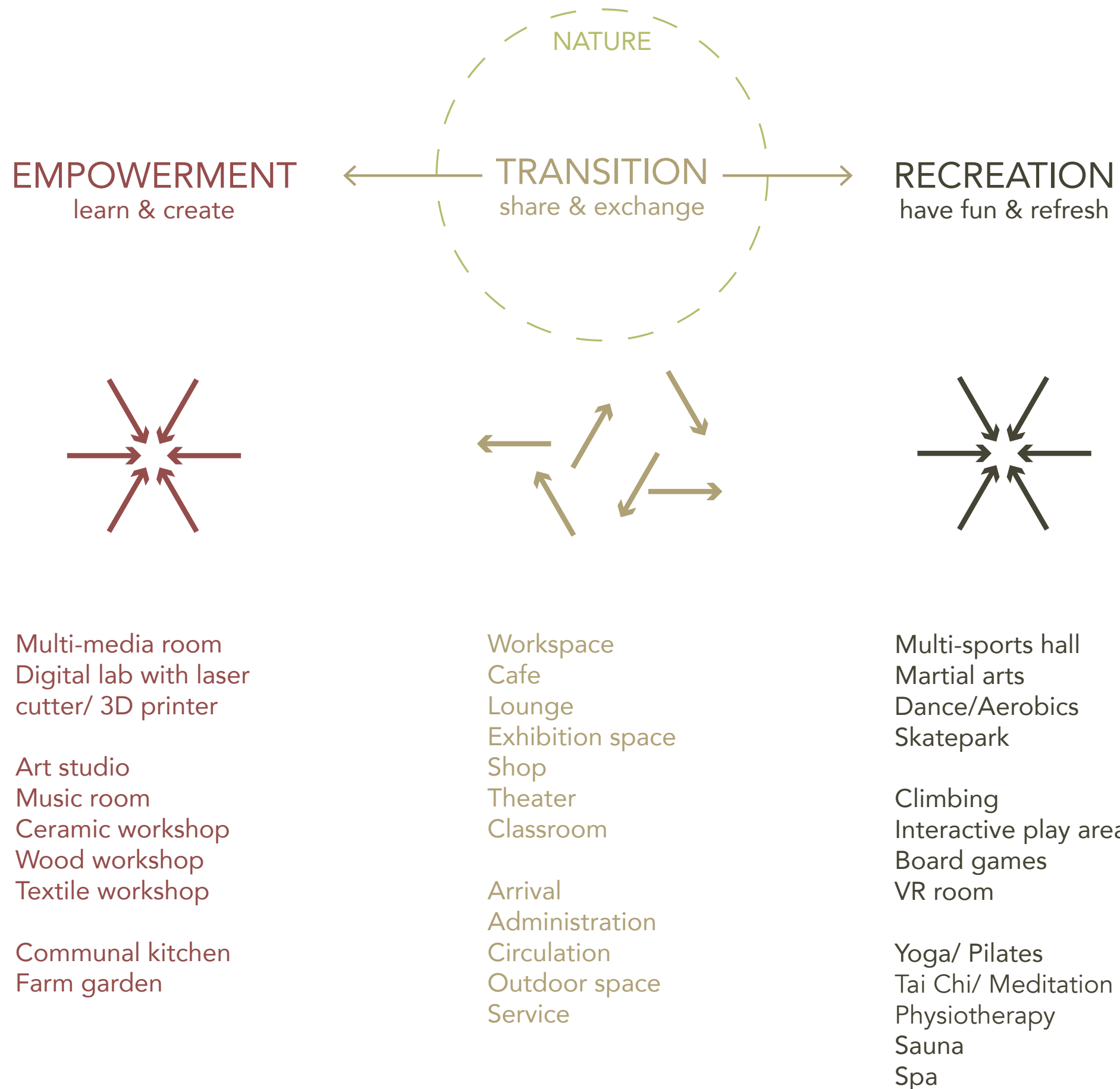


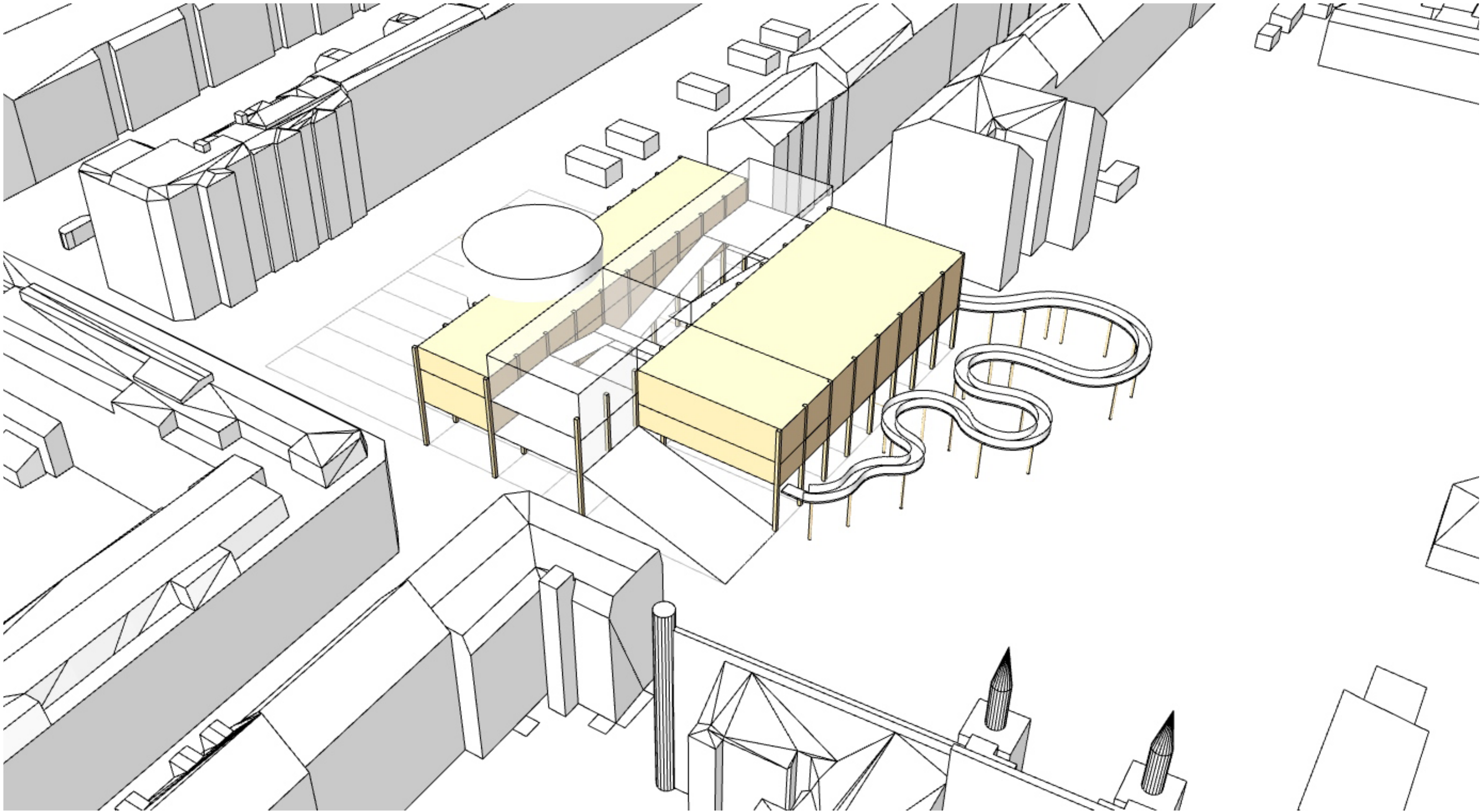


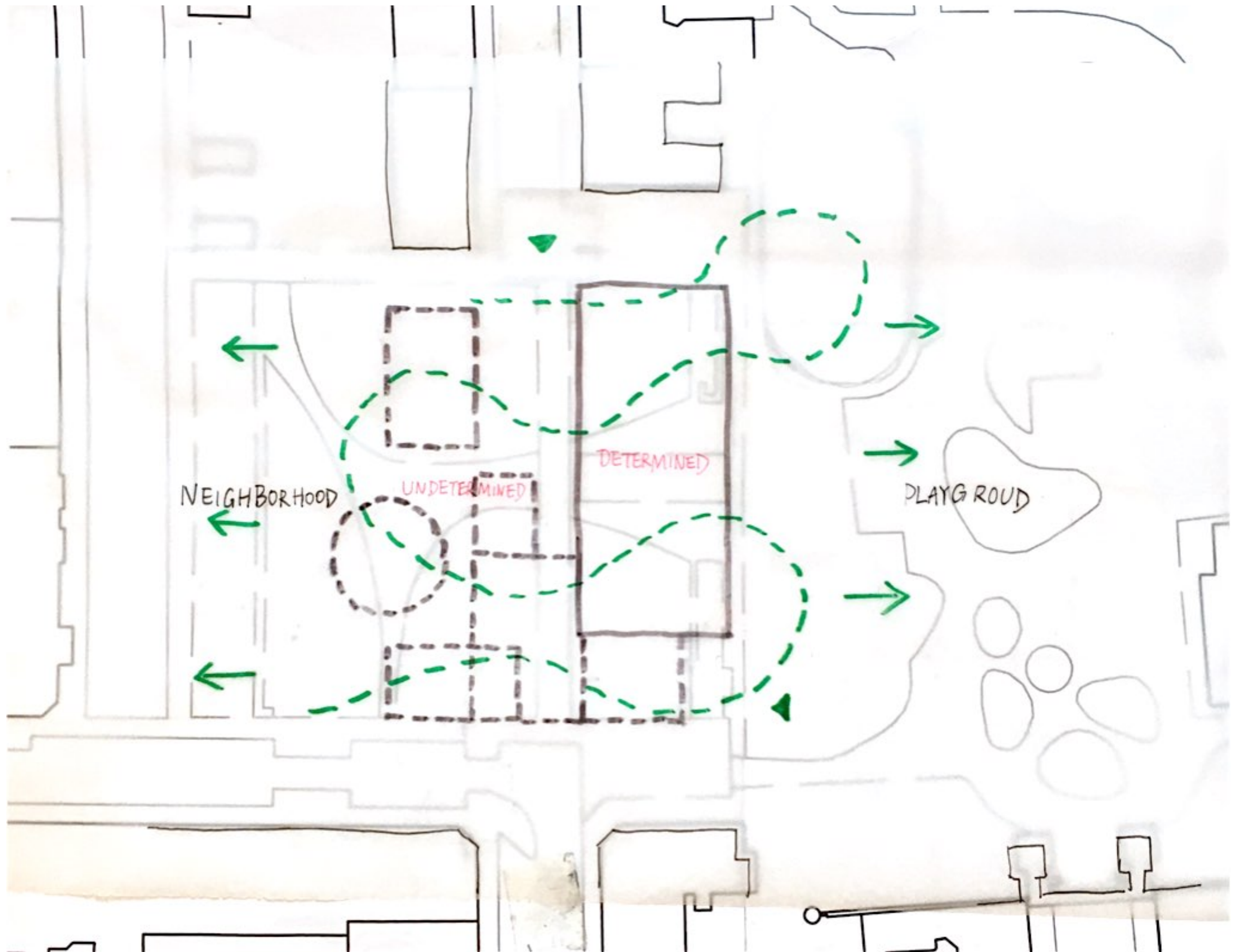


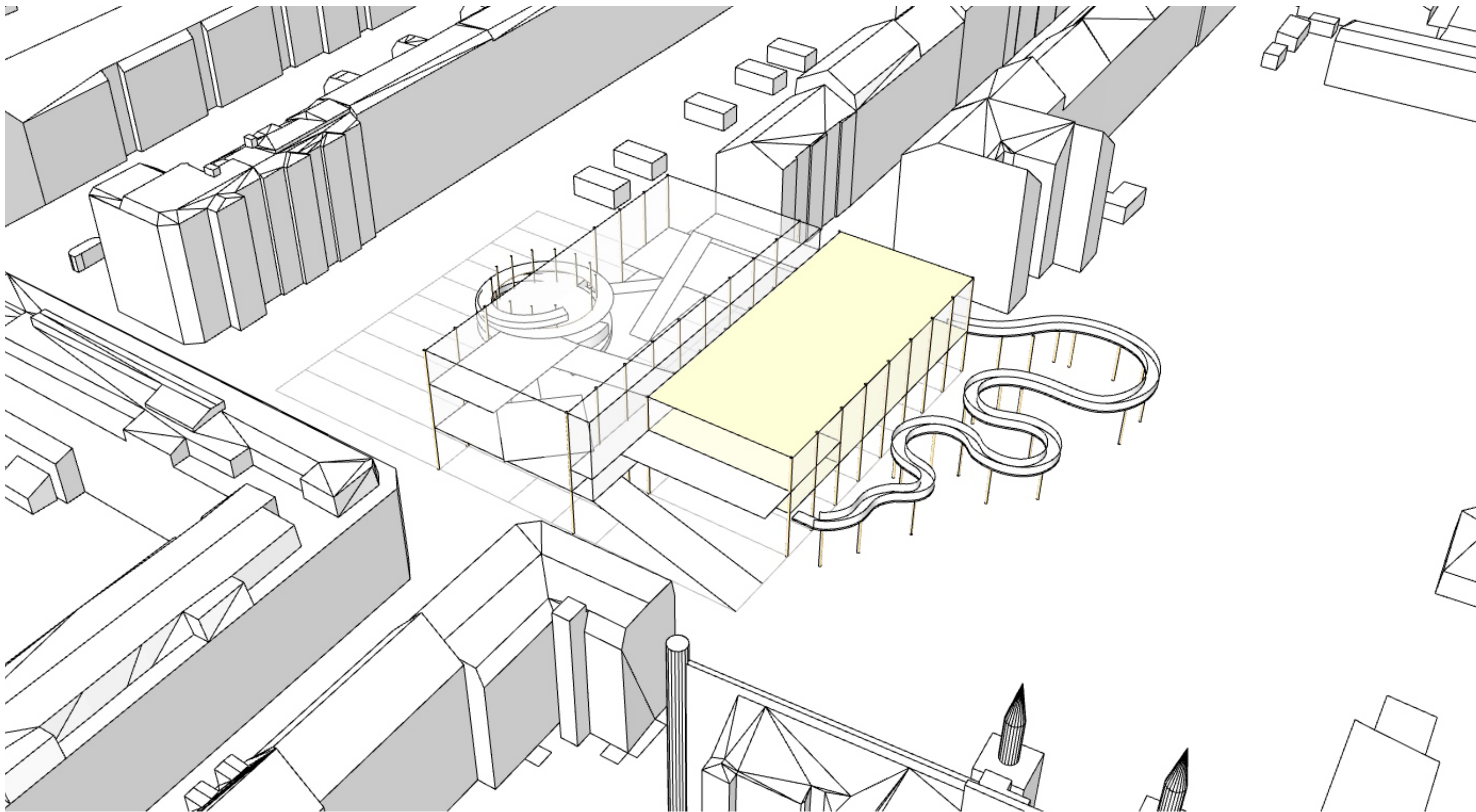


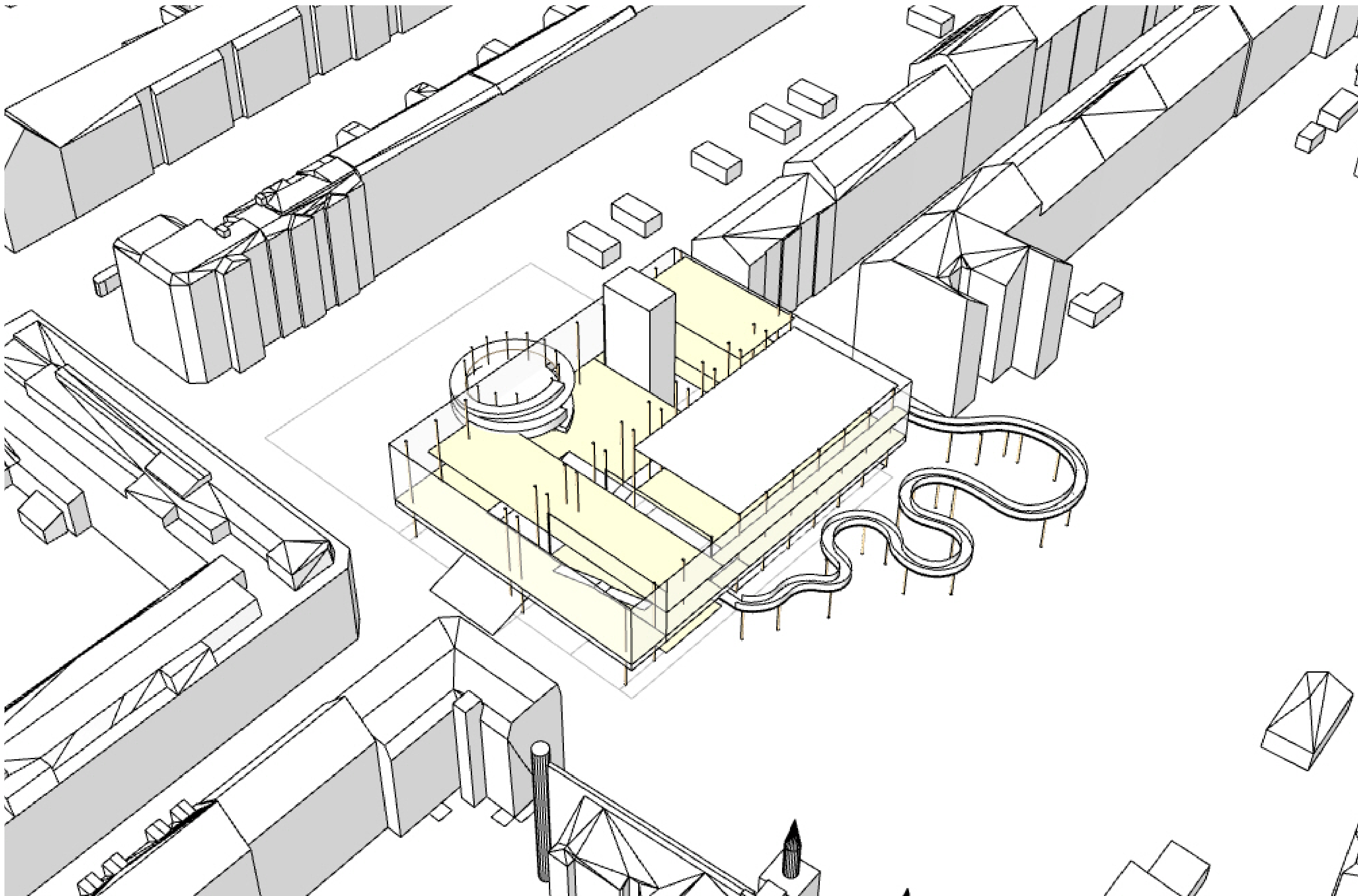












INDOOR

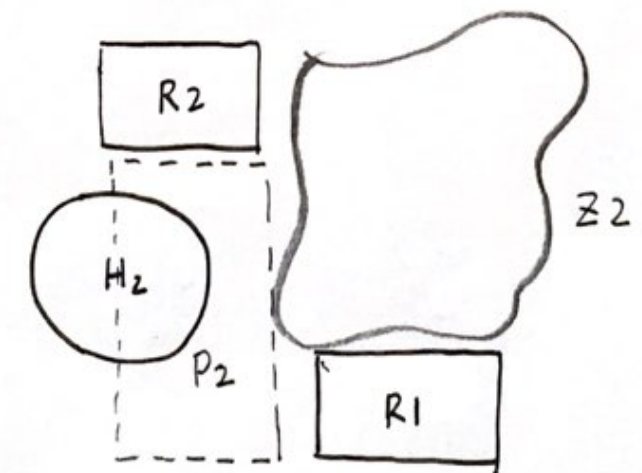
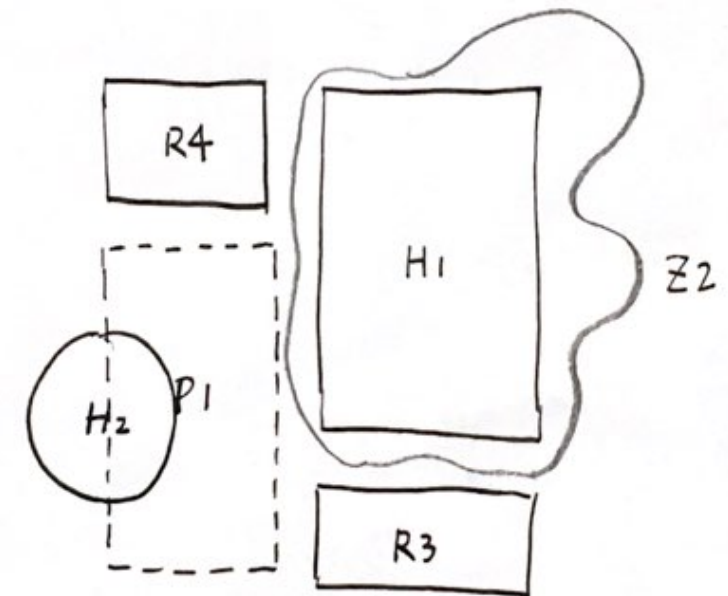
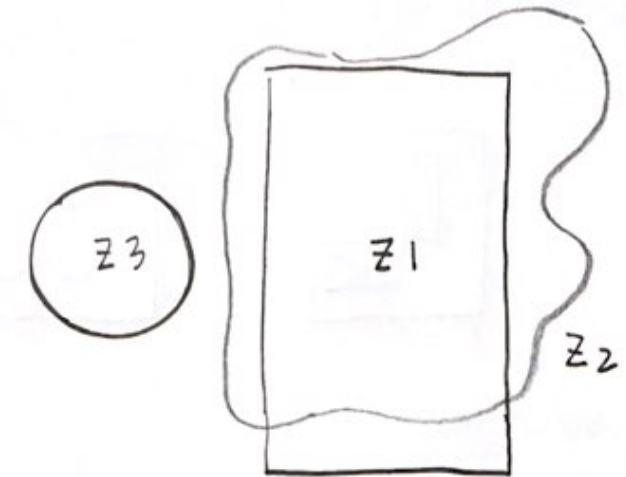
Hall 1	multi-functional rectangular hall
Hall 2	circular theatre
Hall 3	terrace auditorium
Room 1	high room with skylight
Room 2	room with balcony
Room 3	intimate soundproof room

INTERMEDIATE

