

The |
of |
kids |
city
the

The city of the kids

Anna-Lena Cutbill & Preeti Singh



Chalmers University of Technology
Department of Architectur and Civil Engineering
Master's programme of Architecture and Urban design (MPARC)
Graduation and publication year: 2021
Supervisor: Kengo Skorick
Examiner: Joaquim Tarraso

Preeti Singh

Chalmers University of Technology 2018-2021
Master of Architecture
Healthcare studio
Housing inventions studio
Nordic architecture
Sustainable development & design professions
Color & light theory

**Umeå University &
Chalmers University of Technology** 2015-2018
Bachelor of Architecture

Lunds University 2015
Image and Space

Wingårdhs Arkitektkontor 2019-2020
Architect Trainee

Anna-Lena Cutbill

Chalmers University Of Technology 2018-2021
Master of Architecture
Residential Healthcare Studio
Matter Space Structure Studio
Nordic Architecture
Sustainable Development & Design Professions

Chalmers University of Technology 2015-2018
Bachelor of Architecture

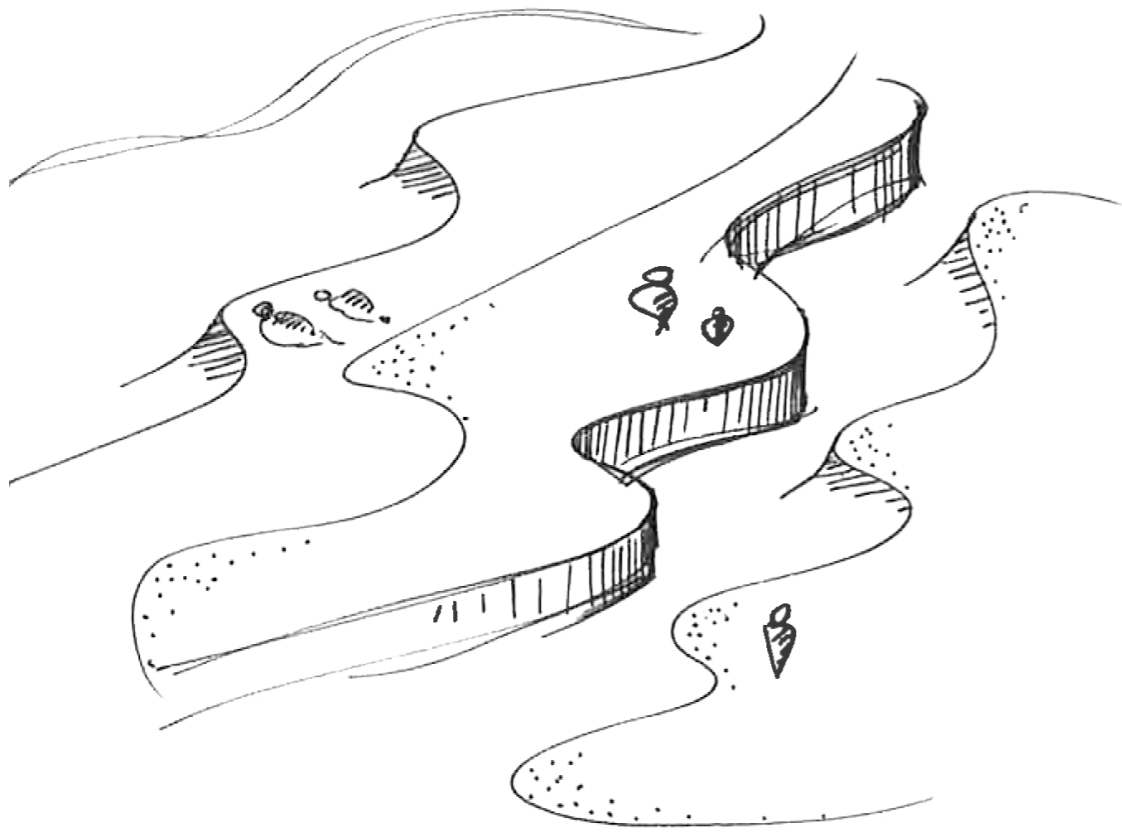
Stockholm Univsersity 2009-2010
Pedagogics and History

D Office Arkitektkontor 2019-2020
Architect Trainee

Älmhult municipality 2019
Architect Trainee

Content

Introduction	8-15	Reference projects	40-47
Abstract	8-9	Urban playground	40-41
Aim and purpose	10	Hybrid between play and architecture	42-43
Thesis question	10	Playful public entrance	44-45
Method	10	Conclusions	46-47
Delimitation	11		
Sustainability	12	Design proposal	48-75
Manifesto	13	Site	50-51
Discourse	14	The area of north city centre	52-53
Theory foundation	15	Pedestrian flow	54
		Challenges	55
The city of the kids	16-29	Safety	56
An urbanised world	18-19	Distance	57-59
Where are the kids at?	20-21	Double programming	60-61
The dilemma of traditional playgrounds	22-23	Levels of interactions	62-63
A child's perspective	24-25	Axonometric view	64-65
Kids right to play	26-27	Site diagrams	66-75
The importance to play	28-29		
		Toolbox	76-81
Affordance	30-39	References	82-83
Affordance	30-31		
Playgrounds by Aldo Van Eyck & Isamu Noguchi	32-33	Discussion	84
Playscapes	34-35		
Playelements	36-39		



Abstract

More kids will live in the cities in the future. The composition of our cities determine how well they are integrated. Our public spaces are spaces where we can meet people that are different from ourselves. To be able to meet people that have other values than we do. It becomes a space in our cities that introduces us to other people that we perhaps would not meet. Social sustainability is about allowing these variety of people to be able to meet and creating spaces for them to interact.

Our purpose with our thesis is to bring out the playfulness in our urban city and integrate children in the city. We want to create a public space for children, where they are socially integrated and feel that they have an equal right to the city. Most playgrounds found in Gothenburg today have more or less the same expression. They are predictable because children have seen them before. Therefore we want

to rethink the concept of playgrounds and how they could be more socially inclusive and be fused into the urban context. By studying relevant literature and reference projects we want to create a hybrid between play and architecture. To work with the affordance and the ambiguity of the design simultaneously with the esthetics of it, which is about an interplay between familiarity and the unexpected. With that we hope to revitalise this significant urban space in the city and turn it into a vibrant space that celebrates and welcomes diversity and livability.

The main focus in this thesis is thereby, the social dimensions which is about rethinking the concept of playgrounds and how we can make them more socially inclusive, the second one being to analyse playelements and to develop them, and lastly how this knowledge can be translated into a hybrid between play and architecture.

Aim & purpose

The main purpose of this thesis is to investigate and analyse the social aspects of playgrounds today to potentially see what could be changed. To see how playgrounds can potentially be more socially inclusive and sustainable. We want to create a public space for children, where they are socially integrated and feel that they have an equal right to the city. How can we inspire children while at the same time challenge them in the urban environment? Our aim is to create an extension of the existing urban city

space with the existing elements on the site so that it unifies into a playful space for children. A space that is simultaneously a playground and a building.

By working with the affordance of the design which is about an interplay between familiarity but also the unexpected. Thereby, we hope to revitalise this significant urban space in the city and turn it into a vibrant and active urban plaza that celebrates and welcomes diversity and livability.

Thesis question

How can kids be integrated with other generations in the city through a hybrid between play and architecture?

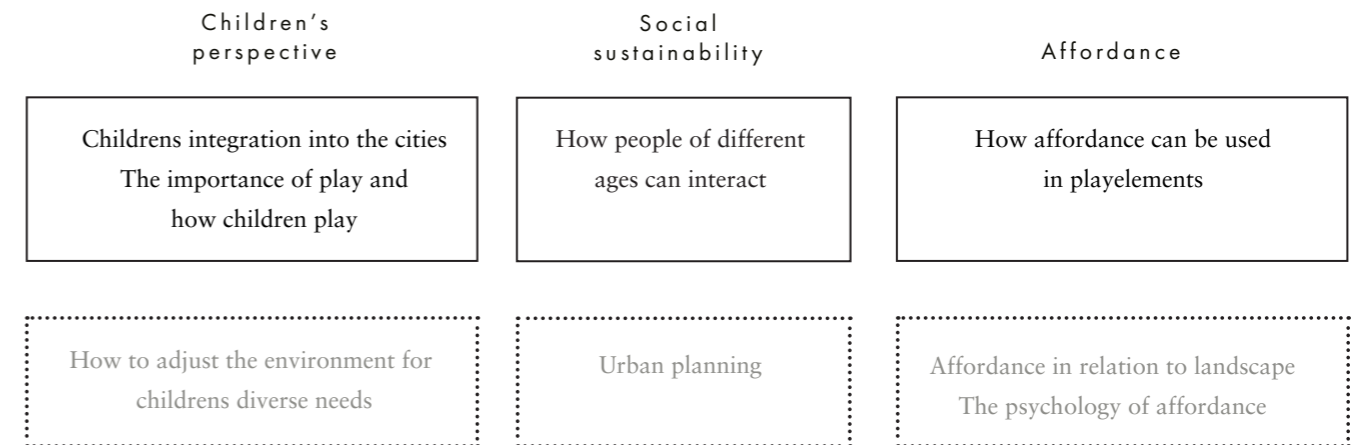
Method

In an initial phase we have collected and studied published research material to gain knowledge to understand the concept of playgrounds, social sustainability and children's perspective.

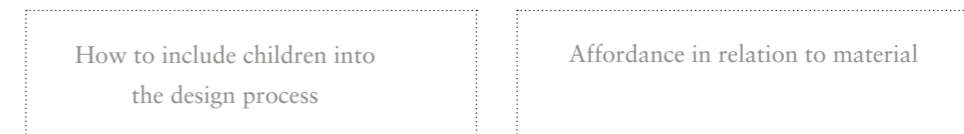
We have then studied relevant reference projects to gain knowledge on how we can create playgrounds that are socially more inclusive and sustainable.

The site was chosen because of its urban location and the lack of vibrance and the presence of children in the area. This is primarily a research by design project and we will work mainly with drawings and design strategies to find implementation methods for our thesis.

What we investigate



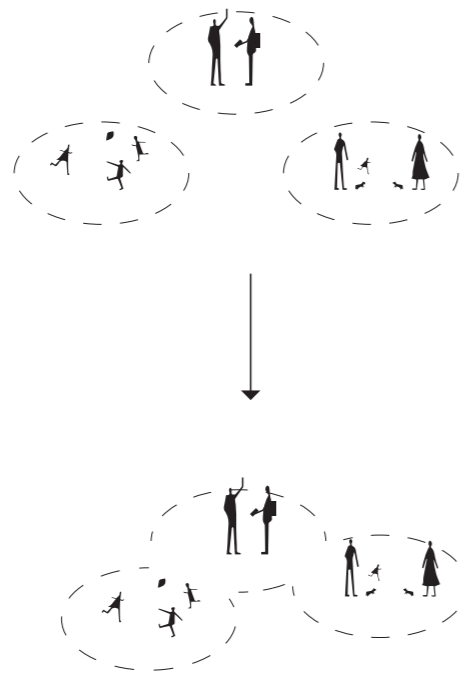
What we DON'T investigate



Delimitation

Our main idea is to investigate subjects related to concepts of playgrounds, childrens perspective and social sustainability.. The city core of Gothenburg is the main place of research to understand the challenges the city is facing when integrating kids into the urban context. The main fields in this thesis

is social sustainability, children's perspective and intellectual knowledge with focus on affordance. This thesis does not intend to focus on building construction, material research or the economical aspect but to rather focus on the social aspects.



Sustainability

Our public spaces are spaces where we can meet people that are different from ourselves. For children it becomes a space where they learn about the social structure of society. To be able to meet people that have other values than we do, speak other languages, cultures, ages and so on. It becomes a space in our cities that introduces us to other people that we perhaps otherwise would not meet. Social sustainability is about allowing these varieties of people to be able to meet and creating spaces for them to interact. It helps us to appreciate the diversity

and all of the opportunities that it might bring. By inviting and welcoming different people into our public spaces helps to create a city that is both tolerant and democratic.

Therefore to be able to meet other people is by far the most important collective function there is in a city. In time of increasing urbanisation we have to rethink the concept of public spaces such as playgrounds to guarantee the space for children in the urban environment in the future.



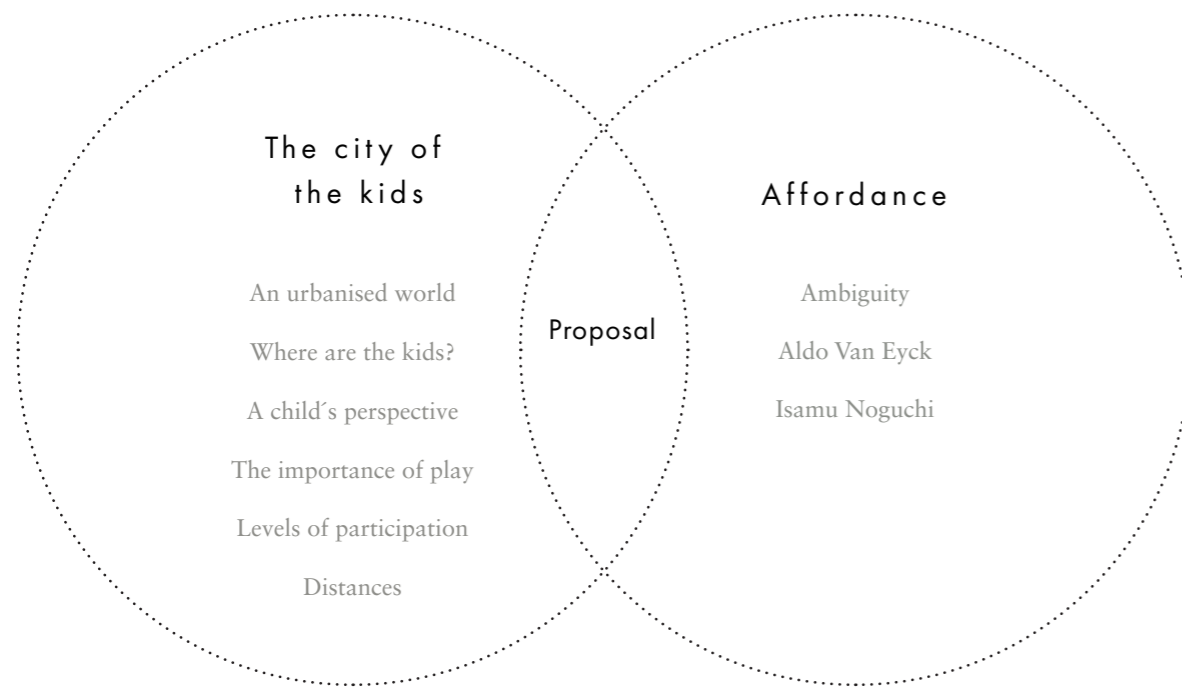
A place where children are not excluded
but a part of the urban cities.
It is about urban democracy and its vitality.