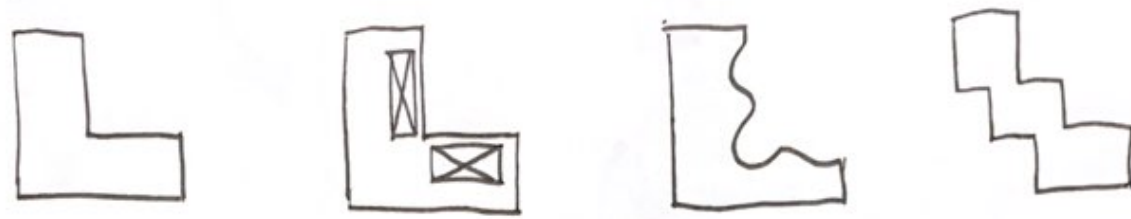
Platform 1	leisure/ exhibition/ catering
Platform 2	work/ study/ DIY
Path	runnning path with greenery

OUTDOOR

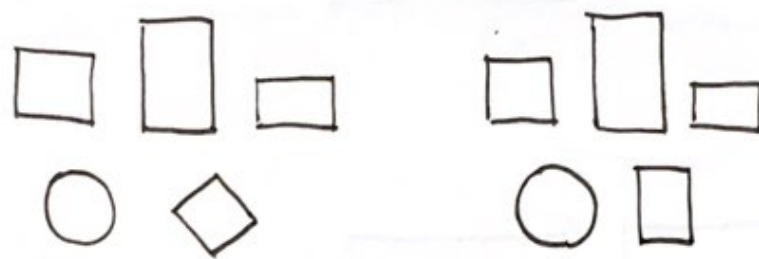
Zone 1	playground-like zone with games and sports
Zone 2	sunken amphitheater



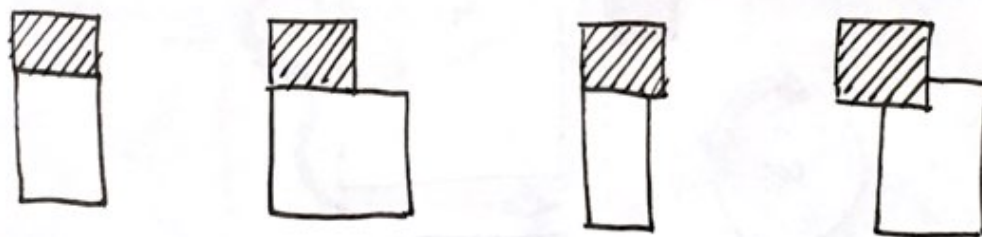
1. The shape of the platform. (horizontal circulation space)



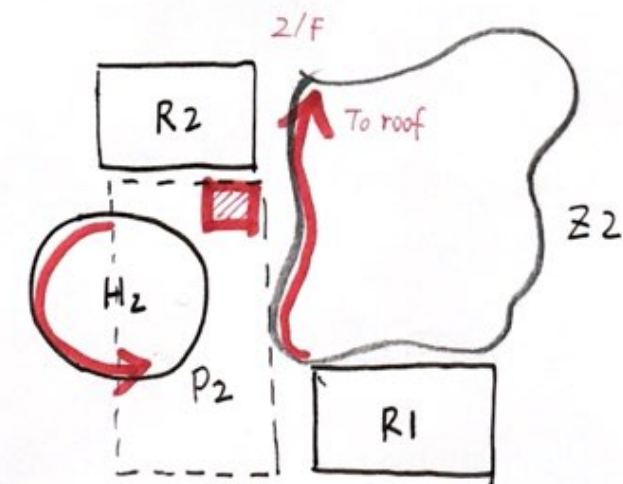
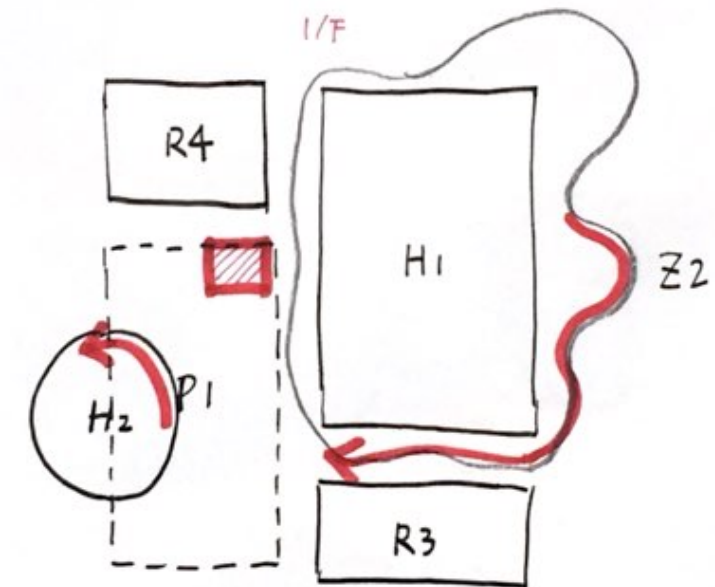
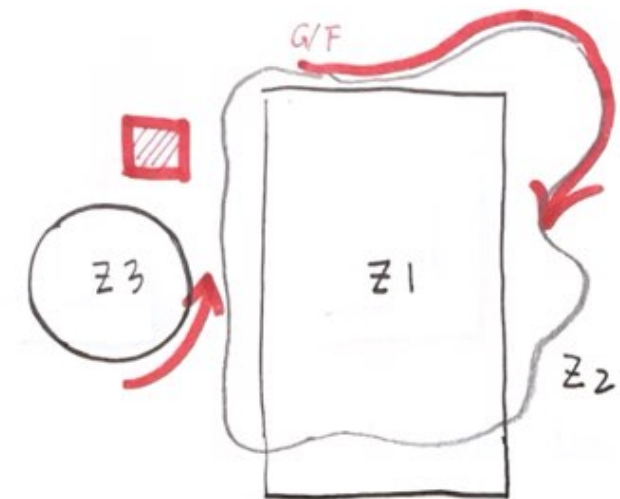
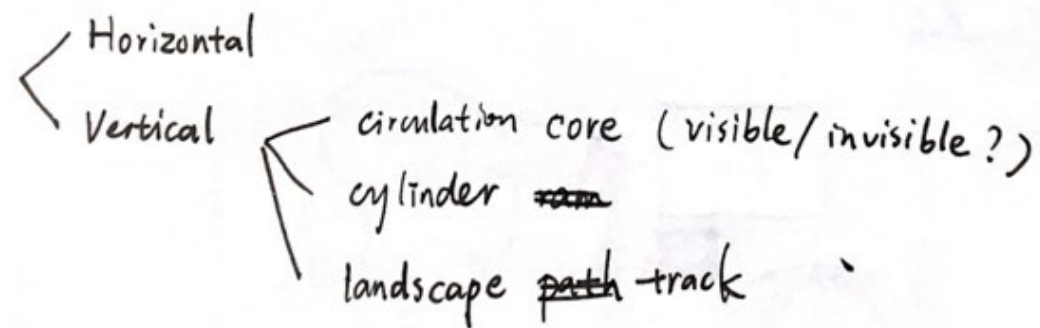
2. Indoor halls and rooms

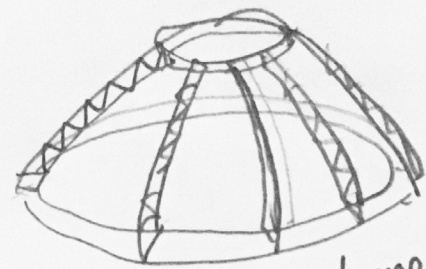


3. Relation of rooms and platform

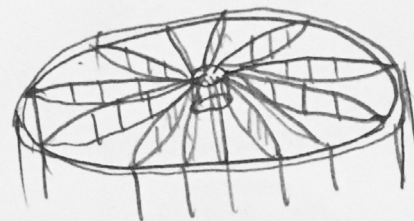


4. Multiplicity of circulation.

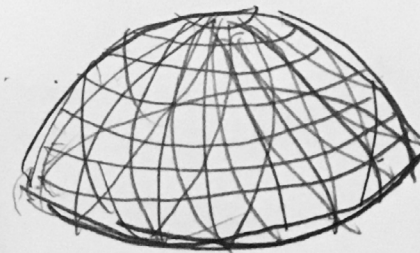




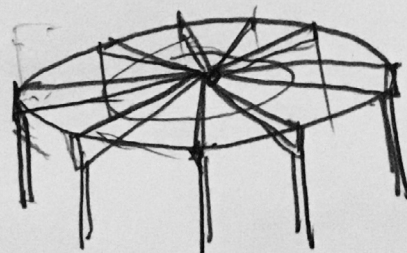
truss dome



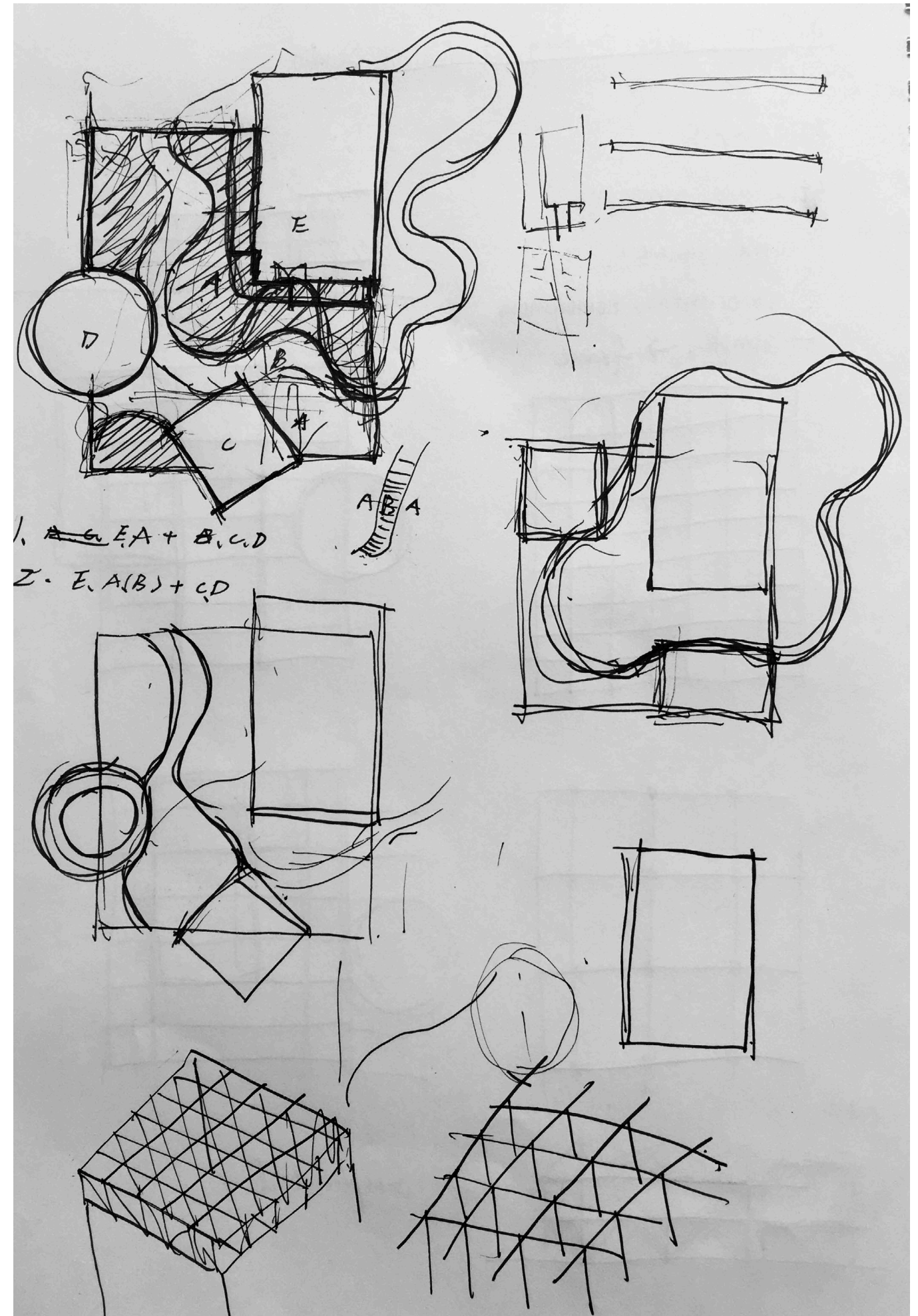
radial cable

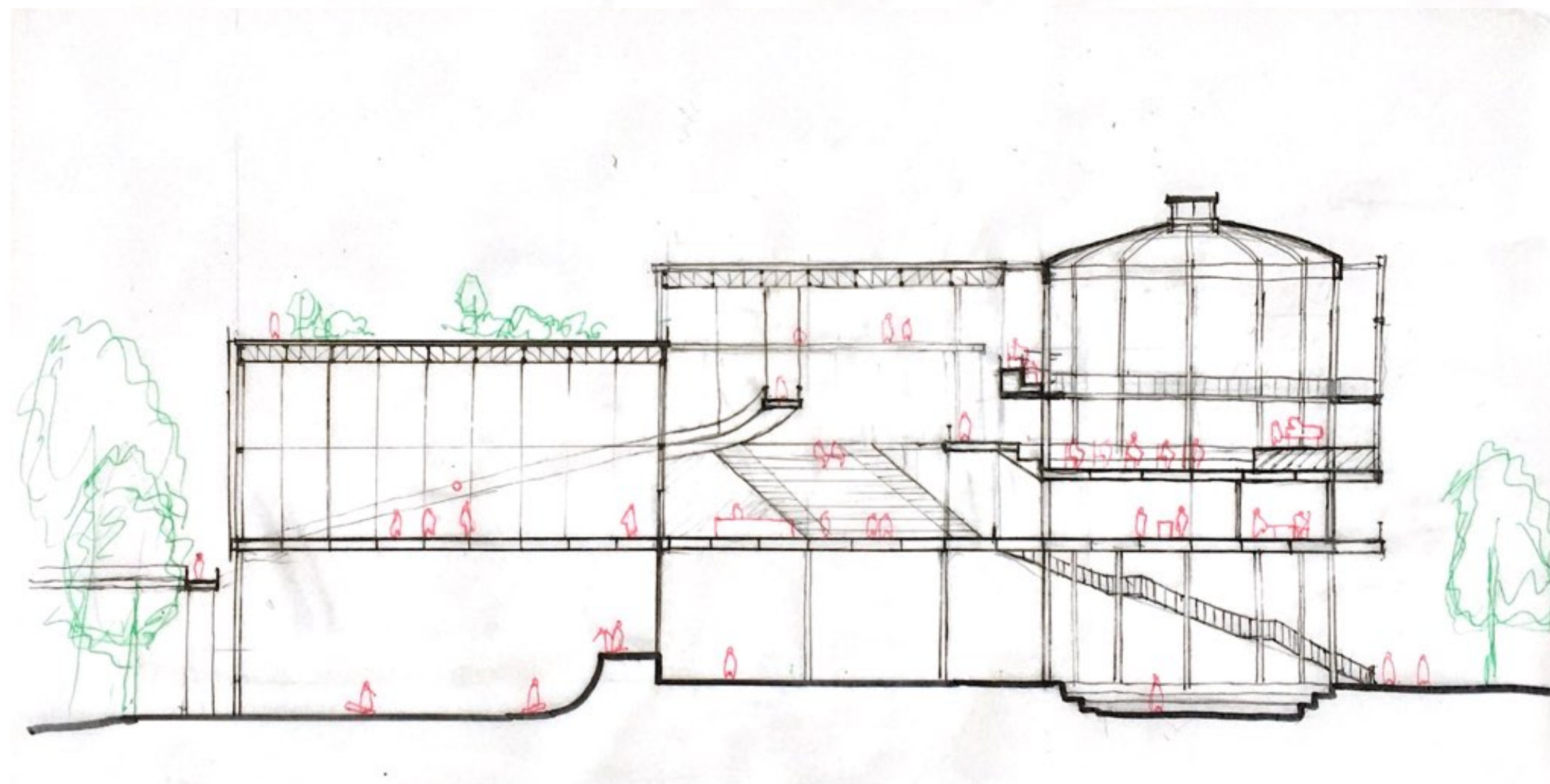
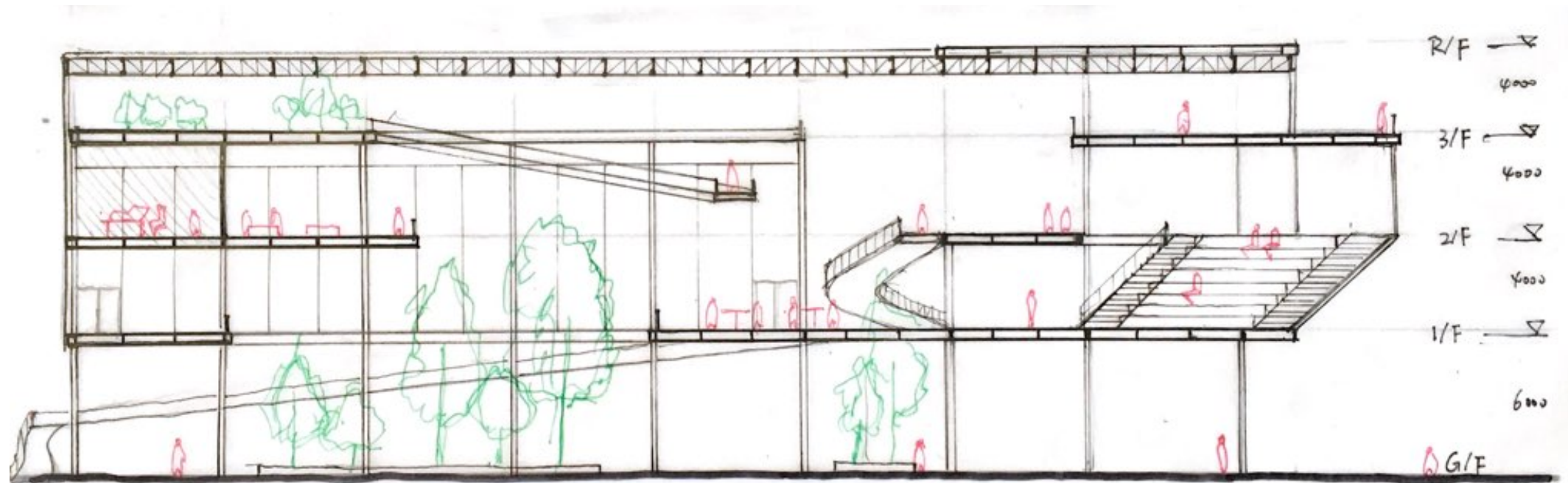


space frame shell



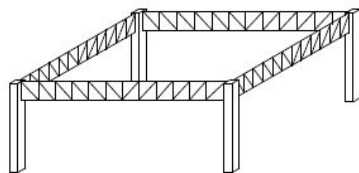
timber beam



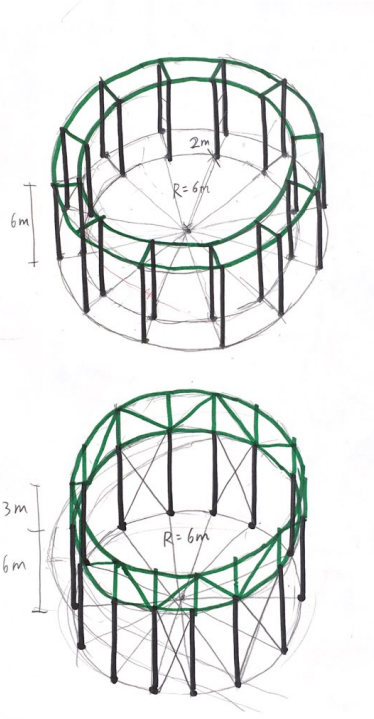
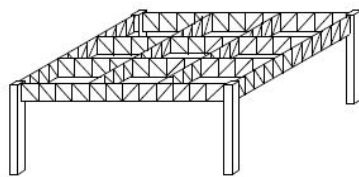


Steel Structure

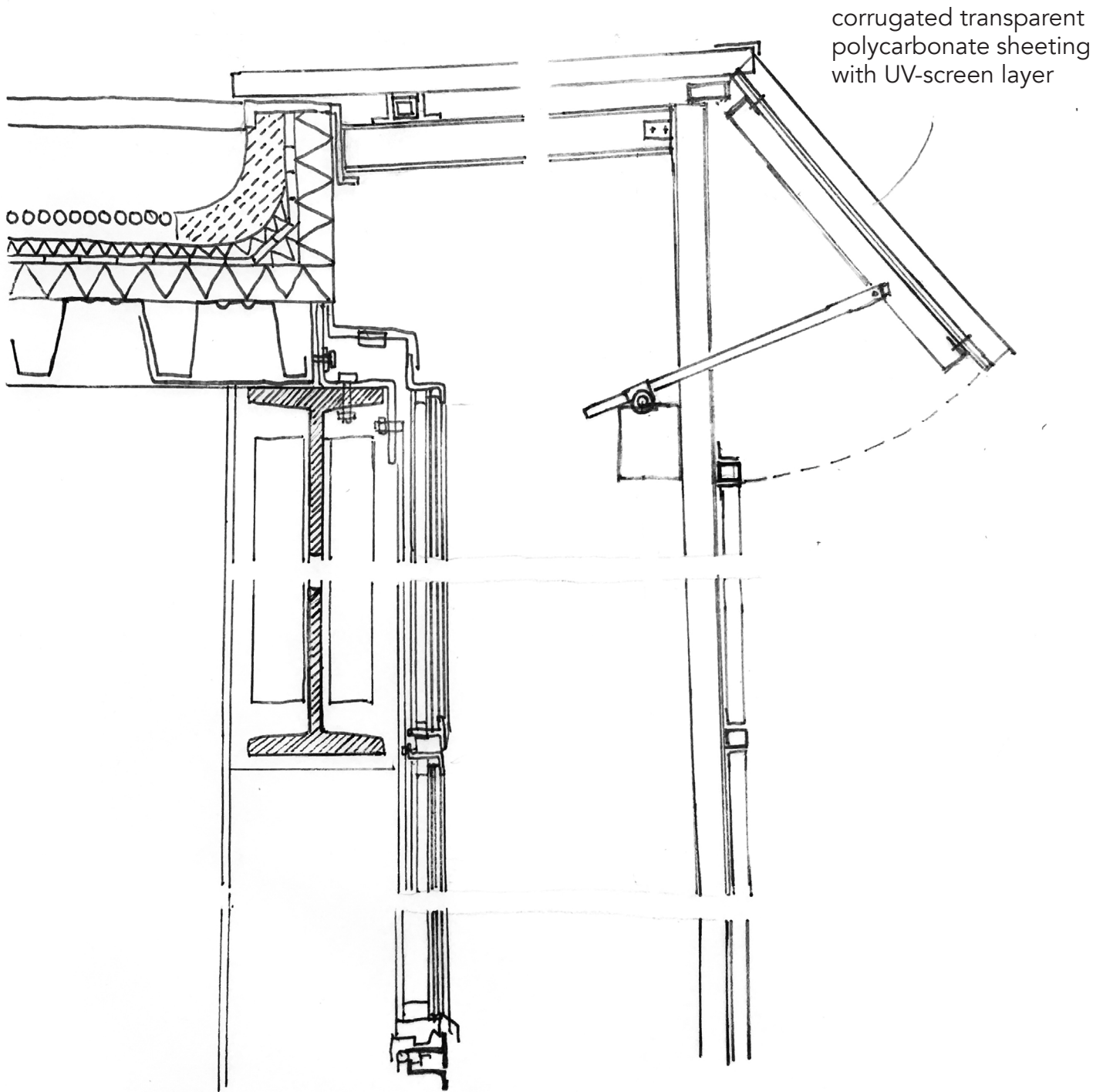
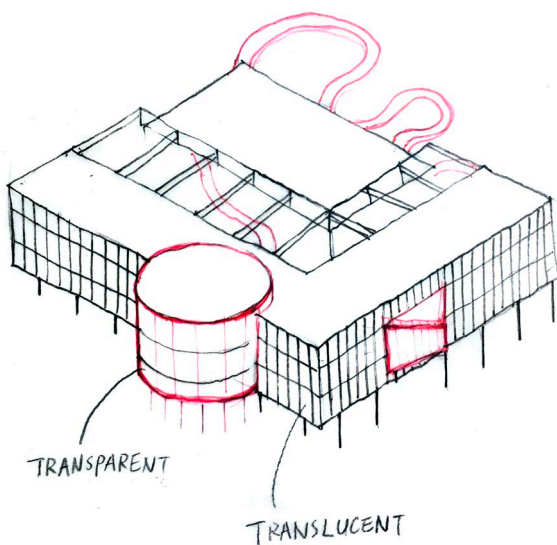
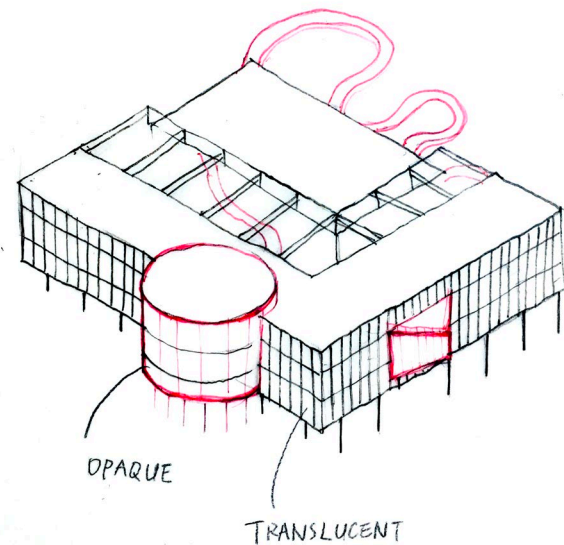
Main lattice girders