Manifesto

We want to tell a story about urban democracy and social interaction. Luxury is in a space, in a lifestyle that unfolds in our cities everyday. It is not just about creating urban spaces that withhold functionality but also about beauty and intelligence. We want to imagine a city where people move spontaneously without feeling constrained by vehicle

traffic. A city where children are playing, people are chatting and drinking coffee on the streets and enjoying the beauty of the city. To create spaces that encourage social interaction and motivates people to put down their phones and just interact with the vitality of the space around them.

Discourse



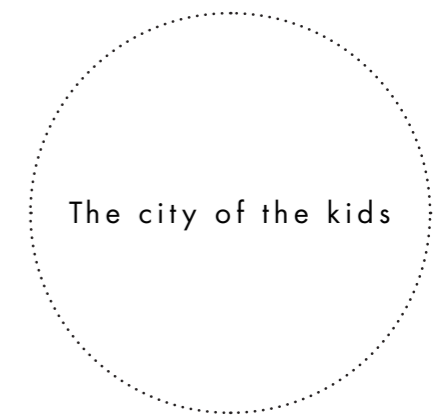
Theory foundation

More kids will live in cities in the future. The composition of our cities determine how well kids are integrated in the city. The urbanisation today requires a new way of rethinking playgrounds, making them more socially inclusive and integrating them into an urban context.

It is through play that the child explores and discovers the world. Therefore, play in the urban context is not only a method for integrating kids in the city but also to help them intellectually understand the social structure of society. This chapter is about different aspects related to the dilemma of playgrounds, children's perspective and the importance of play.

This chapter is about affordance and ambiguity. It is about creating play elements that create a more creative relationship between the user and the object. Play in this meaning becomes a process, where the relationship evolves through interaction and does not try to impose a meaning.

One of our references being Aldo Van Eyck who designed play elements to stimulate children's imagination. The second reference is Isamu Noguchi, a sculpture and landscape architect who emphasized the importance of lifting qualities from the site by shaping the landscape like a sculpture.



The city of the kids

An urbanised world

The amount of kids is expected to increase in Sweden's metropolitan municipalities. A development that is expected to increase in the following ten years, according to SCB:s evaluation. However, the largest amount of kids is to be found in the municipalities around the metropolitan cities rather than in the big cities themselves.

The number of children born in the country are expected to increase in the following years. This is a consequence of the large group of children born during the baby boom around 1990, who will be at ages when it is common to start a family and have children. It is then expected to decline again in the late 2020 and early 2030s, to then increase again from the mid-2030s.

More kids live in the municipalities near the metropolitan cities

The population development has large influence on the overall age structure in our cities. During the 2000s the large amount of child births

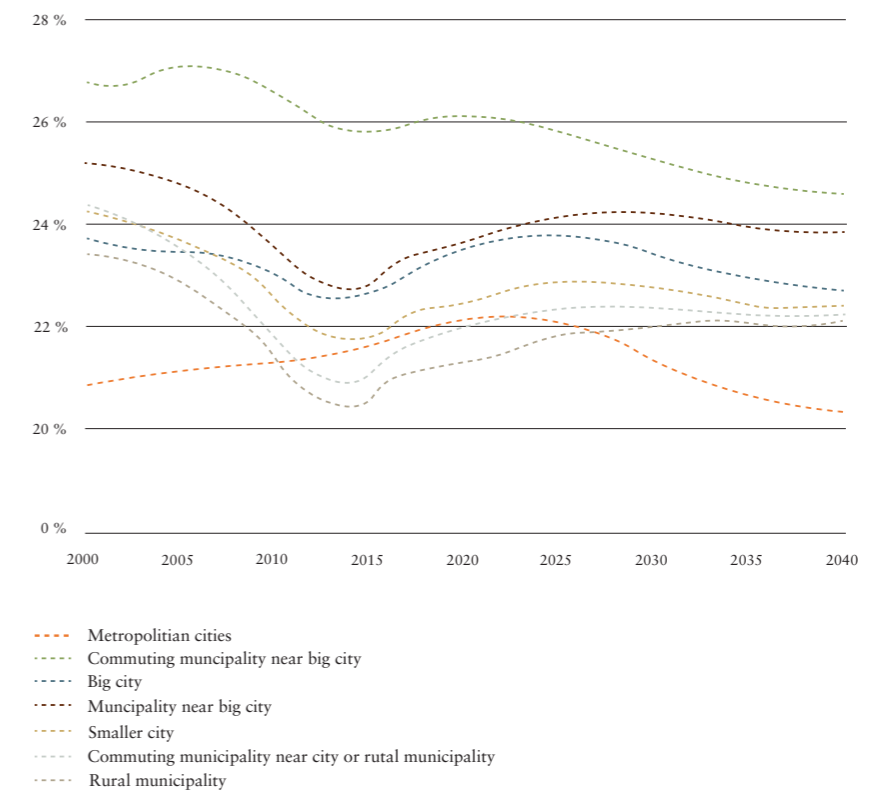
has caused an increase of 0-19-year olds in the metropolitan cities and is expected to continue to increase until 2023. However, it is expected to decline thereafter, because of the decline in child births.

Less kids and teenagers after 2026

The rural municipalities have seen a decline in the amount of kids and teenagers during the 2000 century. However, it is expected now to increase in the rural municipalities and instead decrease in the metropolitan cities. In the future the metropolitan cities are expected to have the least amount of kids and teenagers in the age between 0- 19 years. The largest amount of kids and teenagers are to be found in the municipalities that are close to the metropolitan cities.

However, the statistics are predicting a decline in the amount of kids and teenagers from 2026 and onwards in the whole country. (Statistiska centralbyrån, 2019).

Fig. 1 (Statistiska Centralbyrån, 2019)



The composition of our cities determine how well integration is implemented. Meaning how well different activities and various groups of people are simultaneously living and functioning together. Successful integration in our public space allows different activities and functions to work in alignment with each other. To blend functions and people from different walks of life also helps us to under-

stand the composition of our surroundings and how they function. Furthermore it is worth mentioning that it is not the simple integration of buildings and other primary city functions that determine whether integration is successful. It is rather the actual integration of functions and different people on a much smaller scale that is the prominent determinant if we find the space interesting (Gehl, 2006).

Where are the kids at?

Densification in urban planning is a result of a strong urbanisation around the world. The green areas and public spaces in the cities are shrinking because of the high valued territories in the cities. Green space in the cities is a place for everyone, regardless which generation you belong to, including the younger ones. When economic strong forces within urban planning seize central territories to build, green areas disappear and therefore also valued space for children.

According to the UN, children have the right to play. This means that children have the right to have a territory where they can play, it is therefore even more important that urban planning includes all citizens, including children. So what kind of space does Gothenburg offer to the children?

It is clear by looking at the urban landscape of Gothenburg that the space for children is few and they tend to be traditional playgrounds, often placed in a park.

According to “Park och naturförvaltningen”, a committee of the municipality of Gothenburg that are responsible for parks and urban spaces in the city, playgrounds should be placed in green areas. Green areas give children a possibility of continuing the play from the playground into nature and guarantee safety from cars (Park- och naturförvaltningens riktlinje för lekplatser, 2019).

But with the location of playgrounds in parks comes also problems such as segregation of ages, accessibility and space, green areas need a lot of space which is difficult in a time of densification of cities.



The dilemma of traditional playgrounds

It is necessary to look back into the history of urban development to understand the problem the kids are facing today. Cities were mainly planned for a pedestrian community, streets were a place to walk and play in. This changed with the entrance of motorism in the urban environment, the need for special places for play became critical to guarantee the safety of the children. Around 1900 playgrounds became a part of urban planning in Gothenburg as a result of the car driven planning (Bengtsson, 1974).

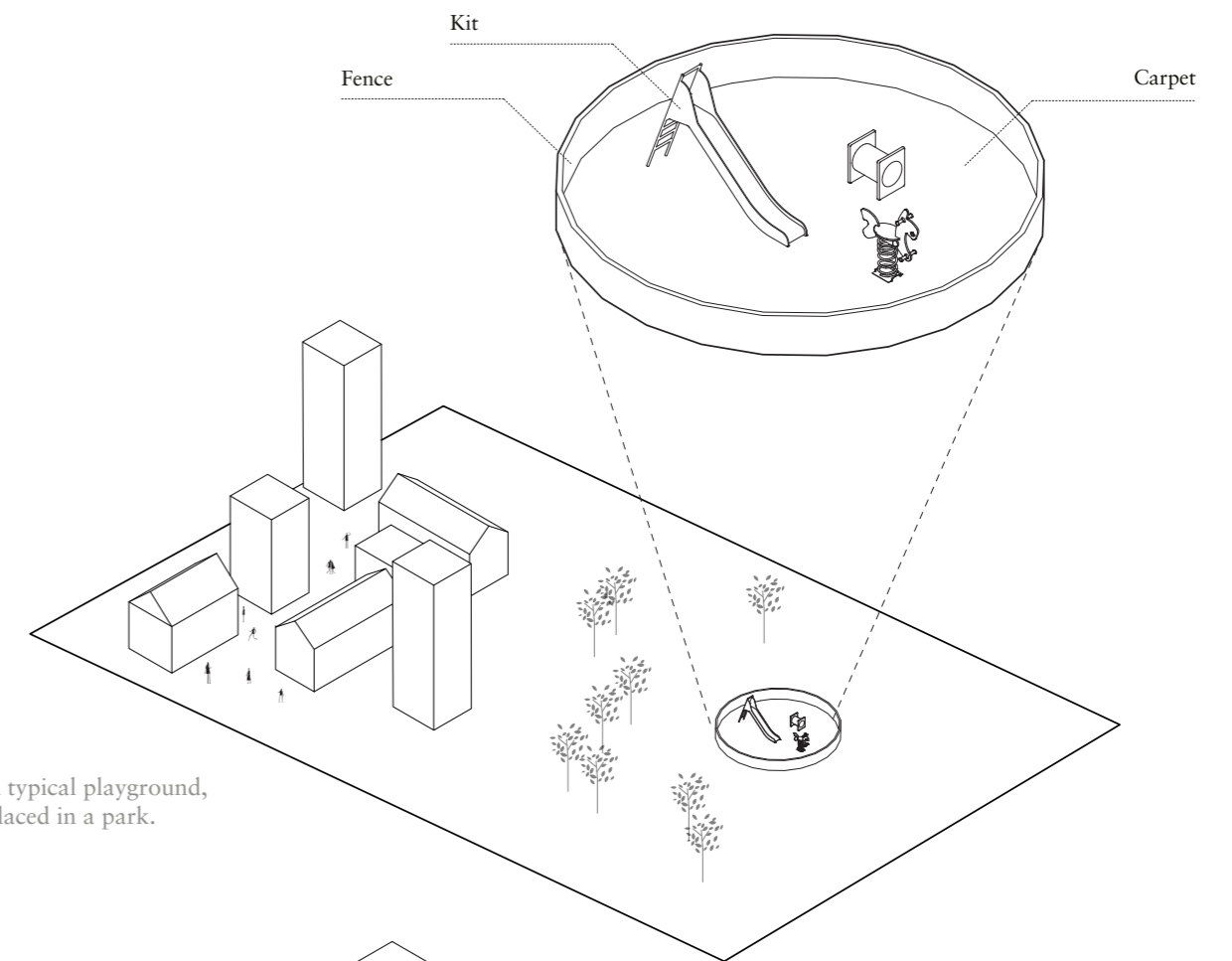
Kids used to be a part of the everyday life of the adults by helping out the older ones at their work and at home and playing nearby in the city centre. But with the development of the infrastructure by cars and trams in the city, children and adults grow apart more and more. (Bengtsson, 1974)

The playgrounds that exist in Gothenburg tend to exist of more or less what landscape architect Helen

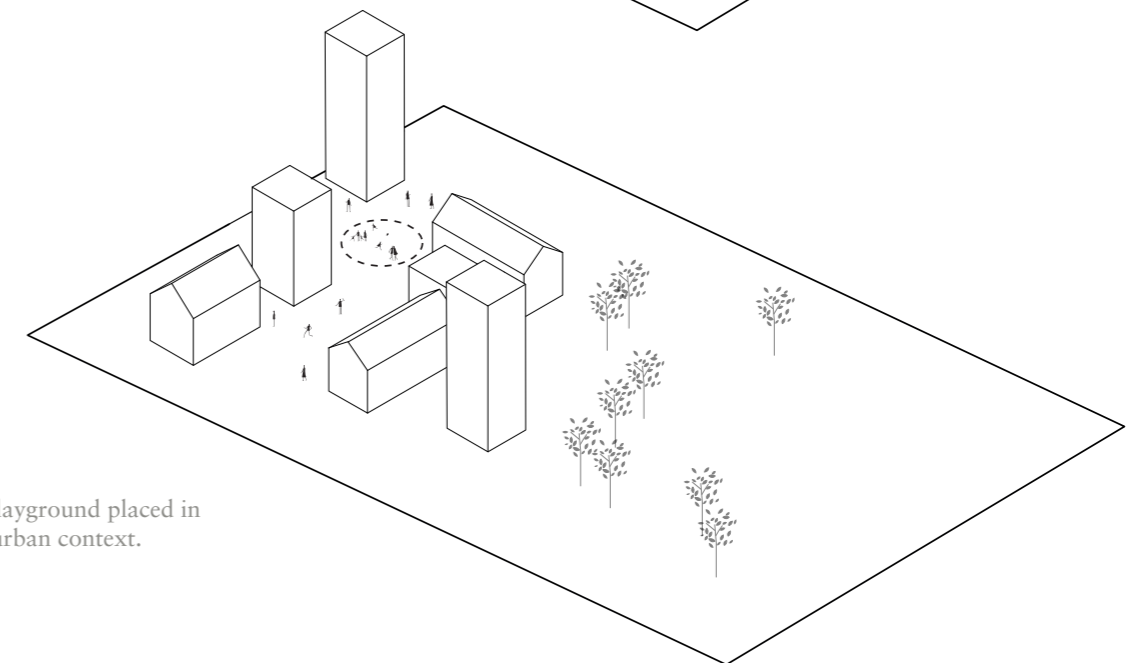
Wolley calls the Kit, Fence, Carpet approach. Kit is the fixed play equipment, often the same with little variety, fence that spatially defines the territory, often a fence, and carpet on the ground. This approach does not invite others that are not children or parents and do not consider the site and its context. (The University of Sheffield, Department of Landscape's research, 2016)

The kit, fence and carpet approach are also problematic in the sense that it makes the kids' environment predictable and does not bring the feeling of adventure and curiosity (Jansson, Klintborg, 2016).

The urbanisation and densification today requires a new way of rethinking playgrounds, adapting them to a more inclusive society and integrating them into an urban context to ensure space for the kids and youth. The young generation have the right to feel that they also can take part of the cities.



A typical playground, placed in a park.



A playground placed in an urban context.

A child's perspective

The urban environment is a place where a lot of young adults and children grow up.

Several studies indicate children's desire to be connected to others in the public space. Research on children's play habits show that children have a tendency to be attracted to where there is the most activity going on or in places where the likelihood of something happening. Programmed play areas that are segregated from flows of people and things to look at, are often not stimulating for longer periods of time for children. Instead children are most likely to be found on the streets, or near entrances to dwellings where there are many people in circulation and where spontaneous encounters are more likely to happen (Gehl, 2006).

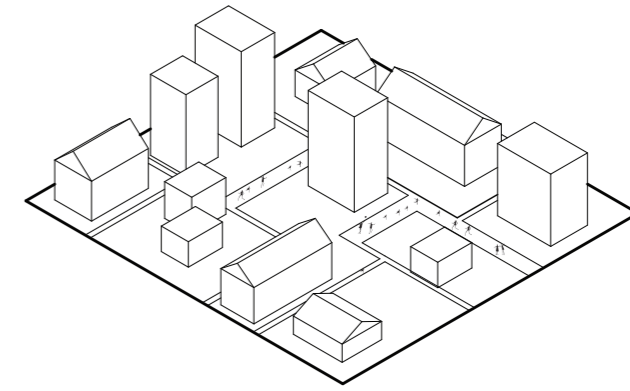
Parents are more often reluctant to leave children

outdoors on their own because of the fear of traffic and other obstacles. This further prohibits children from exploring the world around them independently (Artursson et al. 2019, october).

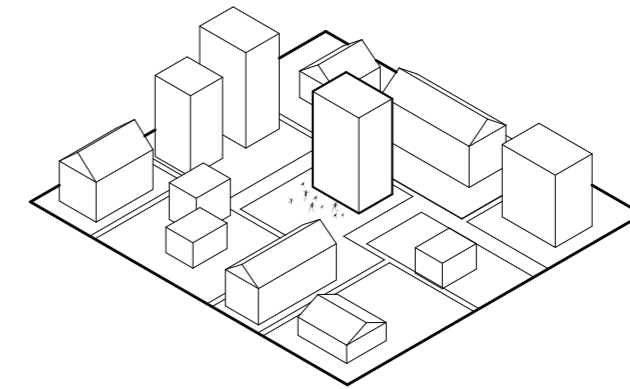
Jan Gehl talks further about this matter in his research of good city spaces. Where protection is a key quality that creates enjoyable city space.

Meaning our desire to be protected from accidents, discomfort and uncertainty. A good city space is where we feel that we can move with freedom without feeling that we need to be on constant alert and where parents don't feel that they need to hold their children to protect them from danger.

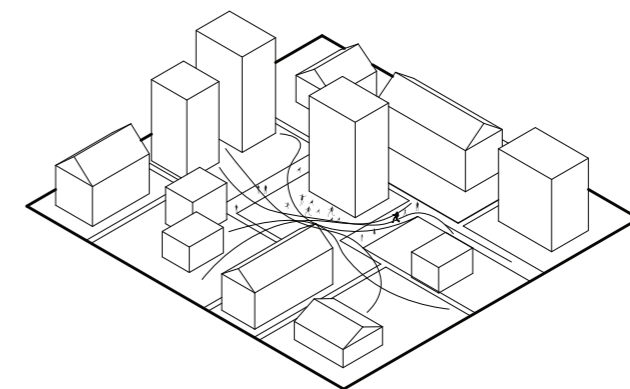
In other words a child friendly city space provides good conditions for pedestrians to be able to move freely (Gehl et al. 2006).



On the streets



Near dwellings



Near flows and many people in circulation

Kids right to play

Children have a desire to explore the world around them. They develop intellectually through play and it helps them to make their world comprehensible.

The UN Conventions on the rights of the child states that all children have the right to play and therefore all children are born with the condition and desire to play (Österberg, 2018, mars 27).

There is also an increase in obesity among children, which is a further sentiment to create urban living rooms where children are encouraged to play. (Moss, B. S. 2012). Through play children learn about themselves, their body and their surroundings. They learn

how to communicate with others, to compromise and to share.

The less time children spend playing outdoors, the more sensitive they become to cope with different challenges and handling risks.

Therefore play is an important part of not only how children develop their empathy, fantasy and their creativity, but also how they process different experiences and impressions. The freedom of the outdoors and being able to try new things are in the end hard to replace in any other forum.



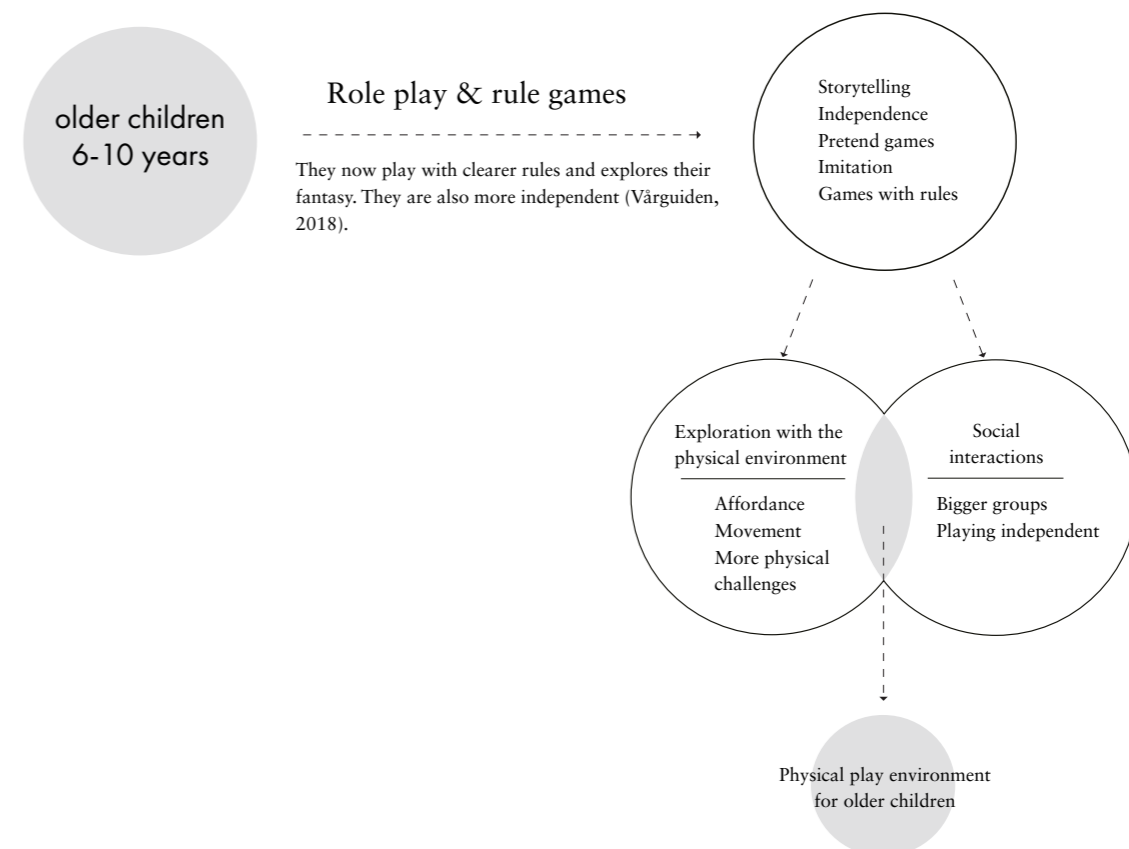
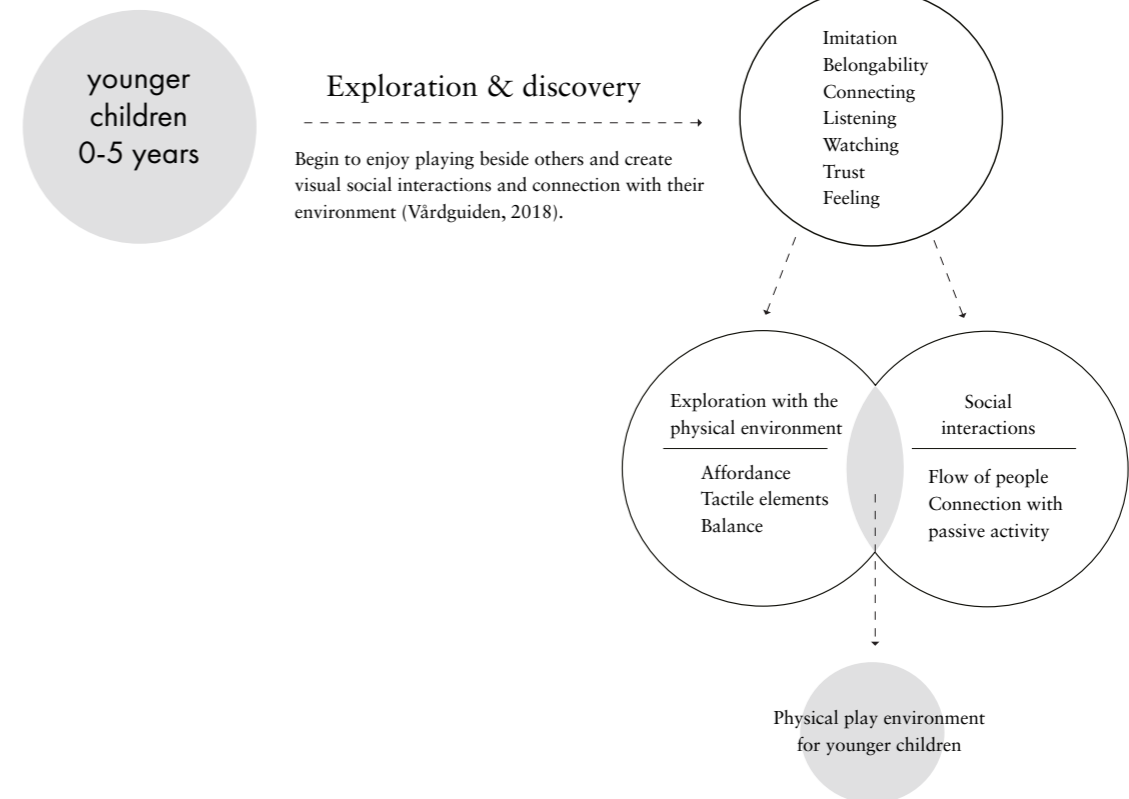
Fig. 2 (Ho, 2021)

The importance of play

Play is where the development of children begins. Children start to develop their personality through play. They develop their social skills when they start to interact and play with others, and begin to understand not only their own feelings but others as well. It is through playing that a child explores and discovers the world and makes it more comprehensible. Therefore, play in the urban living room is not only a method for integrating kids in the city, but

also to help them intellectually understand the social structure of society (Gehl et al. 2006).

Children of different ages play in different ways. During the younger years, kids focus on creating visual social interactions and connection with their environment. During the older years, kids focus on role play and games with rules and play more independently.



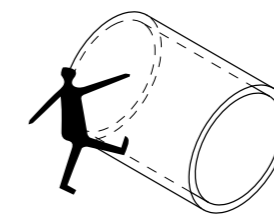
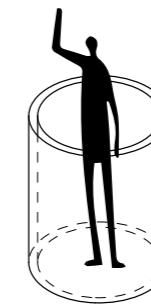
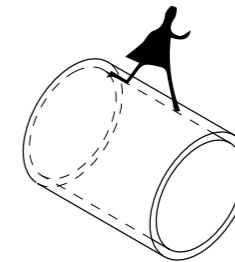
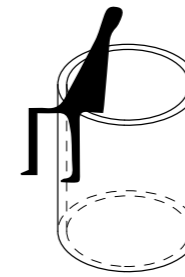
Affordance

To be able to understand the psychology of things, we can read about the theory of affordance of objects. Affordance is about the properties of an object, or about the perceived properties which gives us an indication about how these fundamental properties of an object could possibly be used (Norman, 2013) .