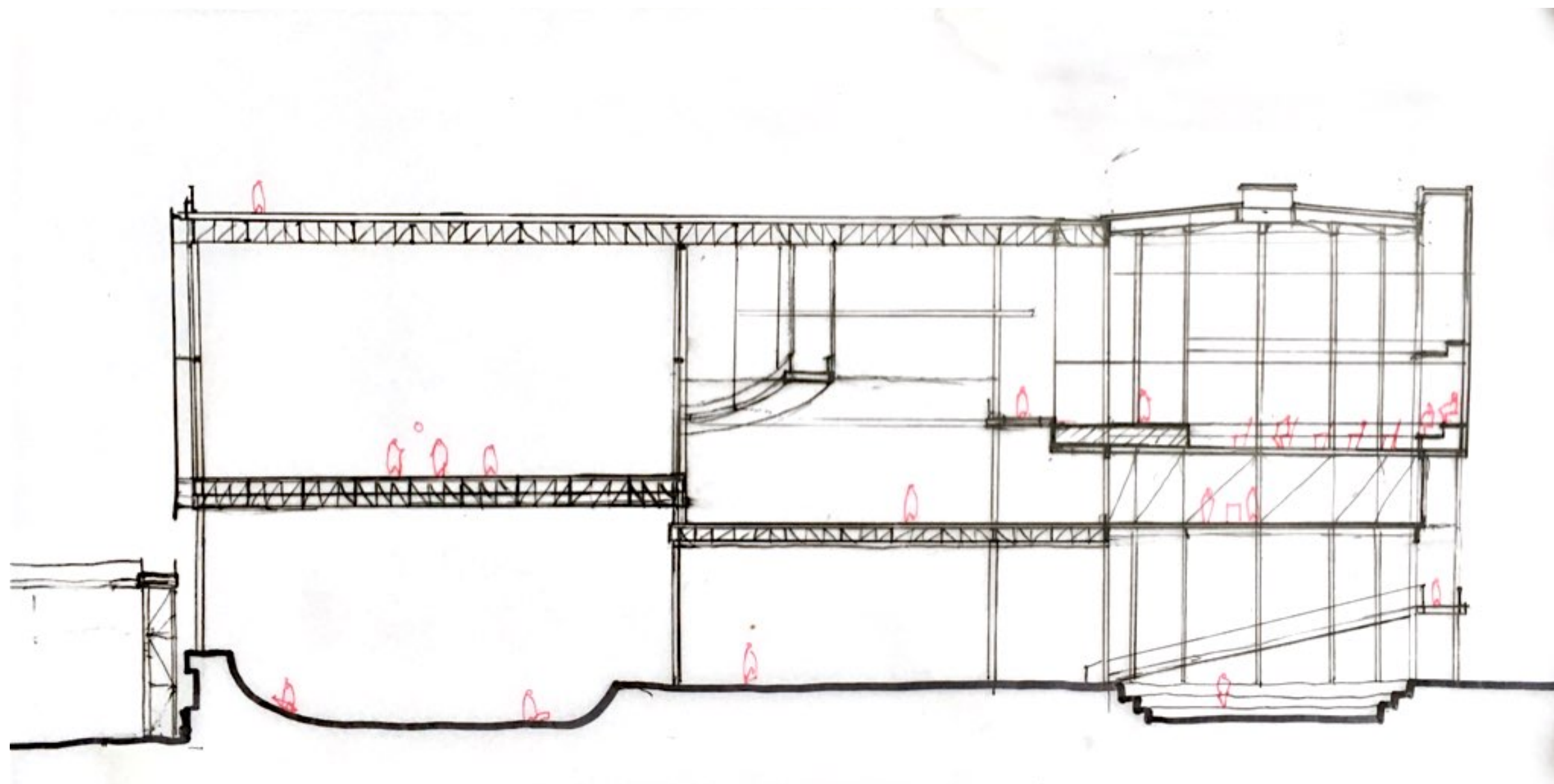


Intermediate lattice girders



Facade Study





3 CLIMATE CONDITIONS

INDOOR

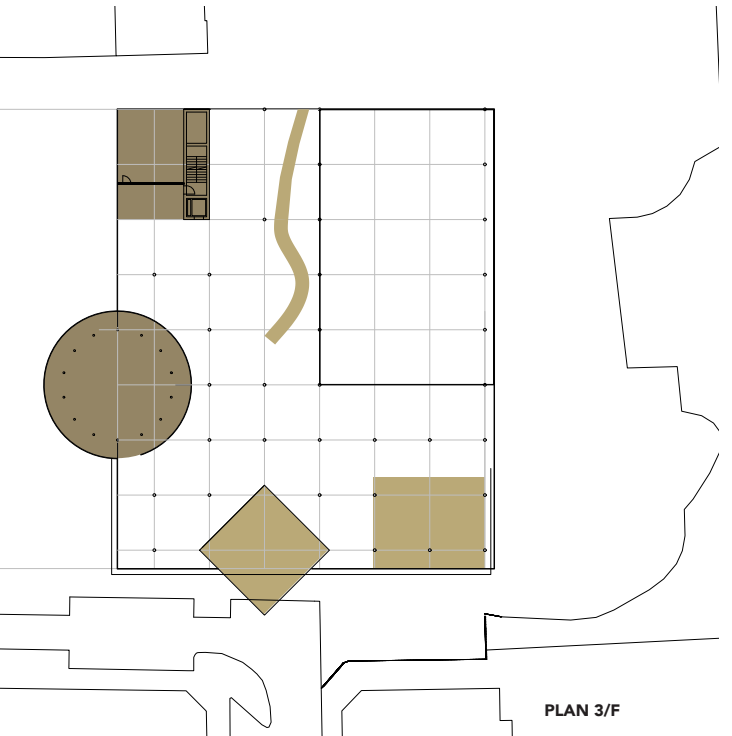
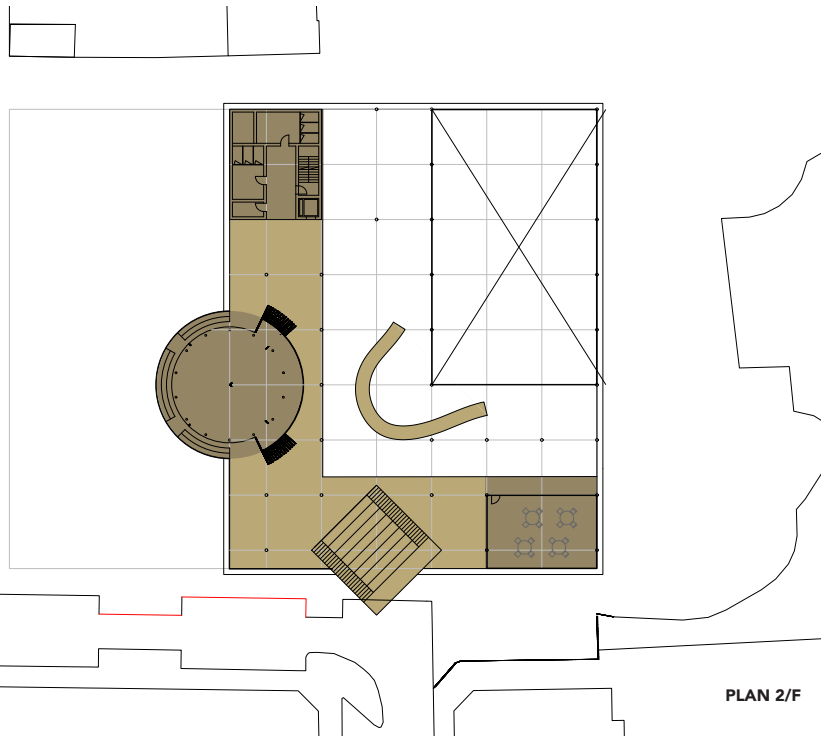
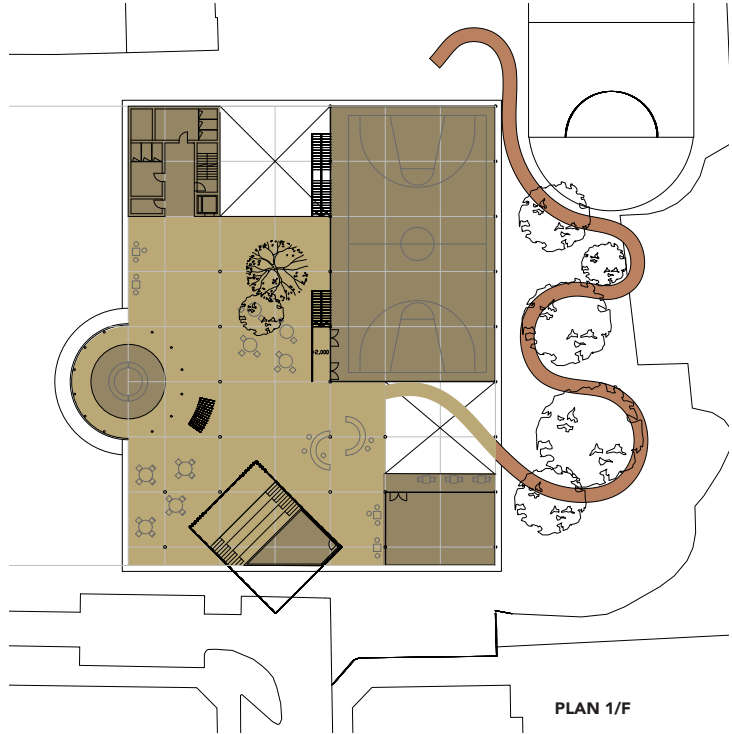
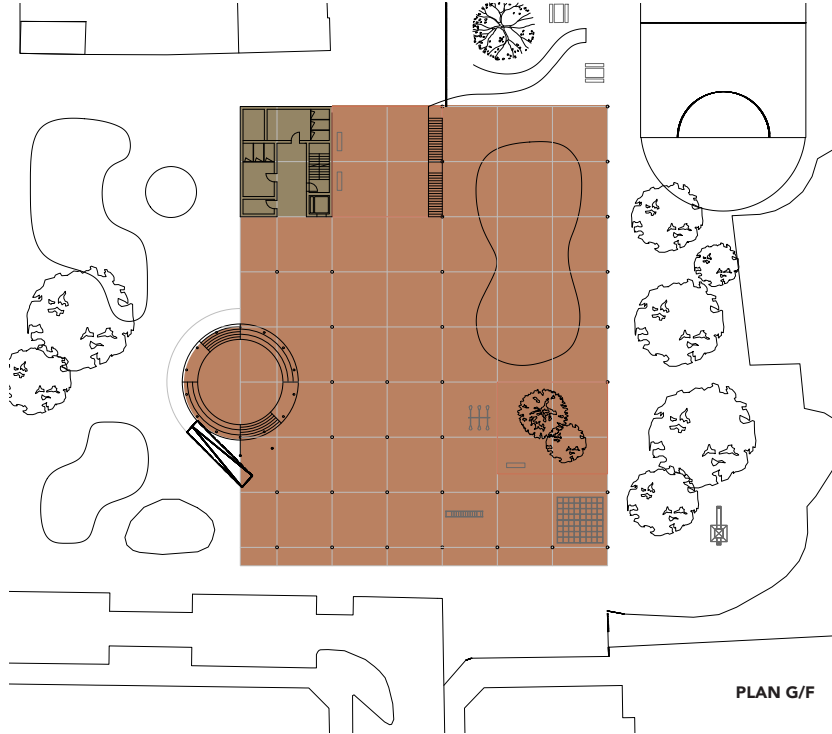
- Hall 1 multi-functional rectangular hall
- Hall 2 circular theatre
- Hall 3 terrace auditorium
- Room 1 high room with skylight
- Room 2 room with balcony
- Room 3 intimate soundproof room

INTERMEDIATE

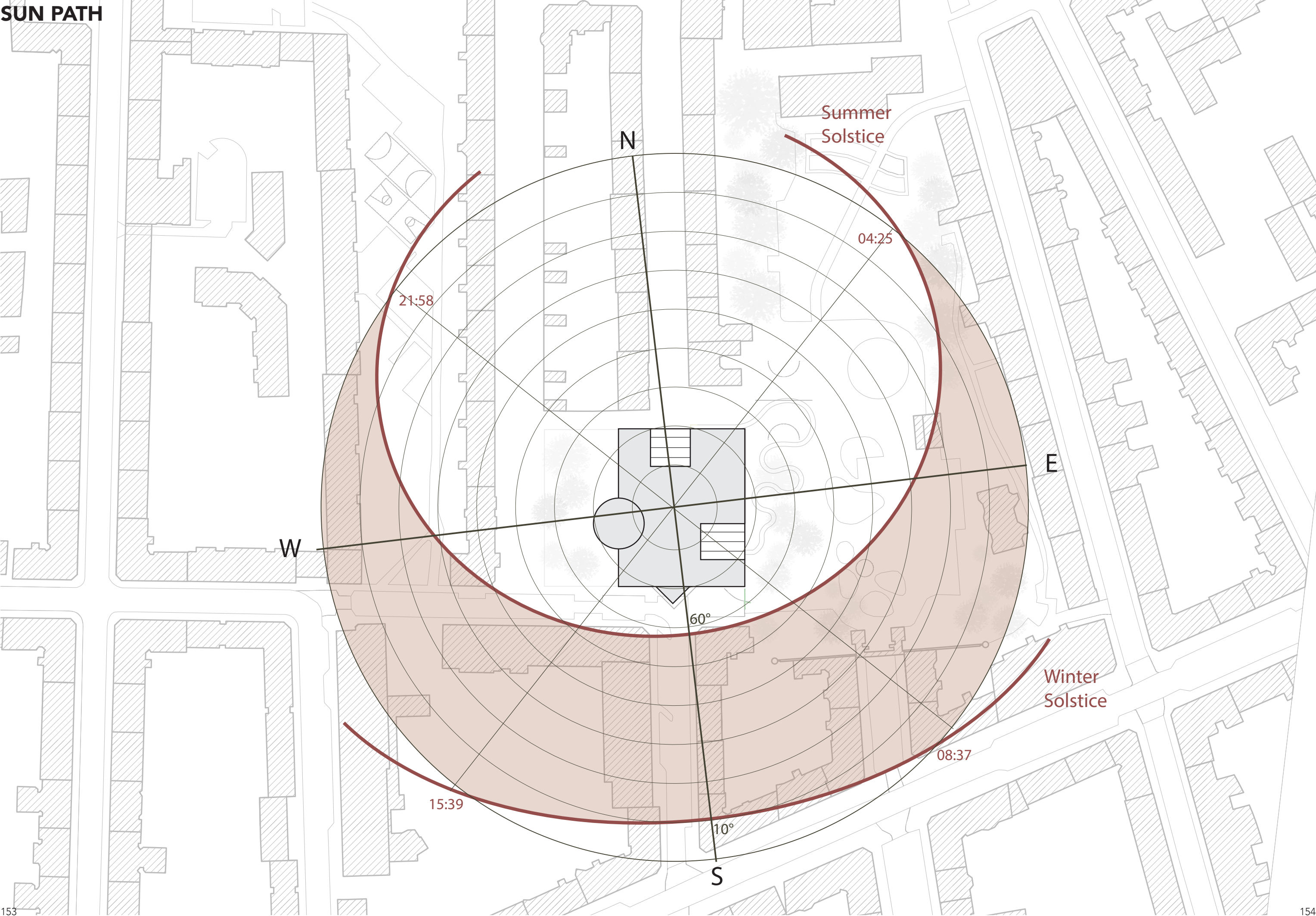
- Platform 1 leisure/ exhibition/ catering
- Platform 2 work/ study/ DIY
- Path runnning path with greenery

OUTDOOR

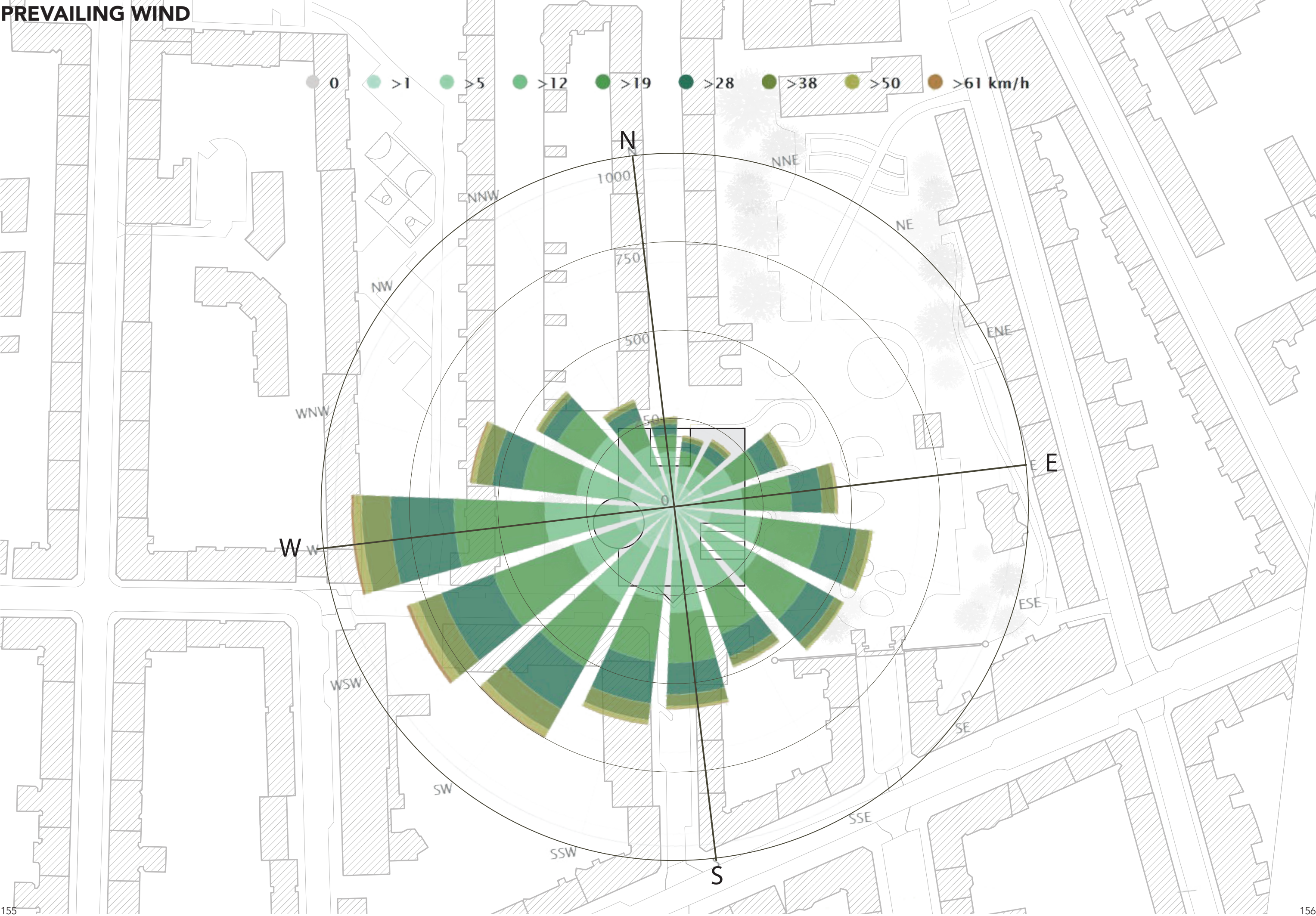
- Zone 1 playground-like zone with games and sports
- Zone 2 sunken amphitheater