Ambiguity in relation to affordance results in a less predetermined and a more creative relationship between the user and the object. It creates a space where the relationship between the user and the object is about co-creating and creating a new meaning rather than a predetermined relationship. Play in this meaning becomes a process, where the relationship evolves through interaction and does not try to im-

pose a meaning. Affordance is ultimately about all the different opportunities that an object provides. Creating play elements that can be used by children in many different ways provides a freedom of opportunities. Therefore, the designers intention should be to create playelements that give a wide range of affordances than to impose a meaning or specific actions.

By avoiding ambiguity in play the design becomes more sensitive to creating a sense of creative potential. One could say that designing for play is a way for society to communicate to children their sense of freedom but also the freedom to create their own future (Gielen & Leeuwen, 2016).



Playgrounds by Aldo Van Eyck & Isamu Noguchi

Aldo van Eyck was an architect in Amsterdam throughout 1947-1978. During his time as an architect Aldo Van Eyck created around 700 playgrounds throughout Amsterdam. One of the remarkable design aspects of his playgrounds was that the play-elements he designed did not have a particular designated function. The simple abstract shapes contributed to playelements that could be used in many ways, to stimulate children's imagination. His aim was not that the playelements should tell a child what they are supposed to do, but rather suggest what could be (R. Caljouw & Withagen, 2017 July). When it comes to his approach to designing playgrounds he was very much inspired by children.

Their ability to imagine things and to create new perspectives relating to play. Children were the main target, but his playgrounds were meant for all generations, to stimulate community life. He created multiple play elements that he then could combine endlessly in various ways and compositions. They were created to create a rhythm, which is individual to anyone playing. Thereby it creates a freedom of rhythm appropriate to the user. The playelements were not in any way hierarchical but rather created to bring a balance between the play and the spaces that are in between (Kollarova & Van Lindgren, 2016).



Fig. 3. (Suister, 2021)

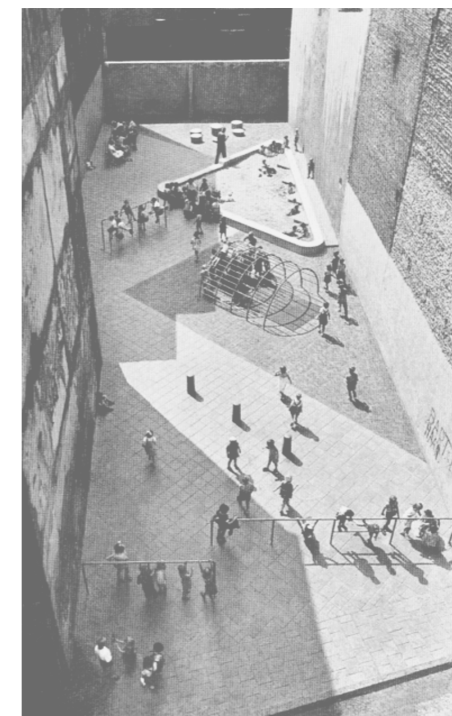


Fig. 4. (play scapes, 2021)



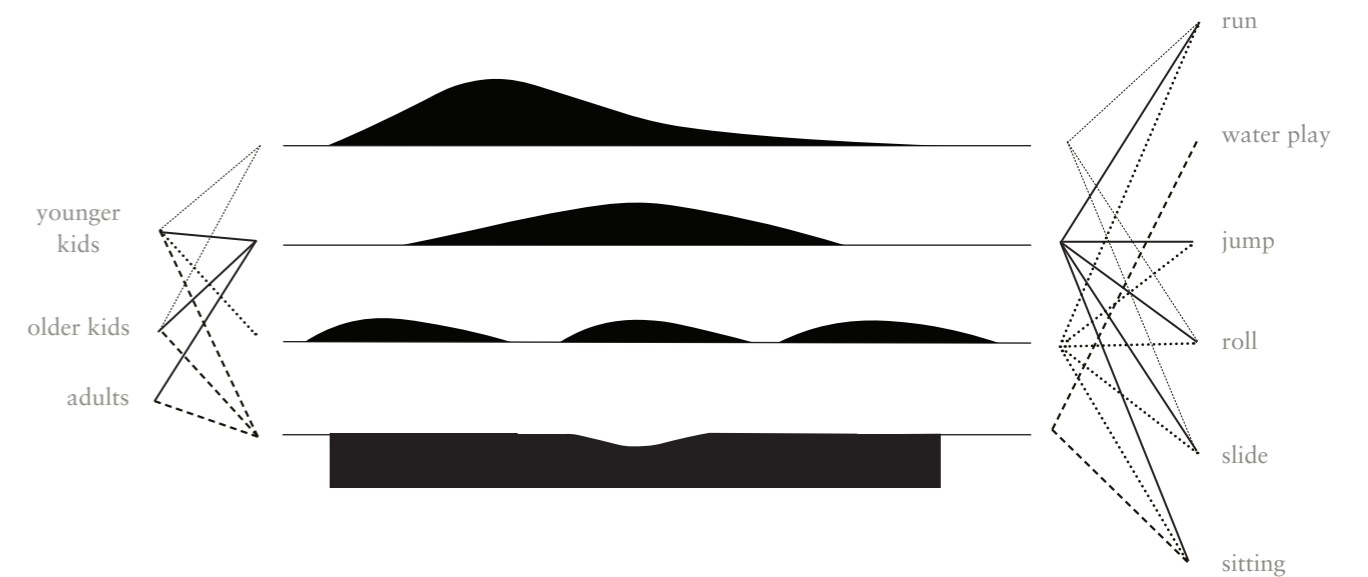
Fig. 5. (South coast plaza, 2021)



Fig. 6. (Noguchi museum, 2021)



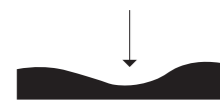
Fig. 7. (South coast plaza, 2021)



Playscapes

The sculpture and landscape architect Isamu Noguchi emphasized the importance of working with the space around buildings and the landscape to define space. He worked with playscapes, a hybrid between landscape and playgrounds, an abstract

approach to playgrounds that could be interpreted in various ways. He also worked with static play elements like Aldo Van Eyck but also emphasized the importance of lifting different qualities from the site by shaping the landscape like a sculpture.



Multigenerational
↓
Balance
↓
Low phase



Small and big kids
↓
Physically challenging
↓
Larger space
↓
Fast phase

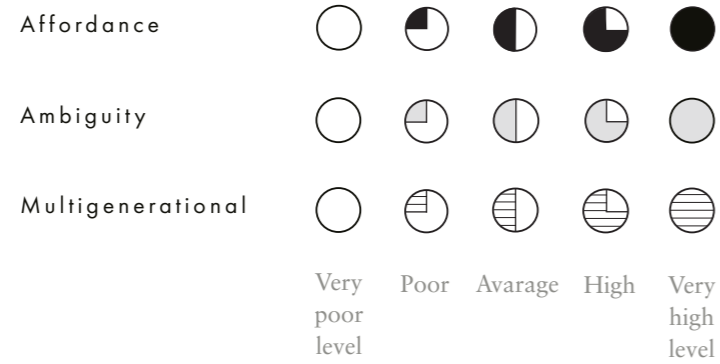


Small kids
↓
Movement
↓
Medium space
↓
Medium phase

Playelements

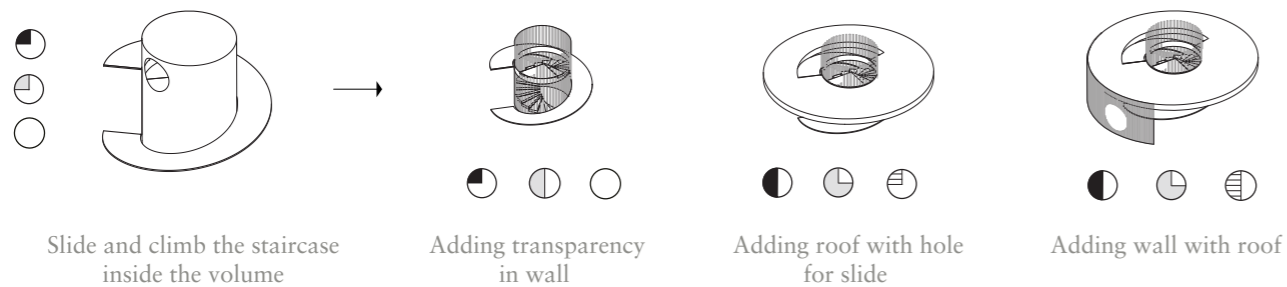
This part of the research is about breaking down the essence of play elements of Aldo van Eyck and Isamu Nougushi. The first step is about analyzing the original design, the level of affordance, ambiguity and how well it functions with both kids and adults. Affordance is about how many play possibilities the element offers but also usability in other ways. Ambiguity is about the uncertainty in the element

that is built-in, the unexpected that offers an excitement to the play. The next step is redesigning the basic design and focus on elements that can be integrated into a building to create new typologies that rethink the concept of playgrounds, a way of creating higher levels of ambiguity but also higher levels of affordance and multi generational characteristics.



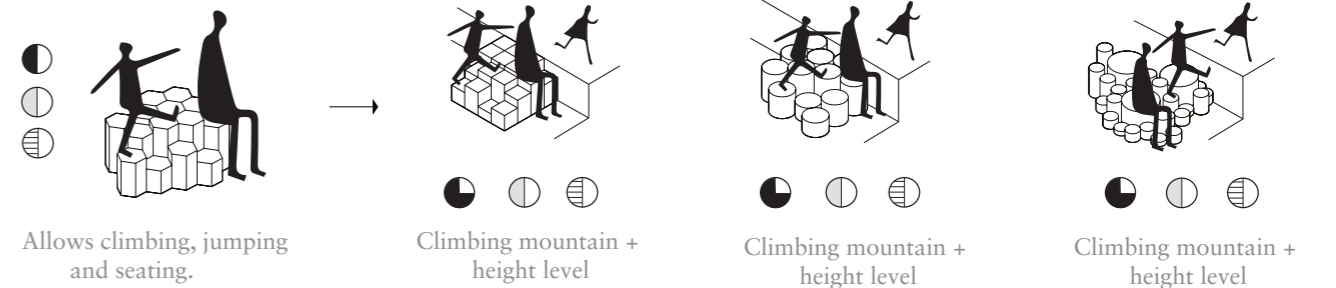
Playsculpture - Slide

Design: Slide + wall + roof



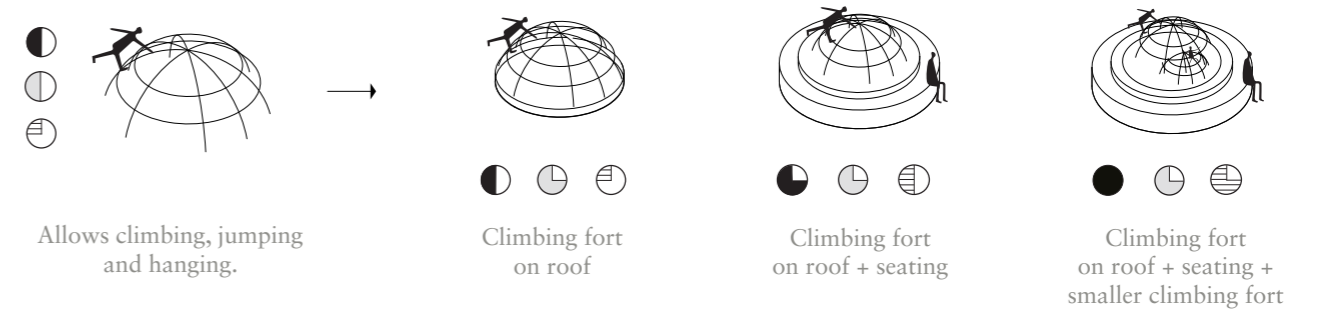
The climbing mountain

Design: Climbing mountain+ Staircase



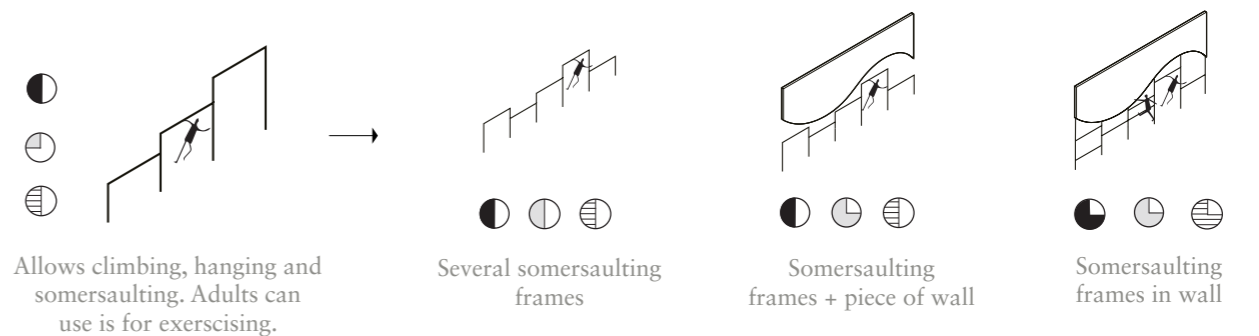
Climbing fort

Design: Climbing fort + roof



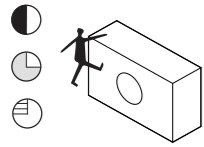
The somersaulting frames

Design: Wall + Somersaulting frames

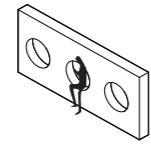


Playsculpture - Hole

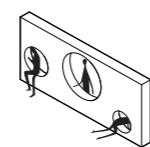
Design: Wall + playsculpture



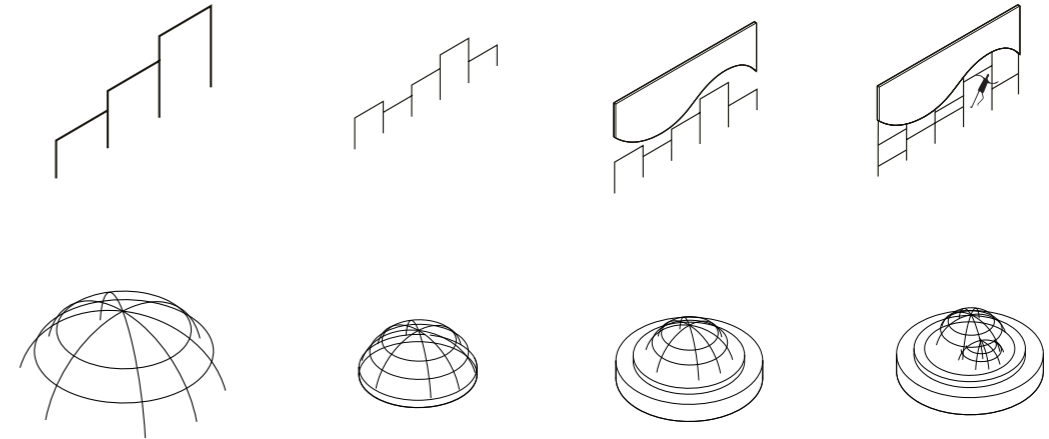
Allows climbing and hiding.



Playsculpture with more holes

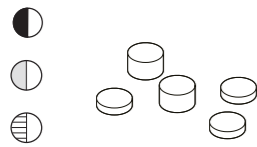


Playsculpture with adjusted holes, both size and height in wall



Jumping stones

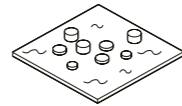
Design: Jumping stones + pond + roof



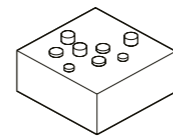
Allows to jump between them and sit on them



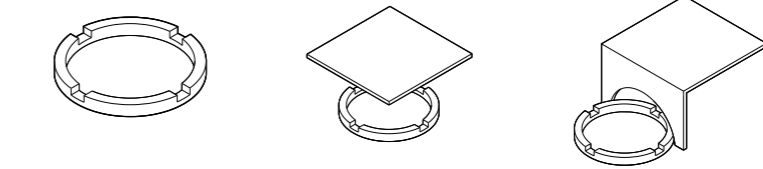
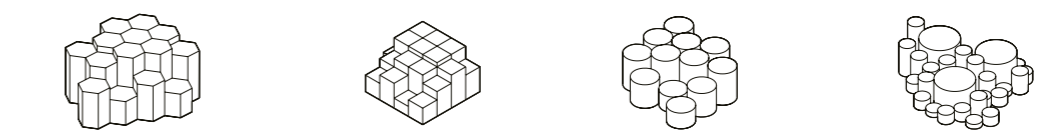
Jumping stones in a line



Jumping stones in a line + pond

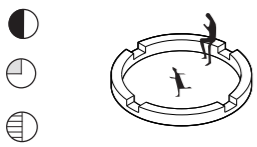


Jumping stones in a line + on roof

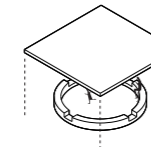


The sandpit

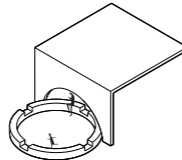
Design: Sandpit + roof + wall



The rim can be used to sit on and to jump on. Sand has a high tactile character.



Sandpit + roof



Sandpit + roof (not covering the whole sandpit) + wall

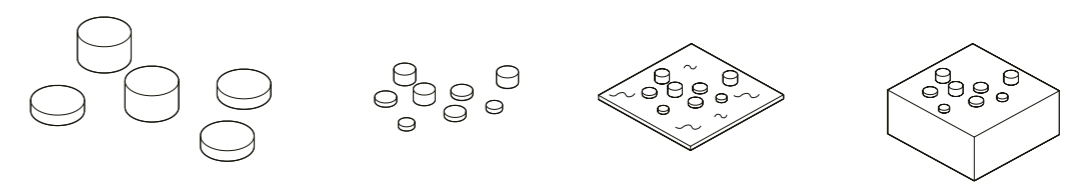
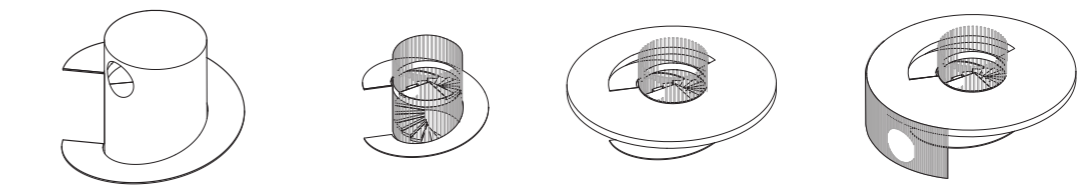


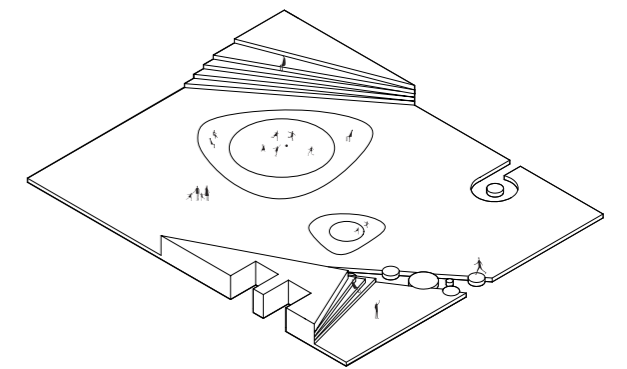


Fig. 8 (Cobe, 2021)

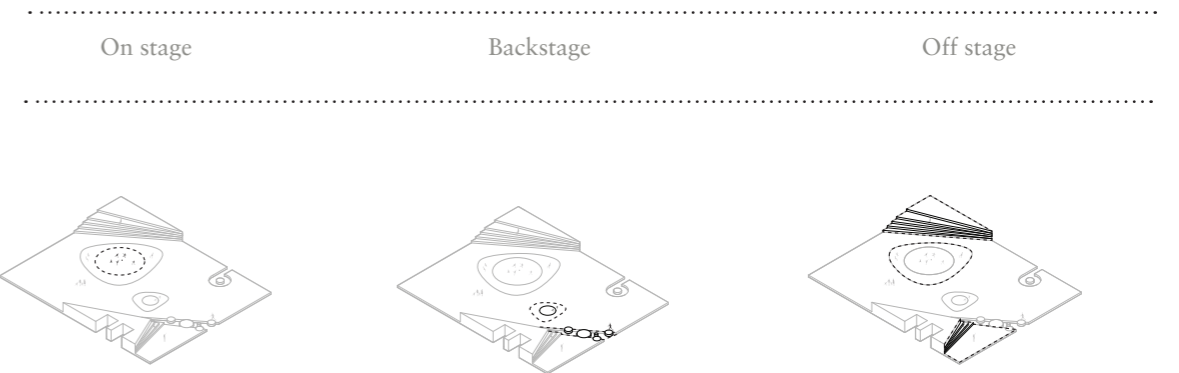
Urban playground

The square is something in between a park and playground. Being closely located near a park has inspired a landscape character, with a continuation of trees from the park. In the eastern and western part of the park the square is raised up and provides folded private zones. Overall the square has a sculptural expression that is related to the history of the park. The surface of the square functions as a large urban playground for different generations and spontaneous events.

Project: Israel plads
 Year: 2014
 Architects: Cobe, Sweco architects
 Location: Copenhagen, Denmark



Levels of user interaction



Usability

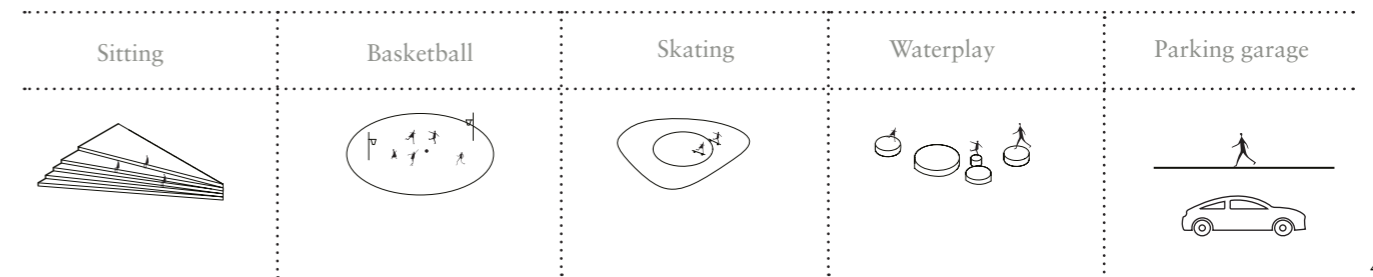


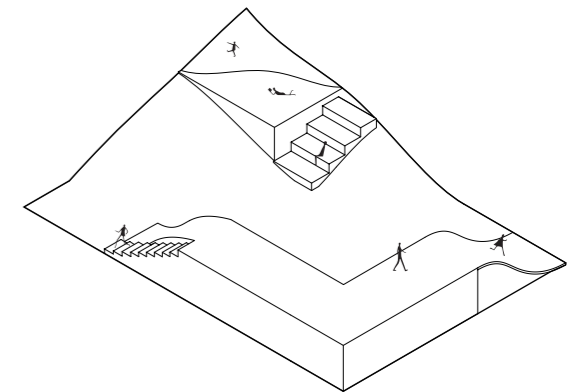


Fig. 9 (Lev Design, 2021)

Hybrid between play and architecture

A building that facilitates two different needs; a sailing club and outdoor space for kids to play. The ground is elevated in order to create space for boat storage while simultaneously providing a wood landscape above for kids to run and play. The building is a result of these two different demands and needs.

Project: Maritime youth house
 Year: 2004
 Architects: BIG + JDS
 Location: Copenhagen, Denmark

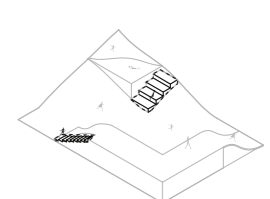
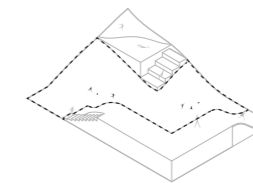
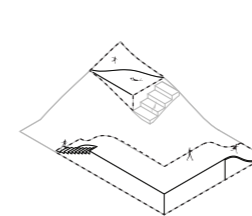


Levels of user interaction

On stage

Backstage

Off stage



Usability

Sitting

Biking

Sliding

Running

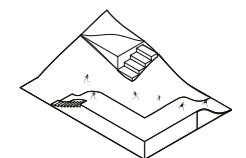
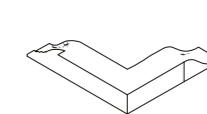
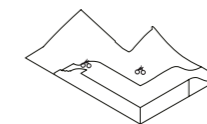
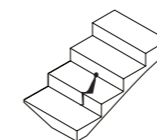


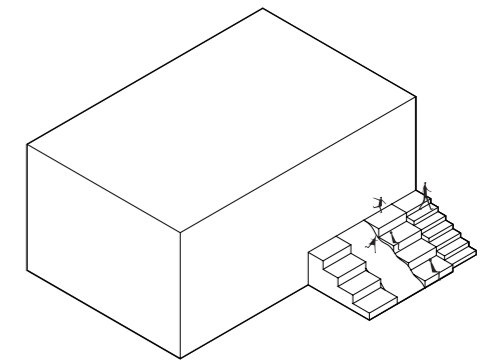


Fig. 10 (Realdania by & byg, 2021)

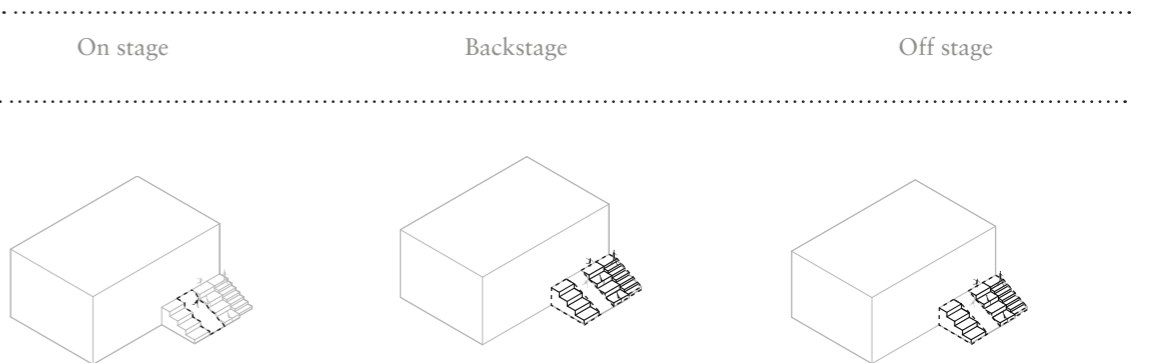
Playful public entrance

The BLOX project is home to the Danish architecture center. The building contains a variation of spaces. The vision is to attract city life by creating unpredictable relationships between the city and the building. A playground is integrated with the building, a form of terraced public space that at night time can potentially be transformed into an open-air cinema.