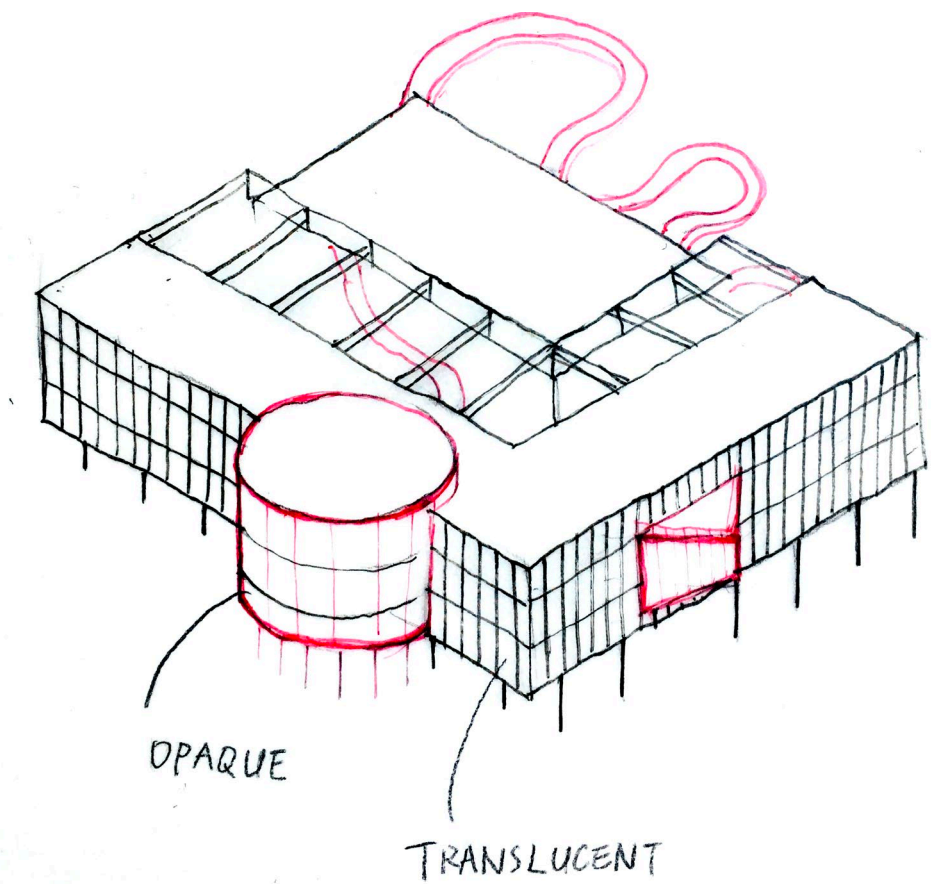
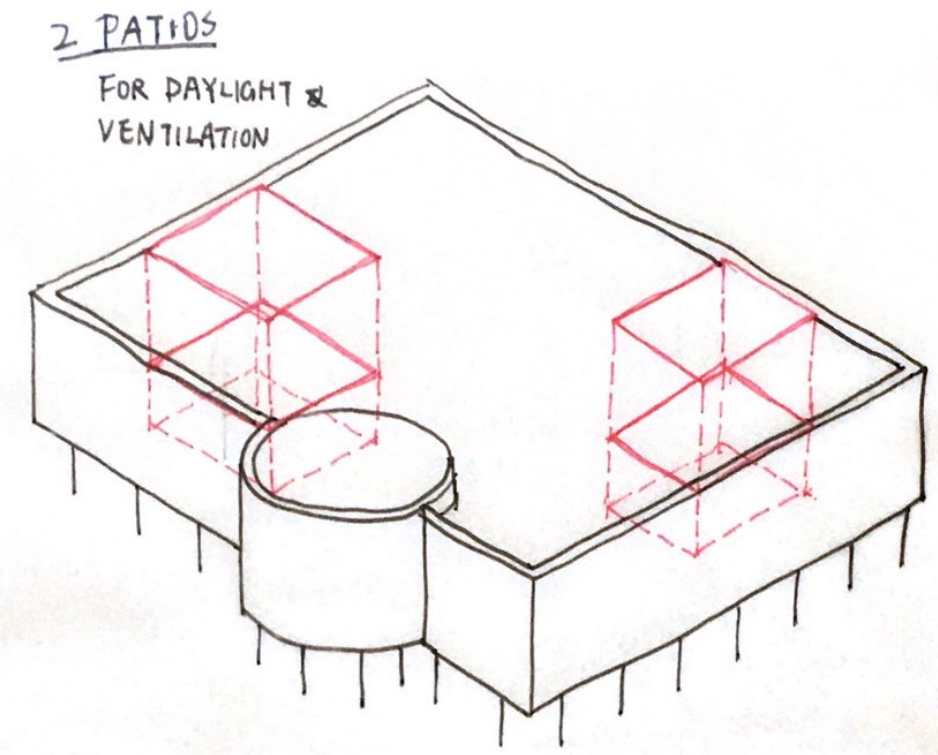
SUN PATH



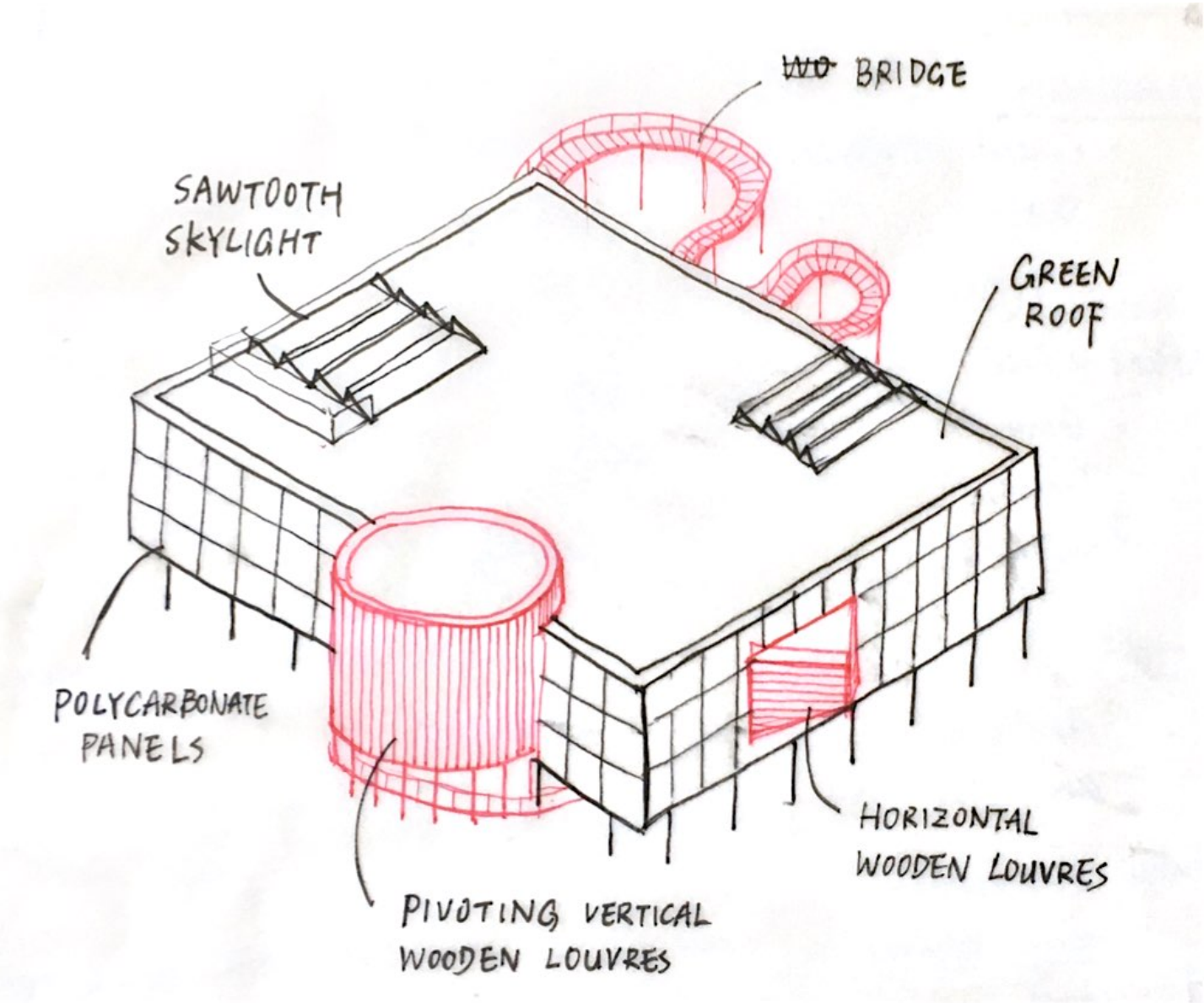
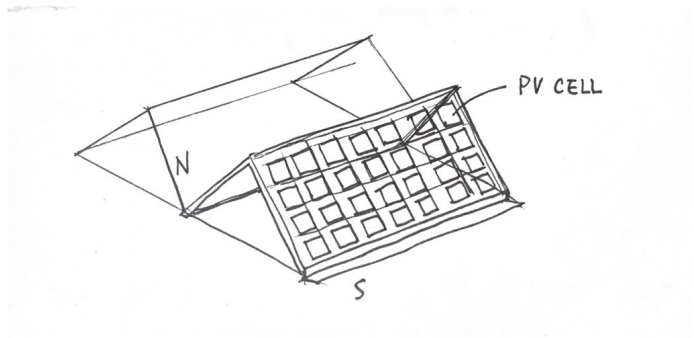
PREVAILING WIND



MASSING



MATERIALS

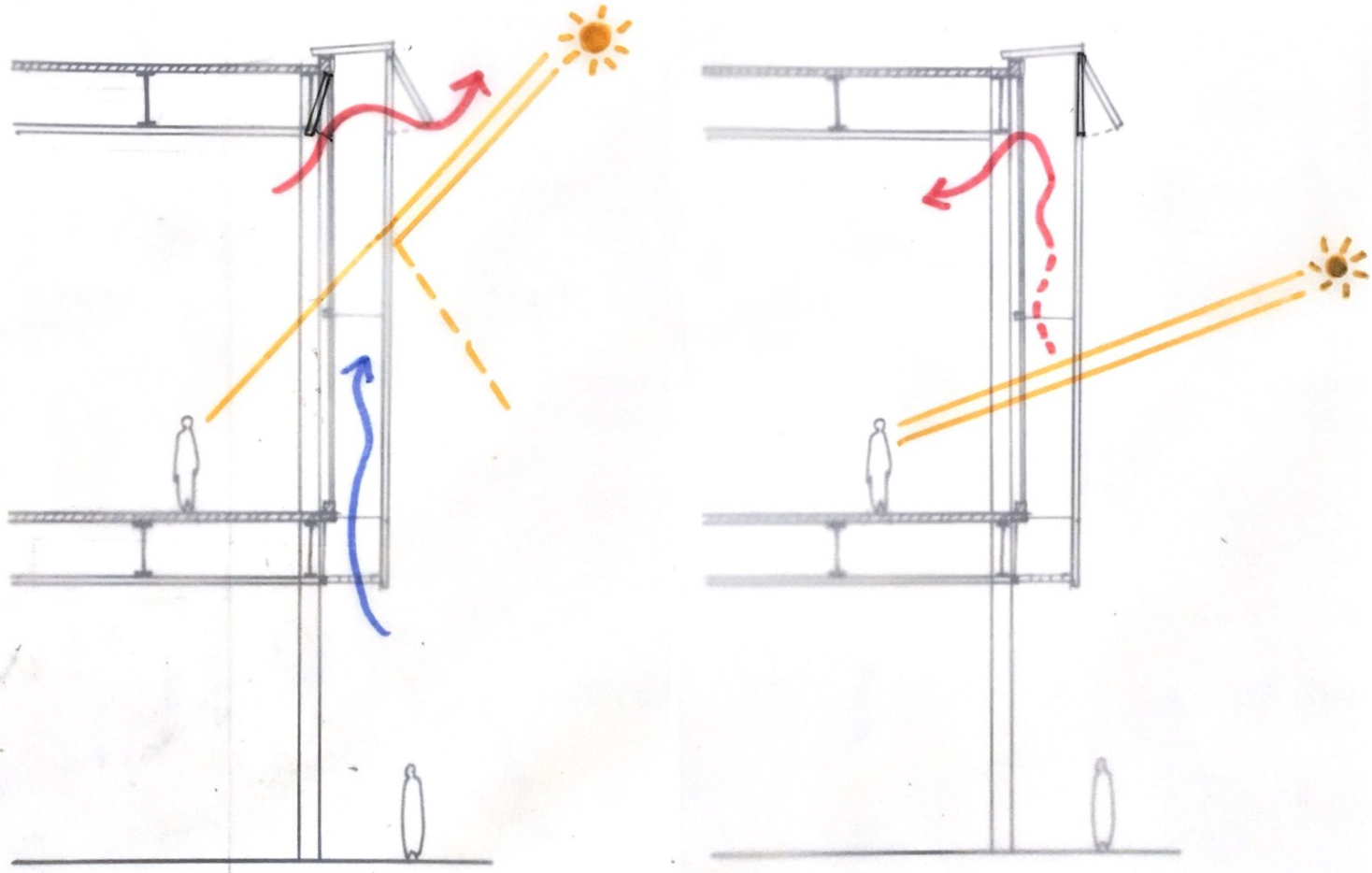
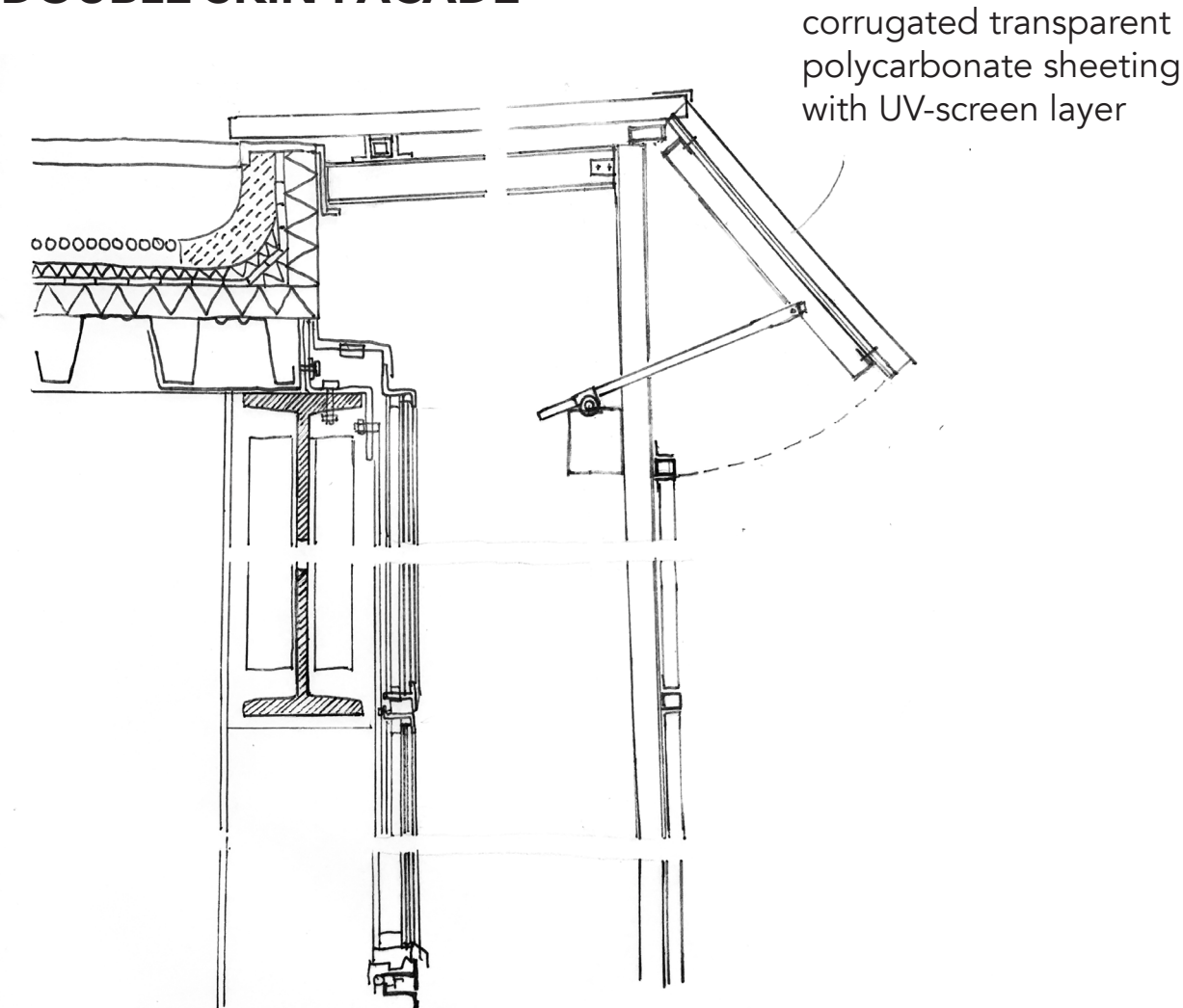


FACADE CASE STUDY

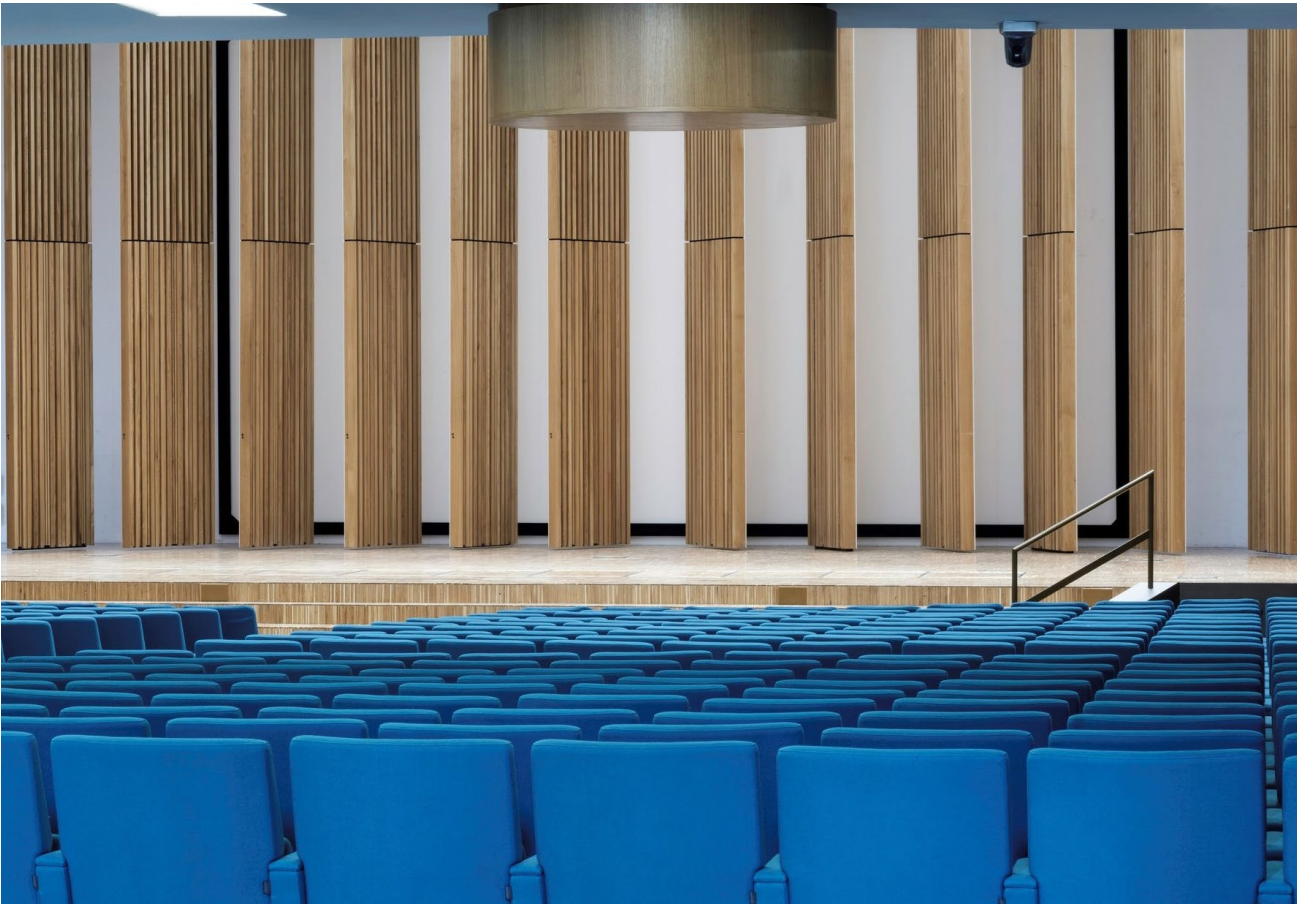
FAIR & EXHIBITION HALL, PARIS NORD
Lacaton & Vassal, 2007



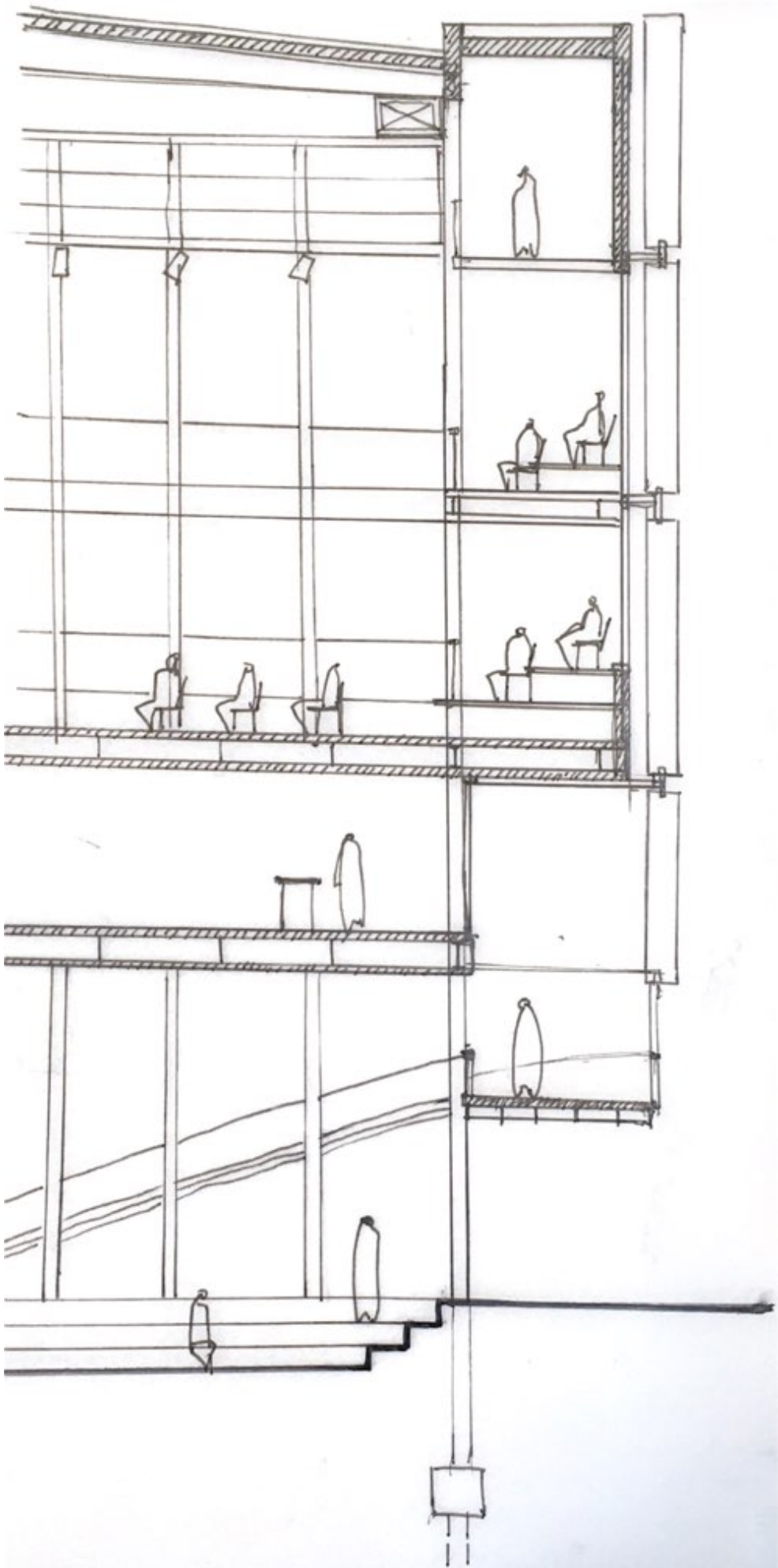
DOUBLE SKIN FACADE

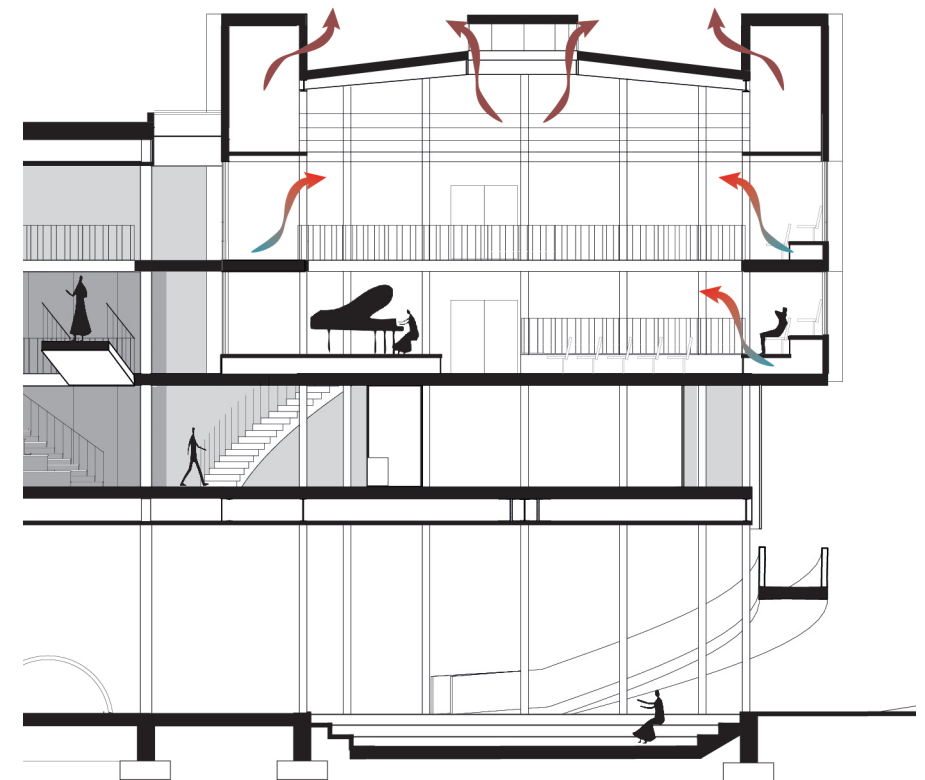
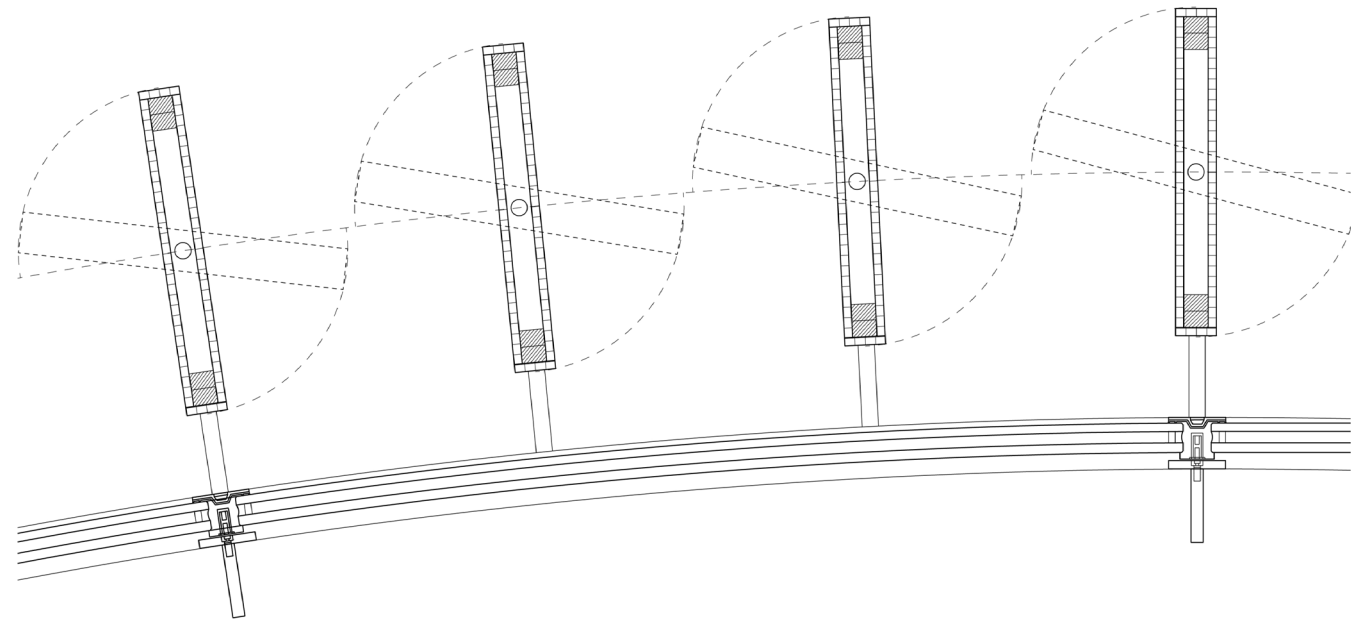
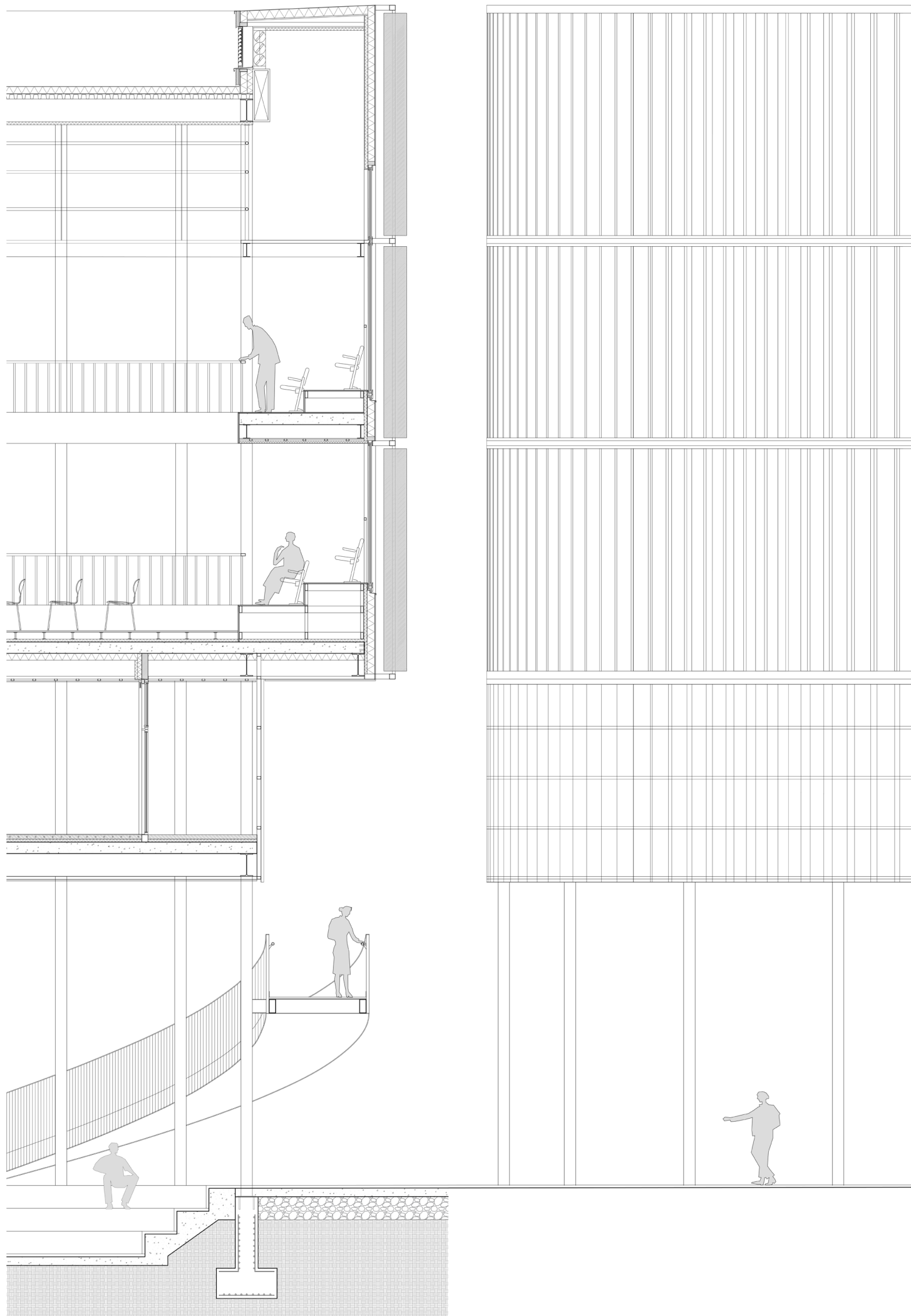