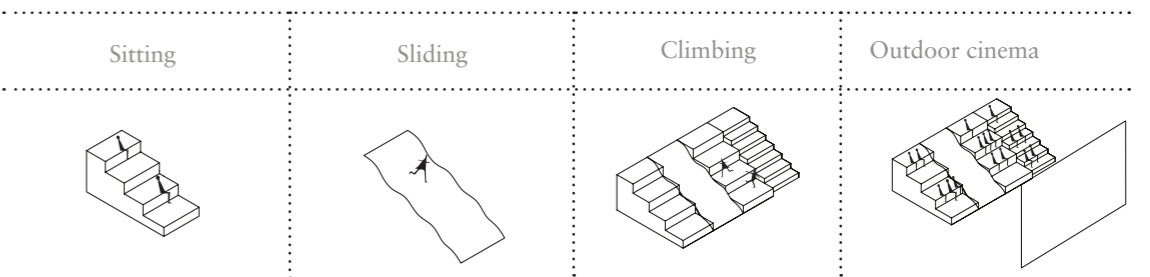
Project: Blox
 Year: 2018
 Architects: OMA
 Location: Copenhagen, Denmark



Levels of user interaction



Usability



Conclusions

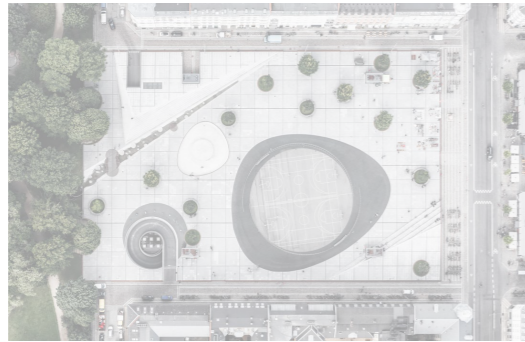


Fig. 11 (Hjortshoj, 2021)



Fig. 12 (Mapchitecture, 2021)

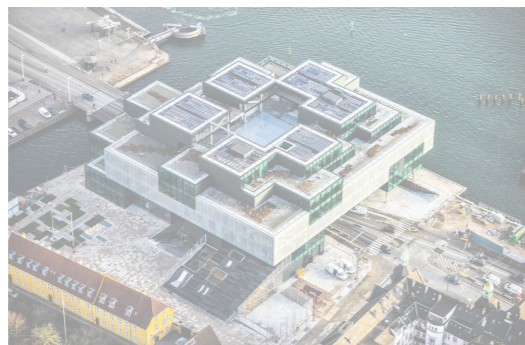
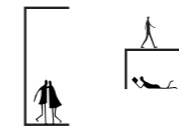


Fig. 13. (Luftfoto, 2021)

Zones

The common nominator in these three references is the sections of level of participation. Our behavioral and action patterns look different depending on where we are, and these spaces allow a variation in activities and people.



Multigenerational

These spaces are also about social sustainability. They allow different generations to be able to meet and interact in spontaneous ways. For children it is a space where they learn about the social structure of society.



Abstract play

The abstract play in the references refers to play elements that are not at first sight obvious, but enables a child to explore the world by moving and using their creativity and fantasy.



Double programming

A variation of activities that are integrated within the same structure. A space where play is integrated within the space.



Design proposal



Fig. 14. (Higab, 2021)

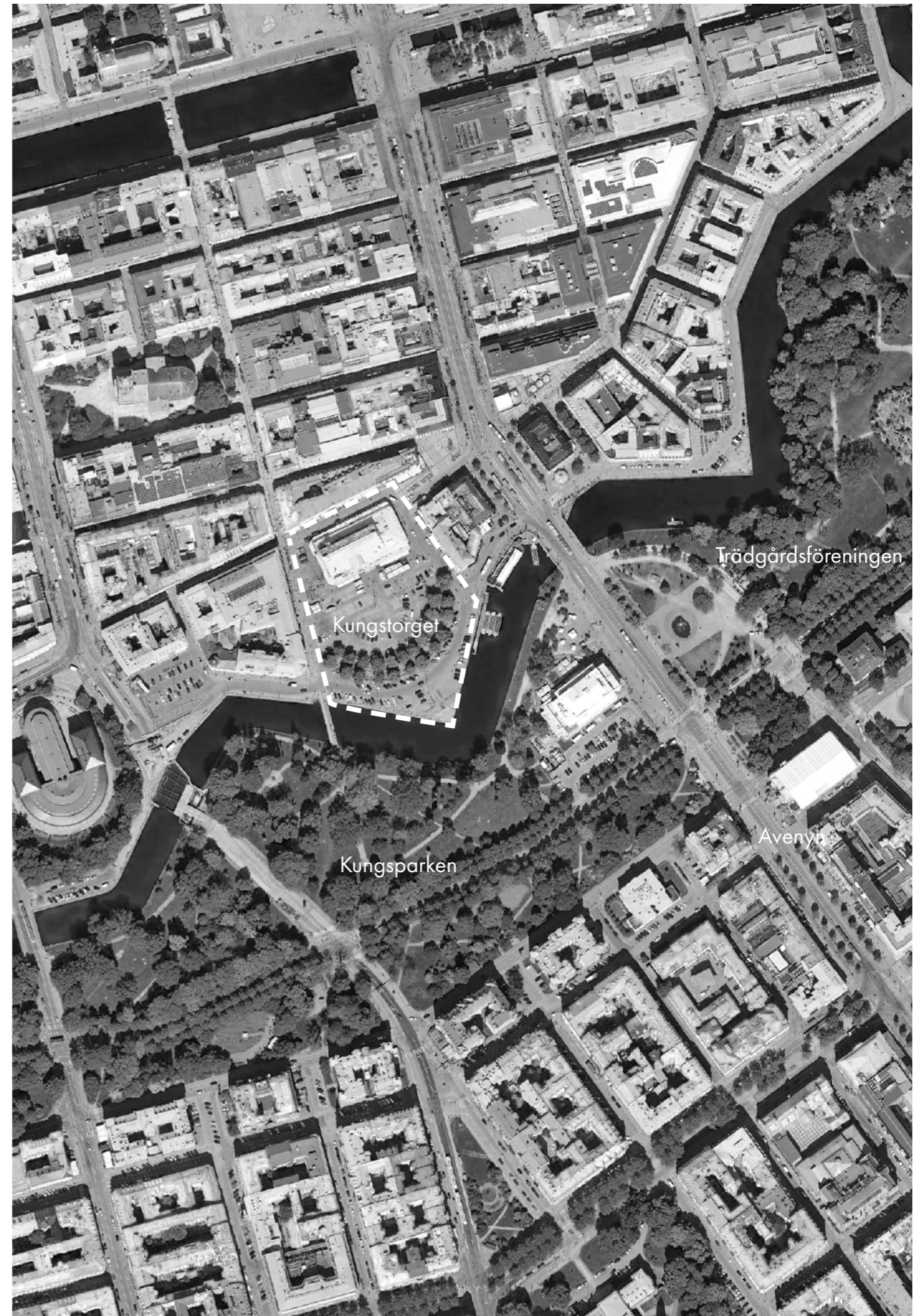
Site











The site is a triangular plot wedged right in the middle of Kungstorget in Gothenburg. The square is today framed by buildings on the east, west and north side and the canal to the south.

The wood square, as Kungstorget was first named, became Gothenburg's new market square when the market square was moved from Gustav Adolf's

square. The bazaar was built in 1850, which ran like an arc along the canal with several shops facing two directions. It was decided in 1912 that the bazaar was to be removed, but it was not demolished until 1966.

A place that once was a place for people is today a place mostly used for car parking, and occasional events (Vårt Göteborg, 2010).



-  Playgrounds
-  Greenery
-  Public transport
-  Outdoor restaurant
-  Paddan sightseeing
-  Cinema
-  Flower market
-  Preschool + Elementary school
-  High school
-  University

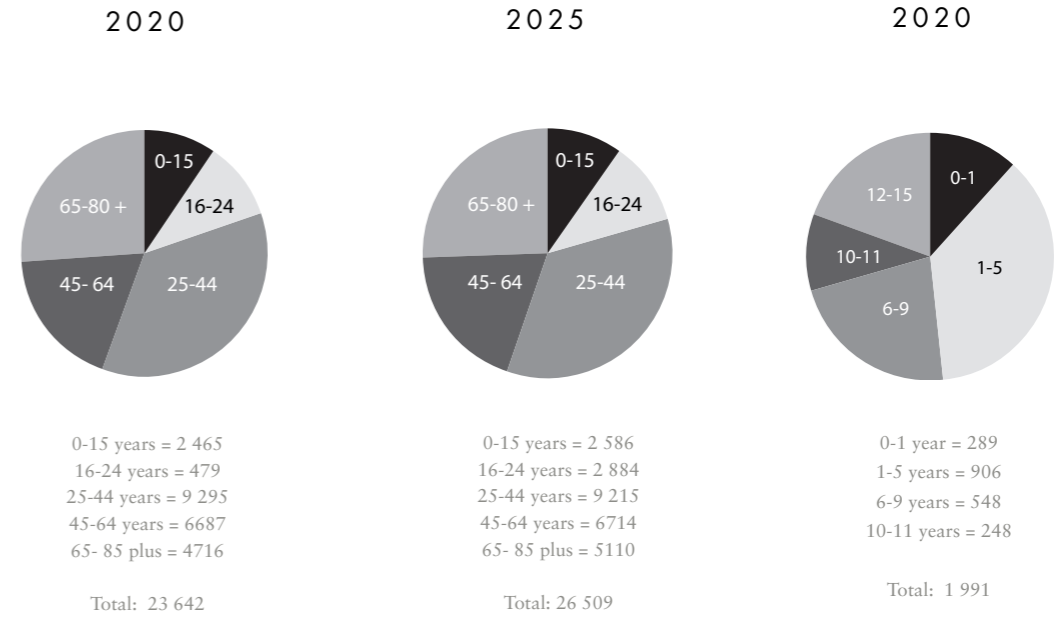


Fig 15. (Statistik och Analys stadsledningskontoret Göteborgs Stad, 2021)

The area of north city centre

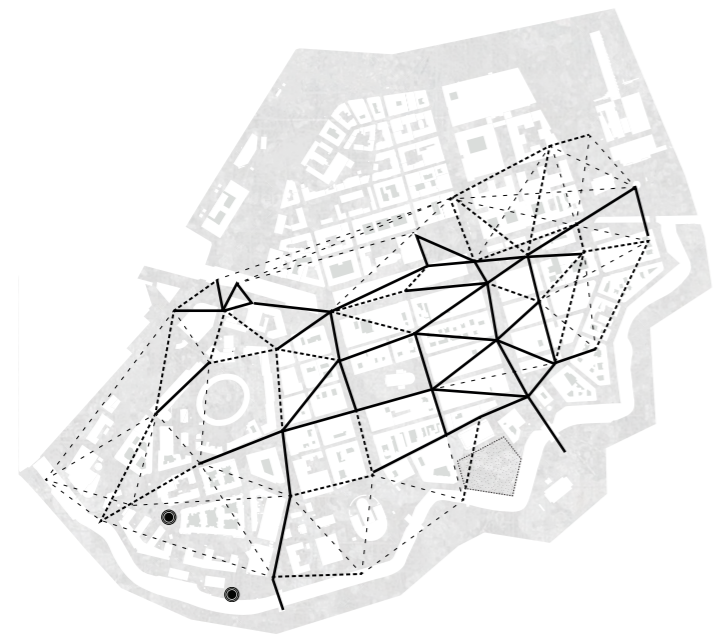
The site is placed in the area of the north city centre of Gothenburg. There are six playgrounds in the area, four of them in green areas, two of them in a more urban context. There are a lot of different activities taking place within the area. A consequence of that is that there are a lot of people traveling from the outside to the city centre to take part in the activities. The public transport has therefore very good communication within the area.

Children consist of 10 percent of the population of the people living in the area according to the statistics. In 2025 the amount of children will be less in proportion to the overall population in the area, but they will still consist of about 9,8 percent of the population (Statistik och Analys stadsledningskontoret Göteborgs Stad, 2021).



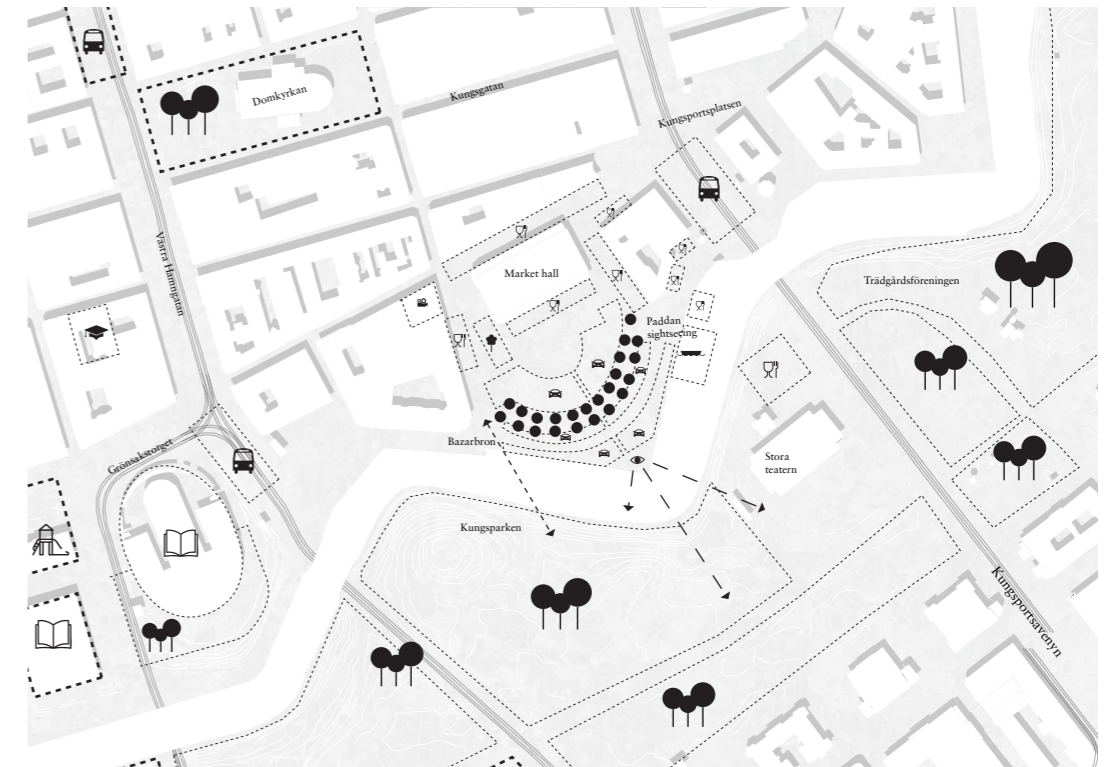
- High flow of pedestrians
- ◌ Median flow of pedestrians
- ⋄ Low flow of pedestrians
- Site area