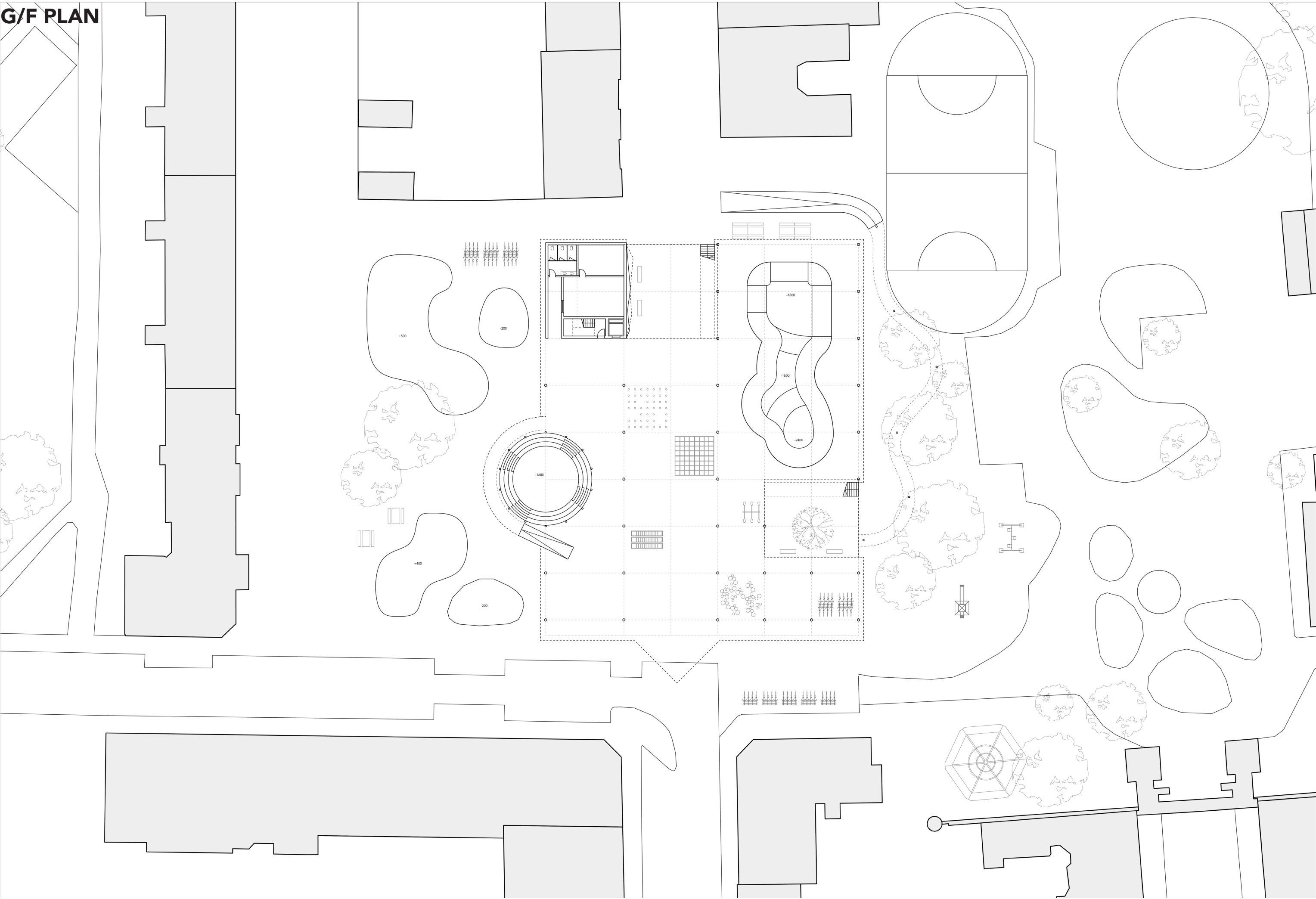
PIVOTING MOVABLE LOUVRES



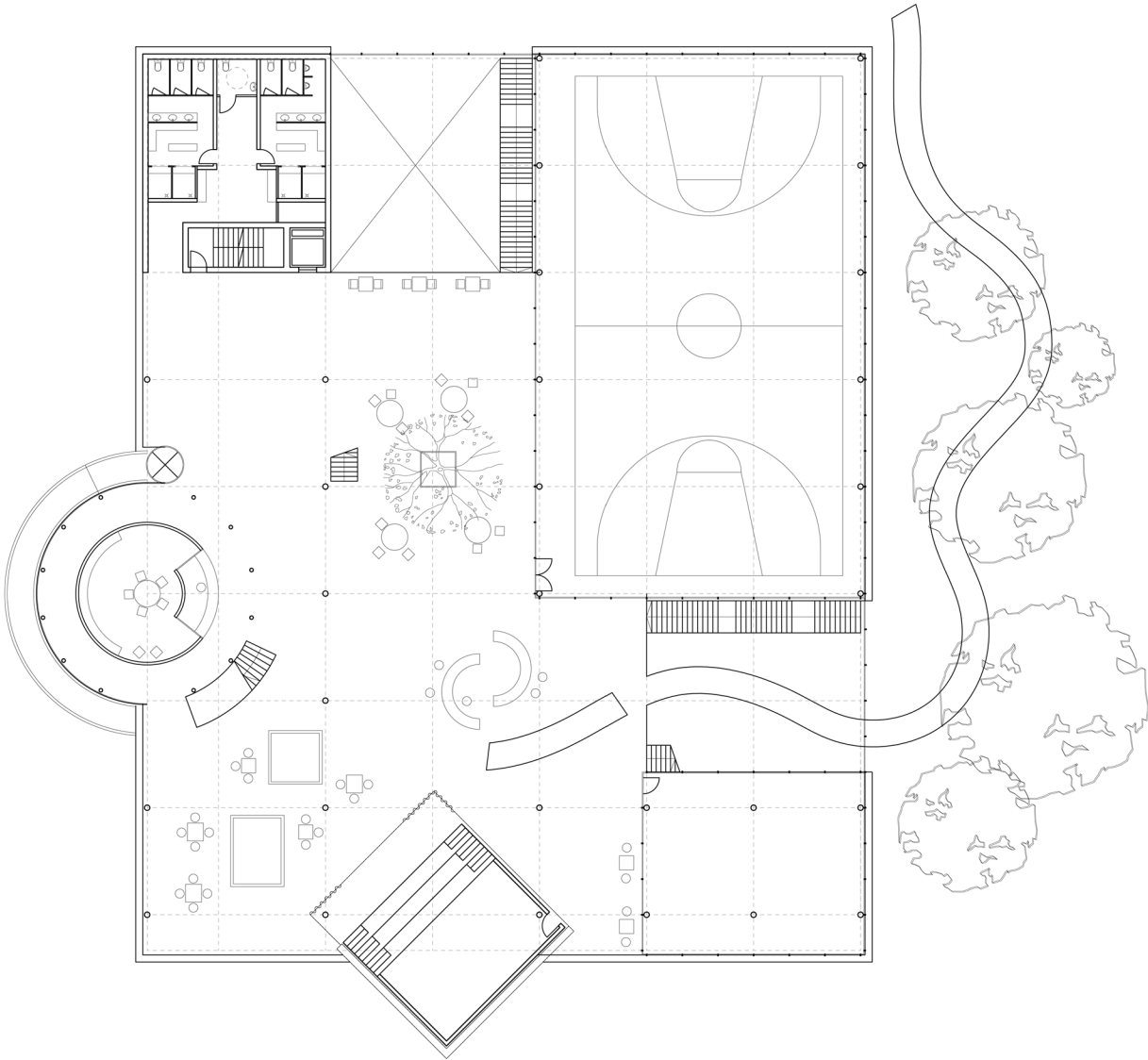
THEATER SECTION



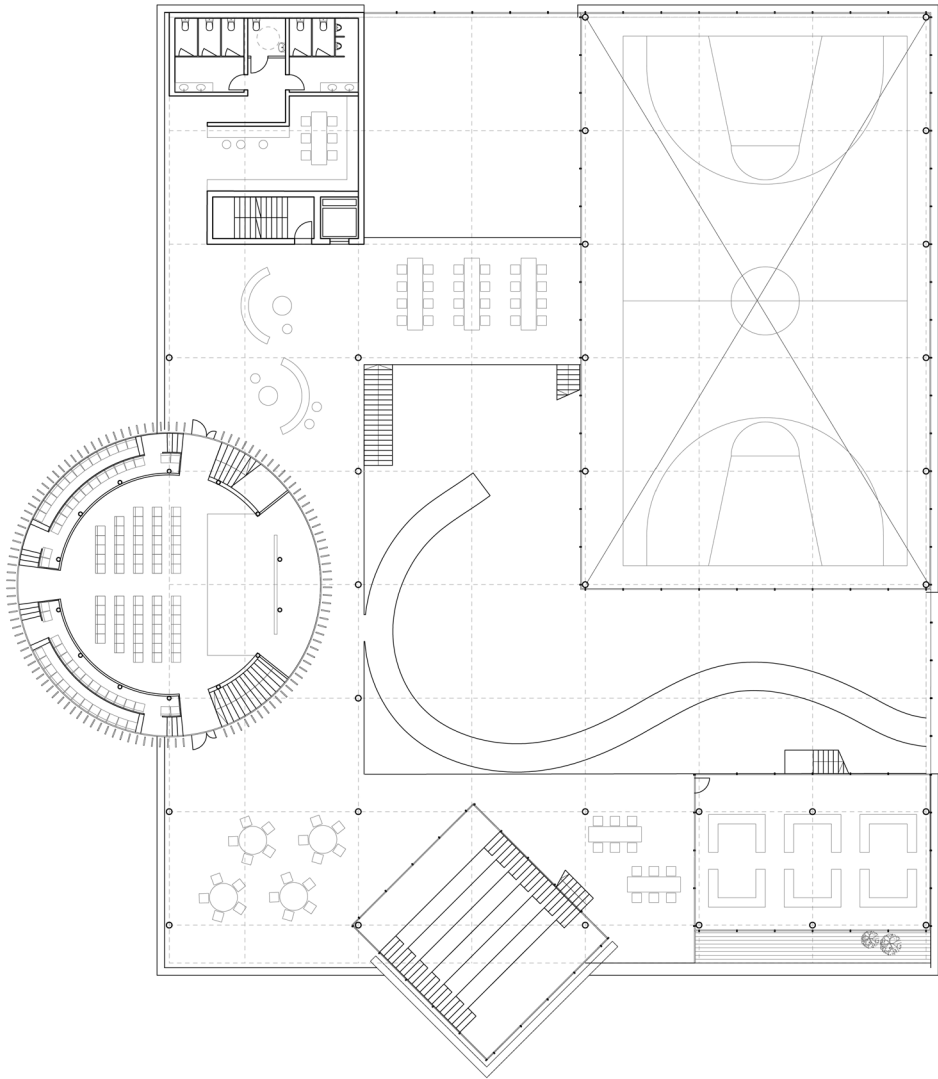


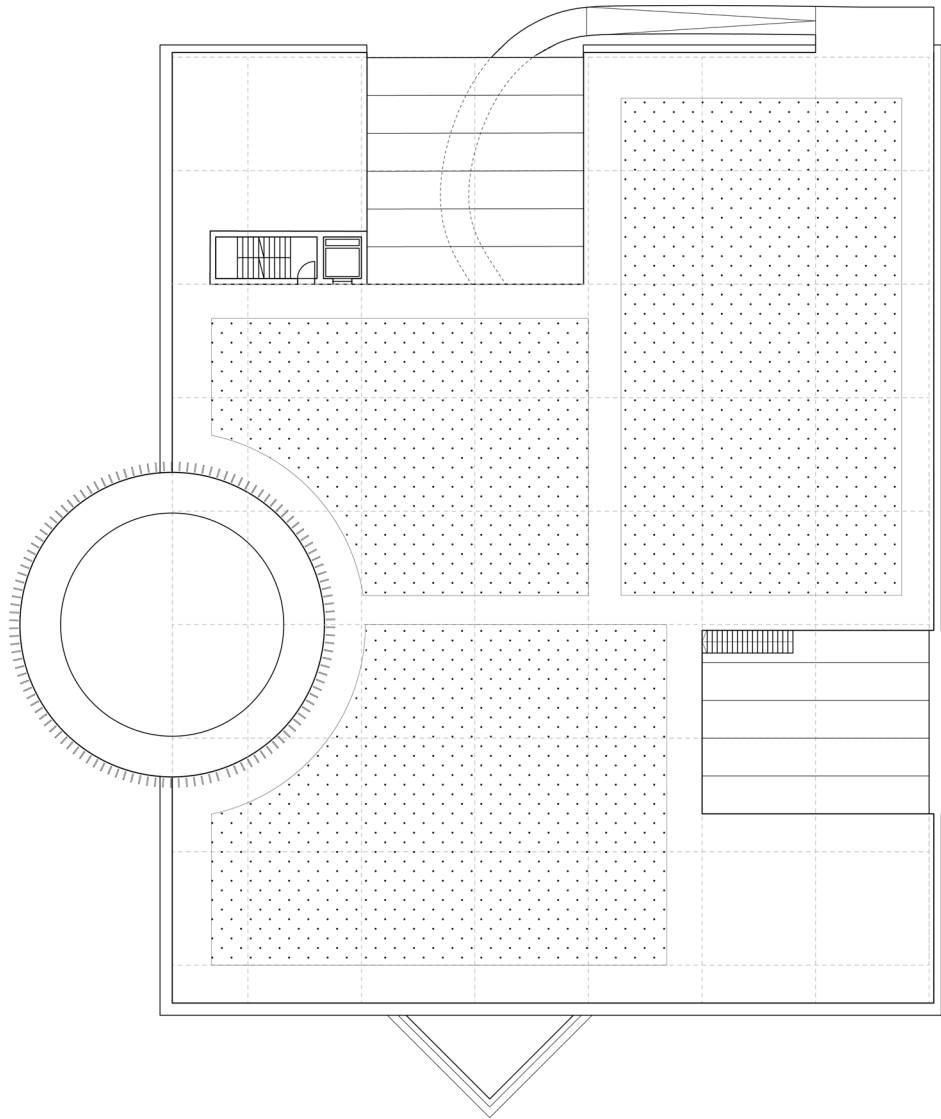
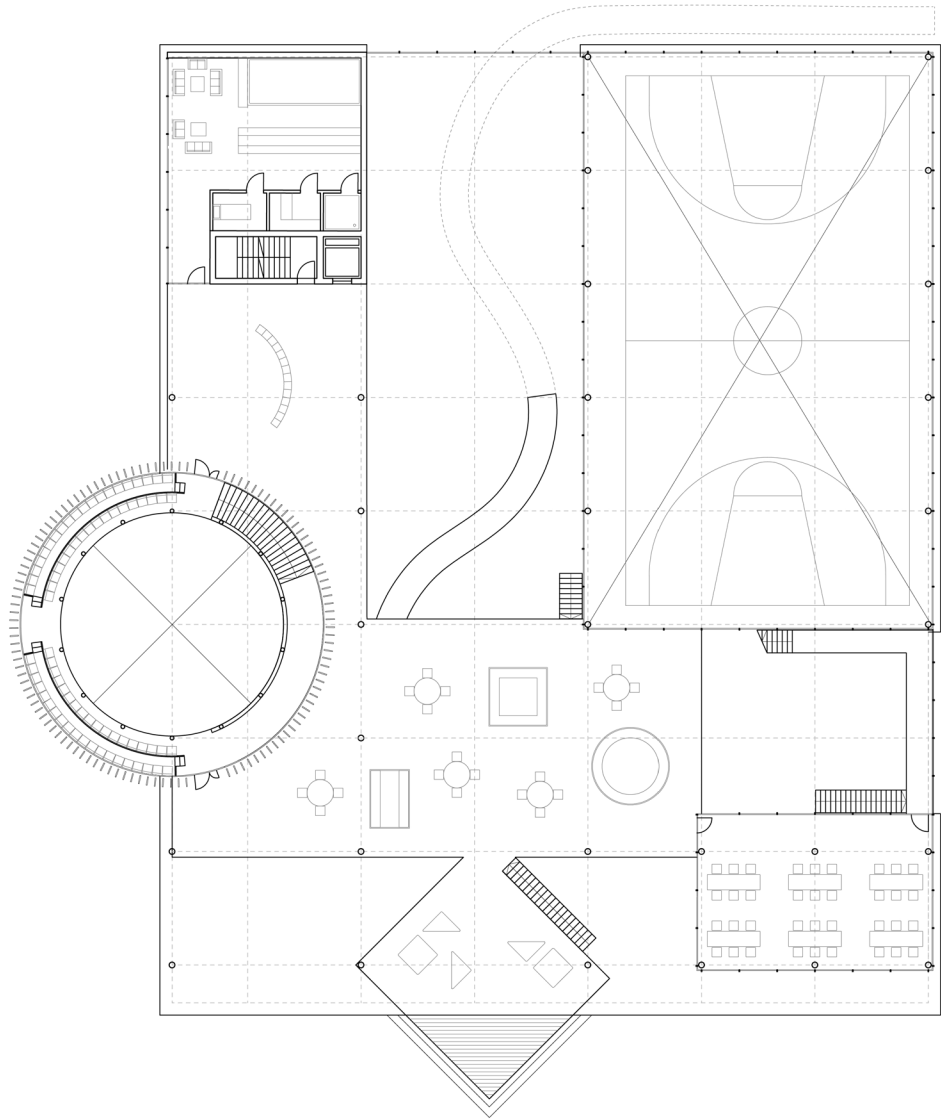


1/F PLAN

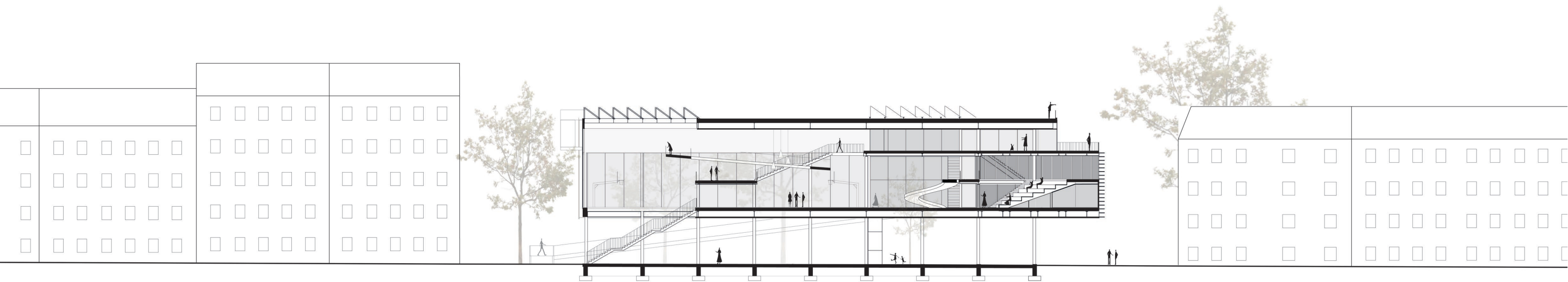
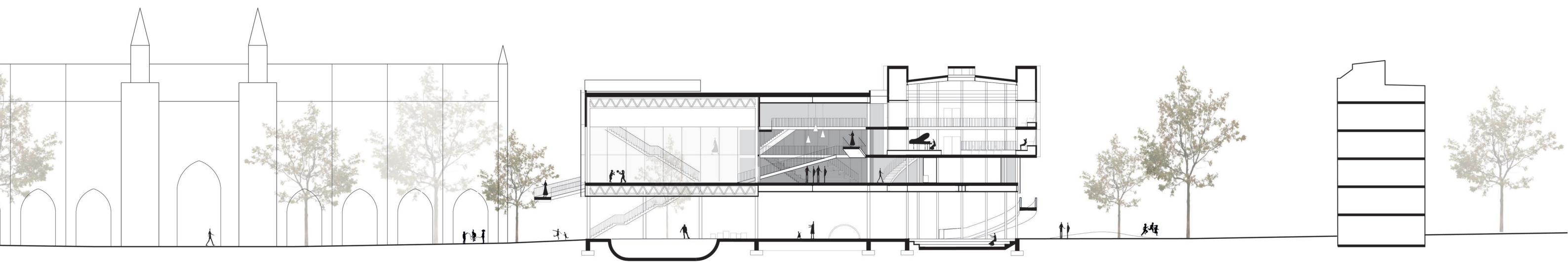


2/F PLAN

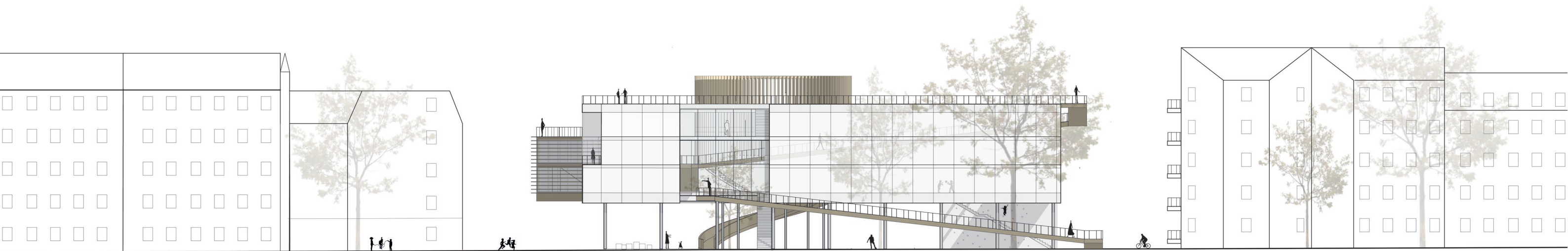
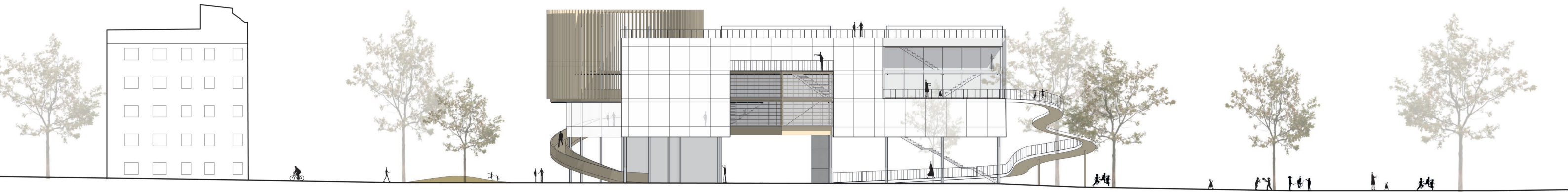




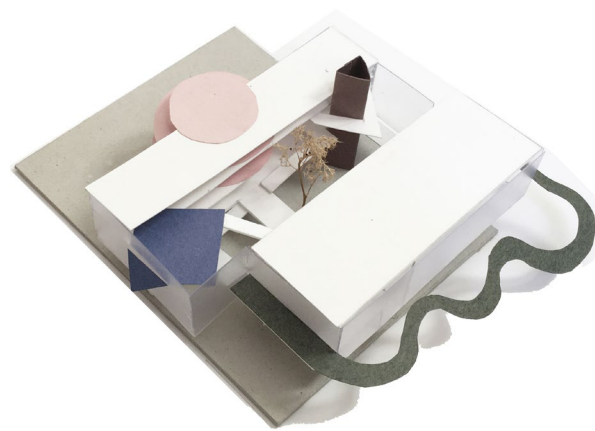
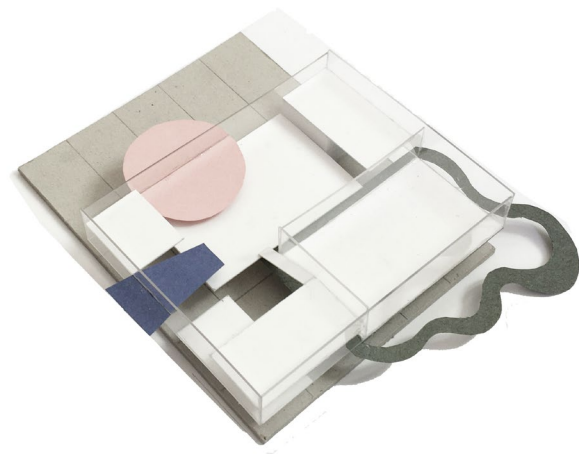
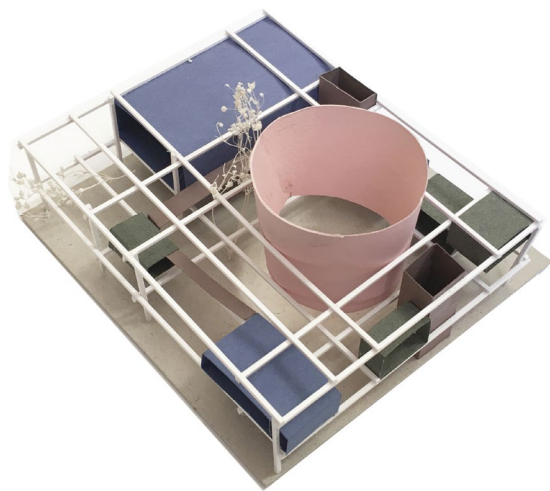
SECTION



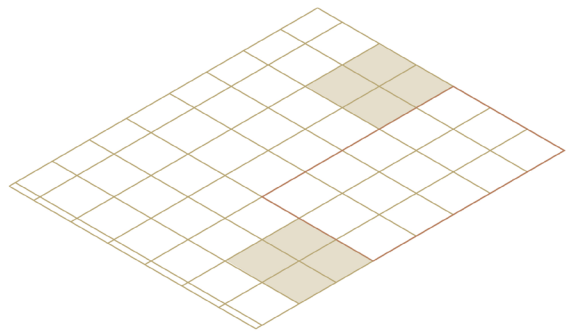
ELEVATION



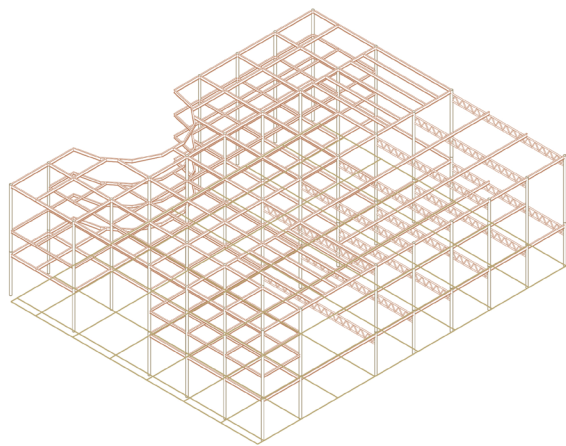
CONCEPTUAL MODEL



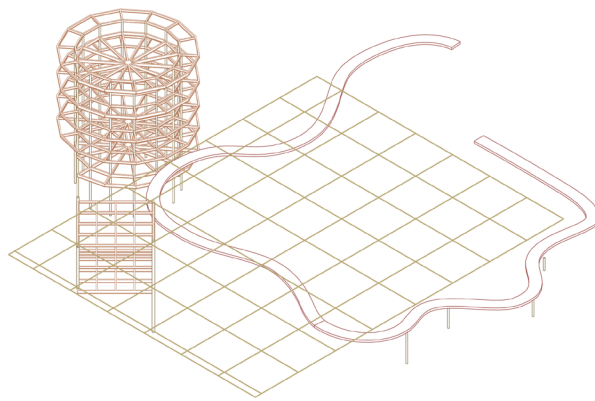
STRUCTURE



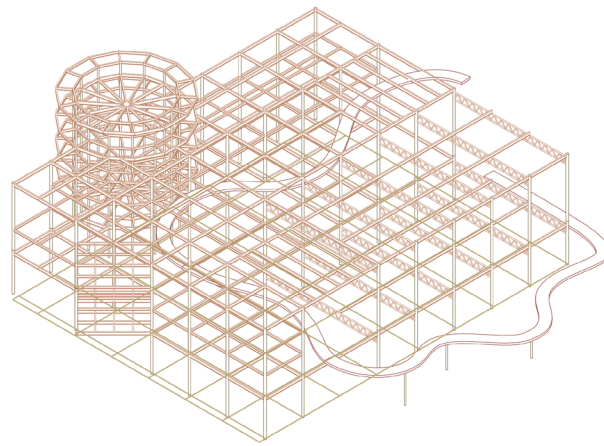
6x6m grid



Regular steel frame



Additional structure



Combination



Roof garden



Platform 3/F

study/ creative workspace



Platform 2/F

leisure/ exhibition/ workshop



Platform 1/F

reception/ administration/ shop/ catering

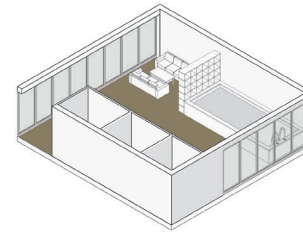


Open G/F

interactive play area/ sports/ gathering/ green space



3 ---> R/F
stair to roof
garden

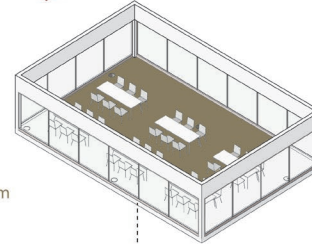


Room 4

3/F
healthcare area
spa /sauna /physiotherapy

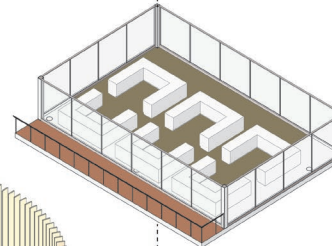
Room 3

3/F
classroom



Room 2

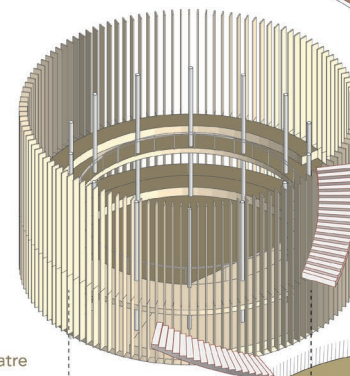
2/F
room with balcony
cooking/DIY workshop



G-R/F
circulation
core

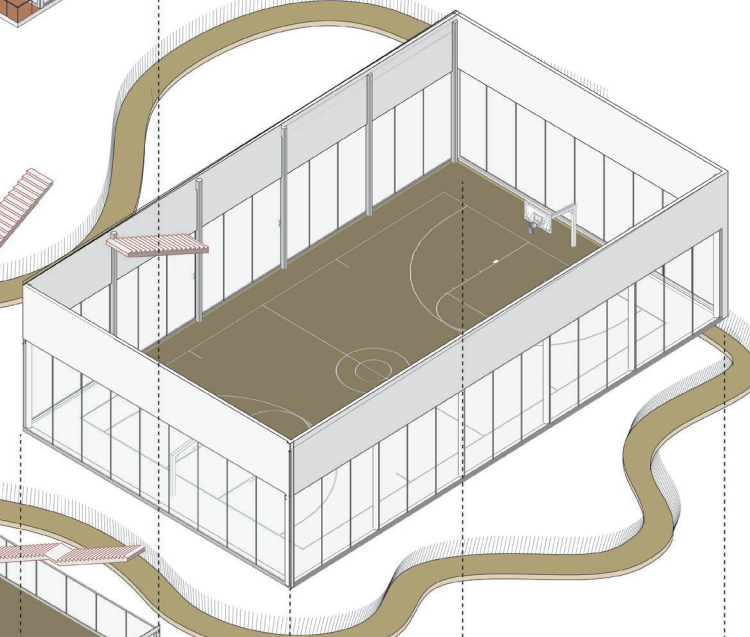


1 ---> 3/F
circular stair
to theatre



Hall 2

2-3/F
circular theatre

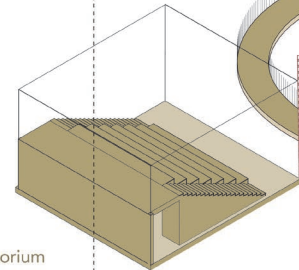


Hall 1

1-3/F
multi-functional hall

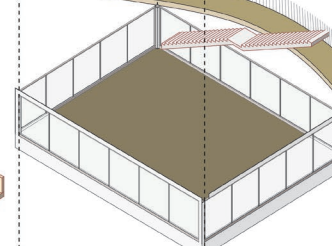
Hall 3

1-2/F
terrace auditorium
1/F
dark soundproof
room underneath



Room 1

1/F
Dance/Yoga



G -3/F
climbing wall

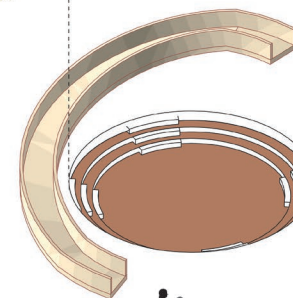


G ---> 1/F
entrance from
Vesterbrogade



Zone 1

G/F
sunken amphitheater



G ---> 1/F
Main entrance



The Loop

G- R/F
running track throughout
the exterior and interior

Zone 2

G/F
skate bowl

G ---> 1/F
entrance from
the playground



■ indoor
■ intermediate
■ outdoor