Fig. 16. Average pedestrian flow per day. (Trafikkontoret Göteborg Stad, 2019)



- Playgrounds
- High flow of pedestrians
- - - Median flow of pedestrians
- · - Low flow of pedestrians
- Site area

Fig. 17. Average pedestrian flow per day (Trafikkontoret Göteborg Stad, 2019)



- | | | | | |
|--------------------|----------|-------------------------------|---------------|--------------------|
| Paddan sightseeing | Sight | Preschool + Elementary school | Flower market | Public transport |
| Cinema | Greenary | University | Parking lots | Outdoor restaurant |

Pedestrian flow

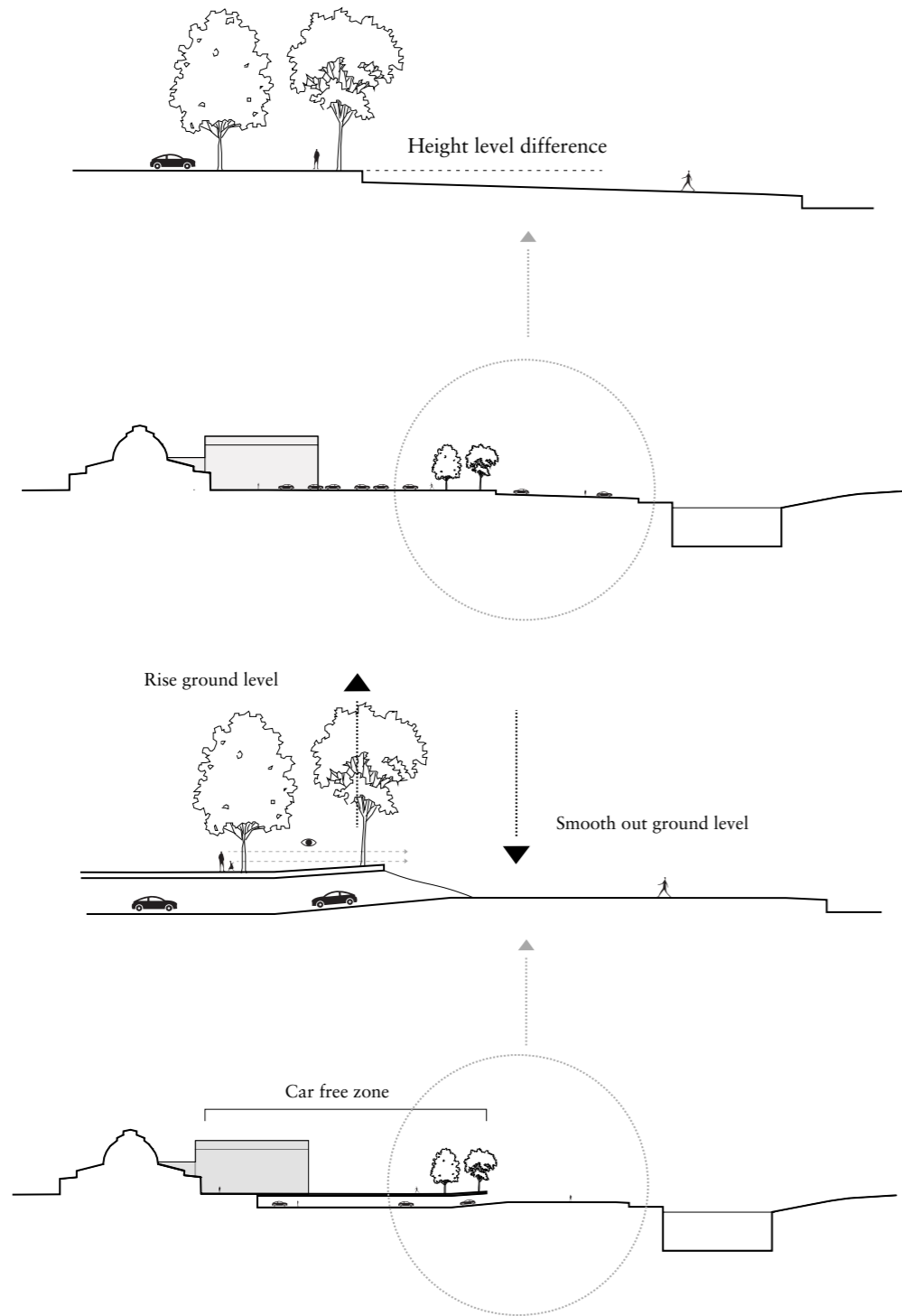
Gothenburg Urban Transport Administration (Trafikkontoret Göteborg Stad) did a report of pedestrian flows in the city centre of Gothenburg with help of measurements from WiFi technology. The report says that there are high flows of pedestrians near the northeast side of the site, a medium flow on the northwest side and lower on

the southwest side. This means that there are a lot of pedestrians circulating in the area, especially nearby on the north side of the site. The report also says that there is a low level of pedestrians nearby the existing playgrounds in the urban context (Trafikkontoret Göteborg Stad, 2019).

Challenges

The site is today mostly used for parking vehicles. This contributes to a barrier for pedestrians but also consequently blocks the views to the canal. The large flow of people that cross the site daily are subjected to danger of traffic and therefore the site is mostly used as a place you walk past, rather than a place you stay at.

The market hall is a historical building, but because of the lack of planning on the site it becomes quite unnoticeable in the context. The site has a lot of potential because of its scale and the views and the flow of people that walk by and people that eat at the restaurants. Also because of its convenient location being in the middle of two public transport stations.



Safety

Safety is one of the basic keystones to create a place for children and adults. The strategy is to program a garage under the ground for the cars, with the car entrance on the northwest side of the side, where there are lower flows of pedestrians.

25 meters

- possible to exchange short messages
- see facial expressions
- get more emotional involved
- intimate distance



100 meters

- see people in motion
- possible to get a overview of the space
- see peoples body language in a broad outline



Distance - How to get people emotionally involved

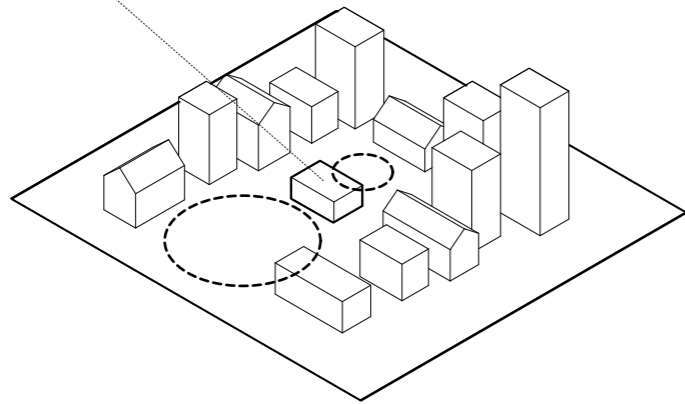
Working with different key distances within urban planning is important to make people want to engage with different places and people according to Jan Gehl.

100 meters - Only within 100 meters can a person perceive a person in motion and their body language in a broad outline. From the distance

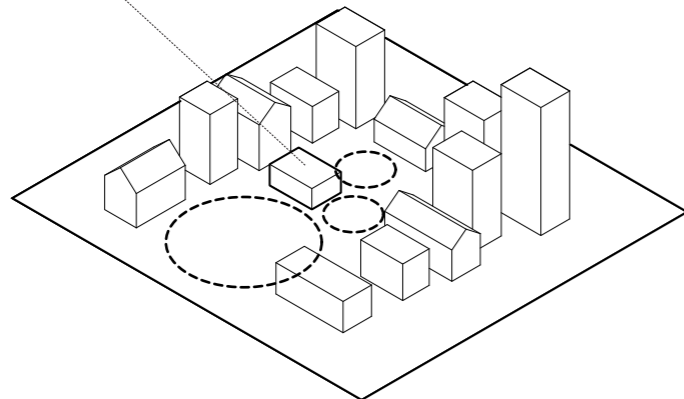
between 75 meters and 50 meters is it possible to read different characteristics of a person such as gender, age, clothes etc.

25 meters - Within 25 meters people can see people's facial expressions and therefore their emotions. It is possible to see others more clearly which makes the urban space more intimate and enjoyable (Gehl, 2010).

Adding building that create smaller spaces

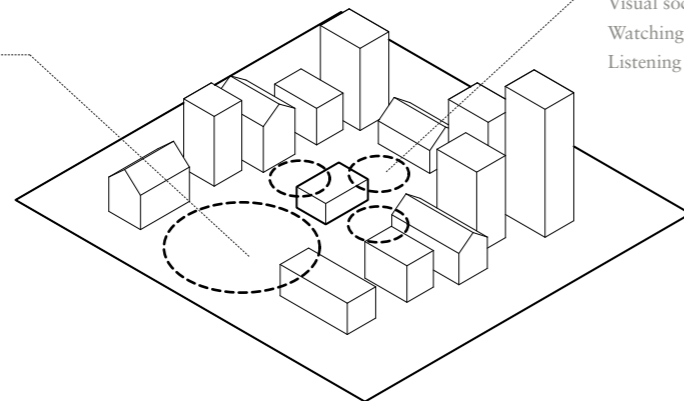


Moving the building to create more smaller spaces



Bigger space <100 m
Older children 6-10 years

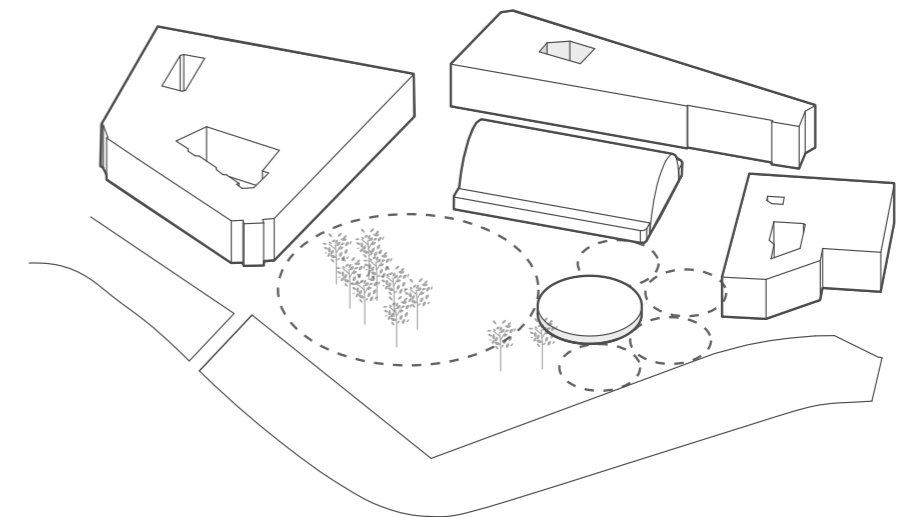
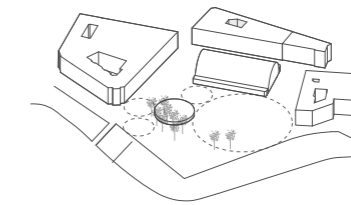
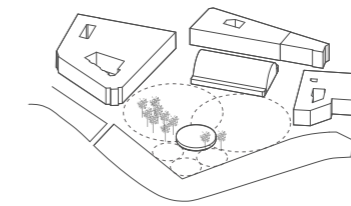
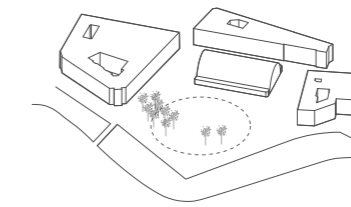
Bigger movement
Bigger groups
More physical challenges



Smaller space <25 m
Younger children 0-5 years

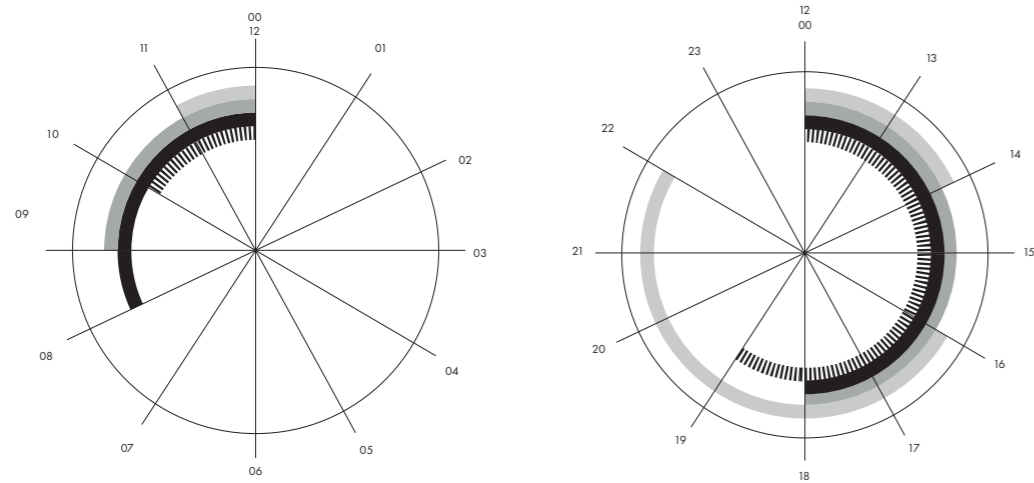
Visual social interaction
Watching
Listening

Diagram showing how to create multiple spaces and how to adapt them to childrens need in play.

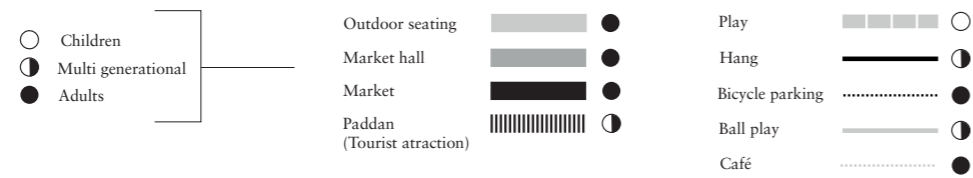
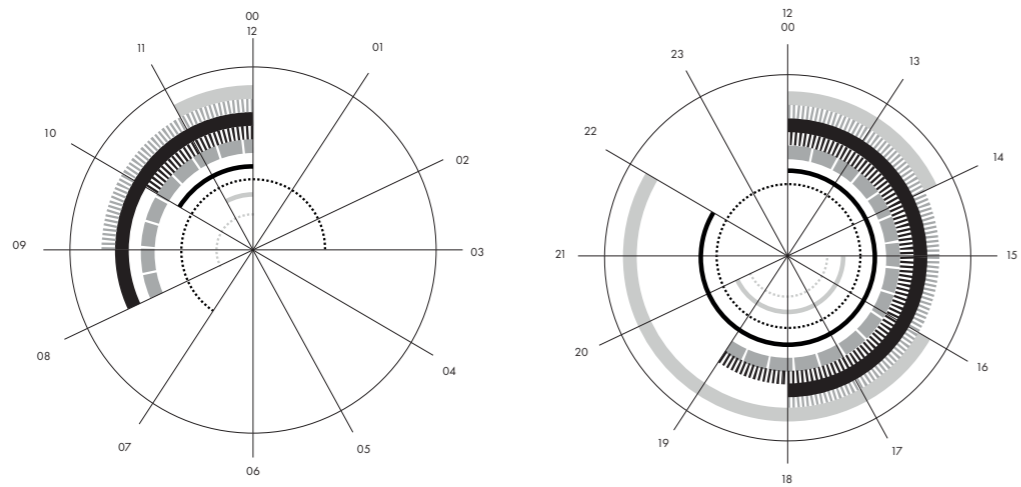


The existing site is too big to get a feeling of belonging to the site. The final proposal creates several intimate spaces near a high level of flow of pedestrians (in the north side of the site) and can therefore benefit from that.

Today



With other activities



Double programming

Public space requires activities that are activated during different times during the day to ensure that the space is used by people most of the time.

Integrating activities for different generations is important to gather people of various ages.

Flows

The proposal is shaped to embrace and enhance the existing flows on the site.

No backside

The organic shape of the volumes ensures safety around the hybrid, as there is no apparent backside.

Levels

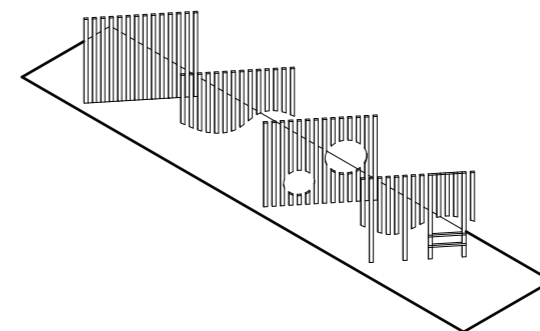
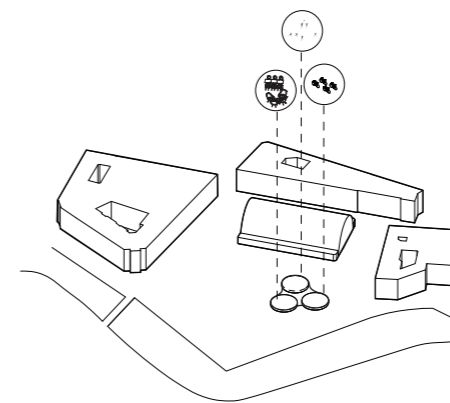
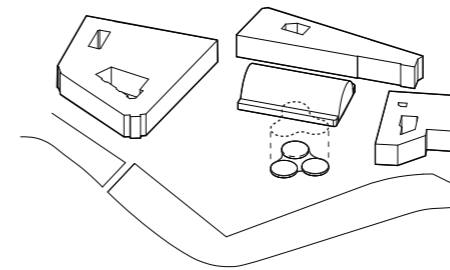
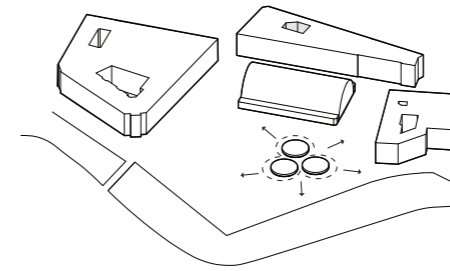
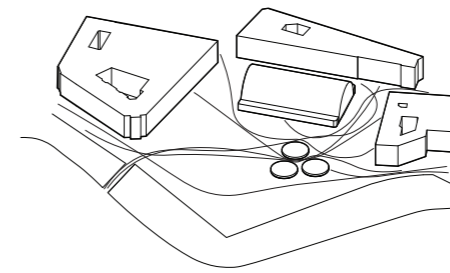
Playground on the roof creates different experiences and sight-lines, not only horizontally but also vertically.

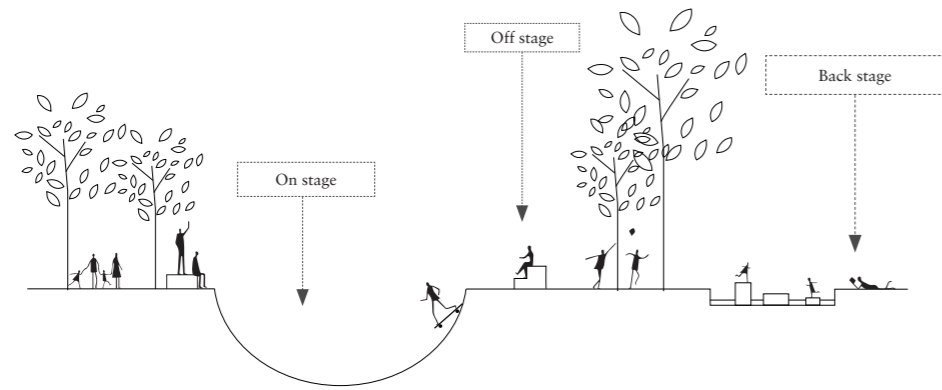
Double programming

Integrating playelements with other activities, to create a space that is active during longer hours of the day but also to create a multigenerational space.

Facade concept

The facade consists of wood slats to create transparency and to ensure safety. This enables a visual connection with the inside and outside but also with the different activities.





Levels of interaction

Children have different needs and one way of adapting the environment for diversity is working with different levels of interaction.

The level of social interaction that we choose to interact in can be divided in three different categories on stage, backstage and off stage. These concepts come from the sociological reasoning developed by Erving Goffman, a professor in anthropology and sociology. Our behavioral and action patterns look different depending on whether we are on stage, back stage or offstage. On stage becomes a place of attention where our level of self-awareness increases and we are aware of the fact that we are being observed. Back stage on the other hand is a space where we have the opportunity to be more left alone, without anyone watching us. The

term off stage indicates the type of spaces where it is possible just to watch everyday life unfold in our public spaces. To be able to listen and hear other people, to be a spectator.

There is an advantage from an equality perspective to create spaces that give people the opportunity to be on stage, back stage and off stage. The opportunity to play back stage before entering a larger context increases both security and encourages people to use places that are of an on stage nature. Places of an off stage nature can work as an invitation to those that are more comfortable in the background. For a public space it becomes a prerequisite that a place is large enough in order to be able to offer these levels of interaction (Göteborgs Stad, Park- och naturförvaltningen. 2014).

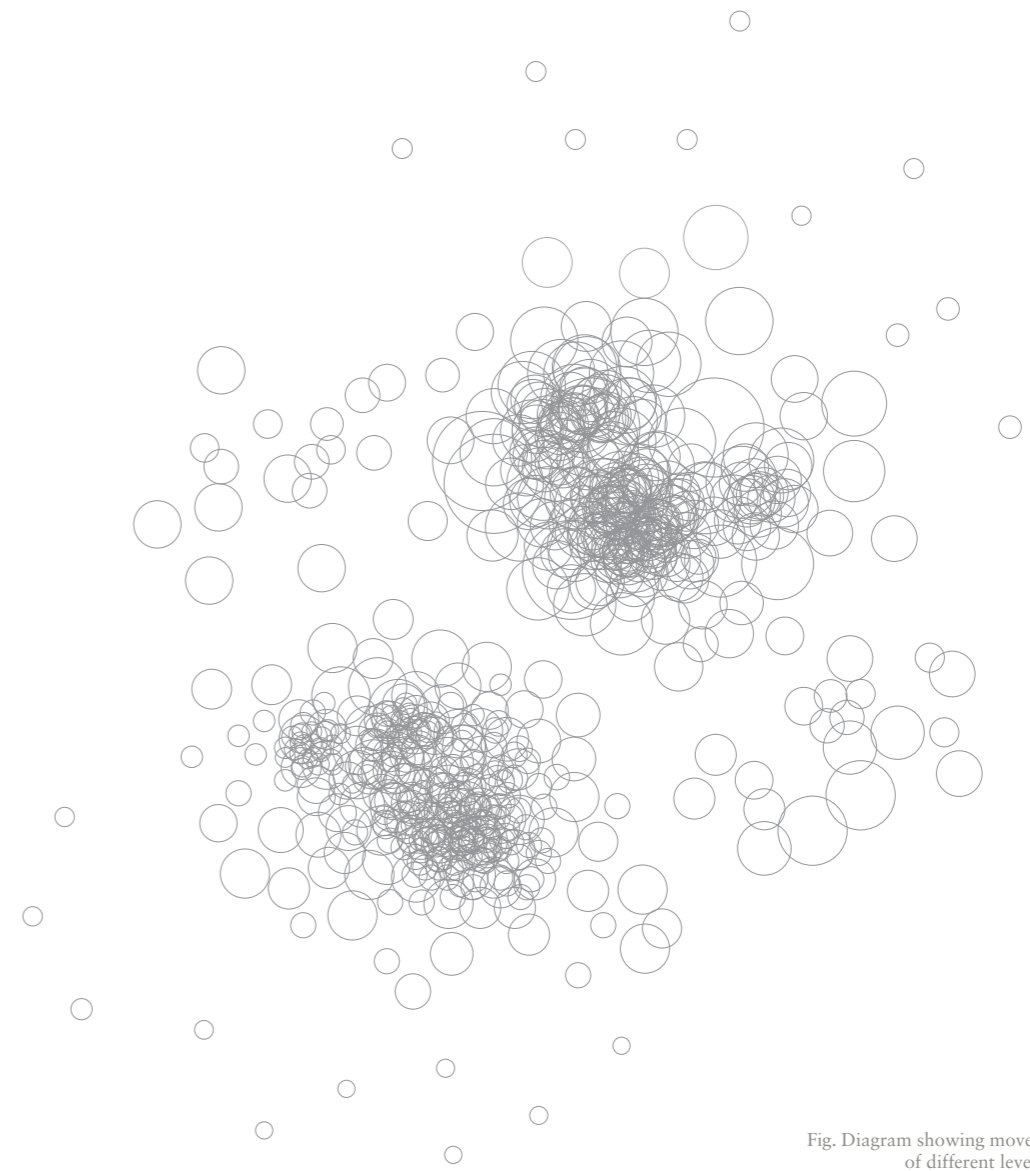
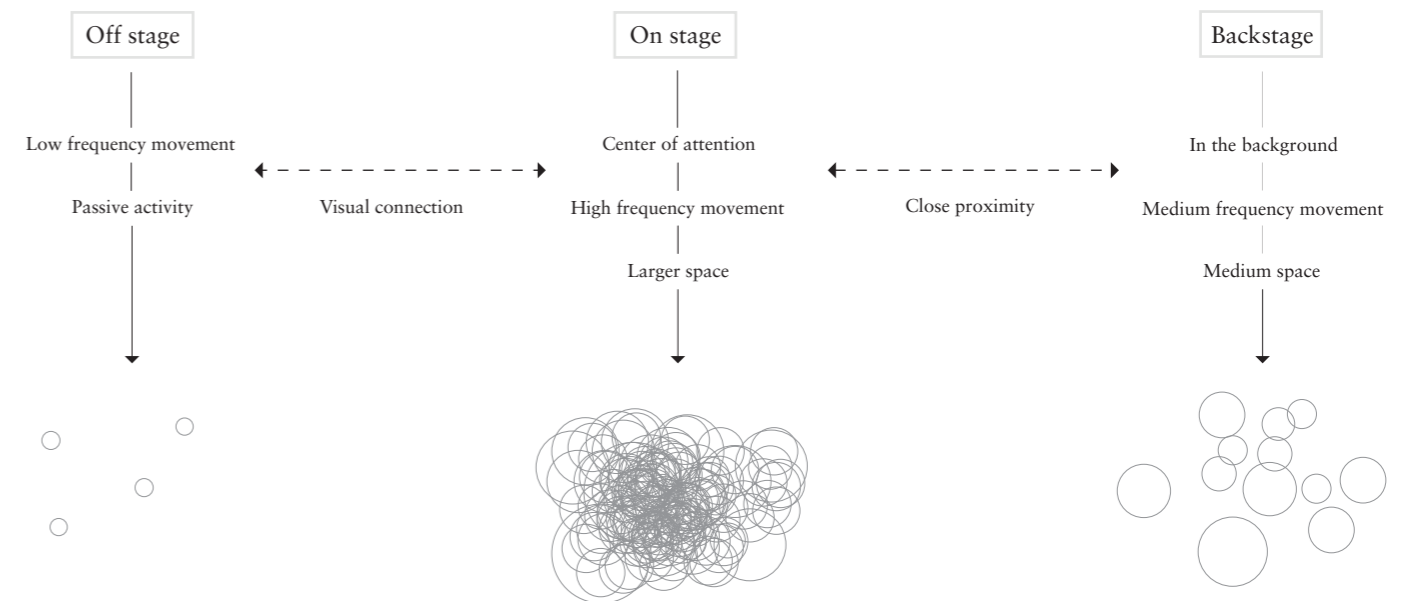
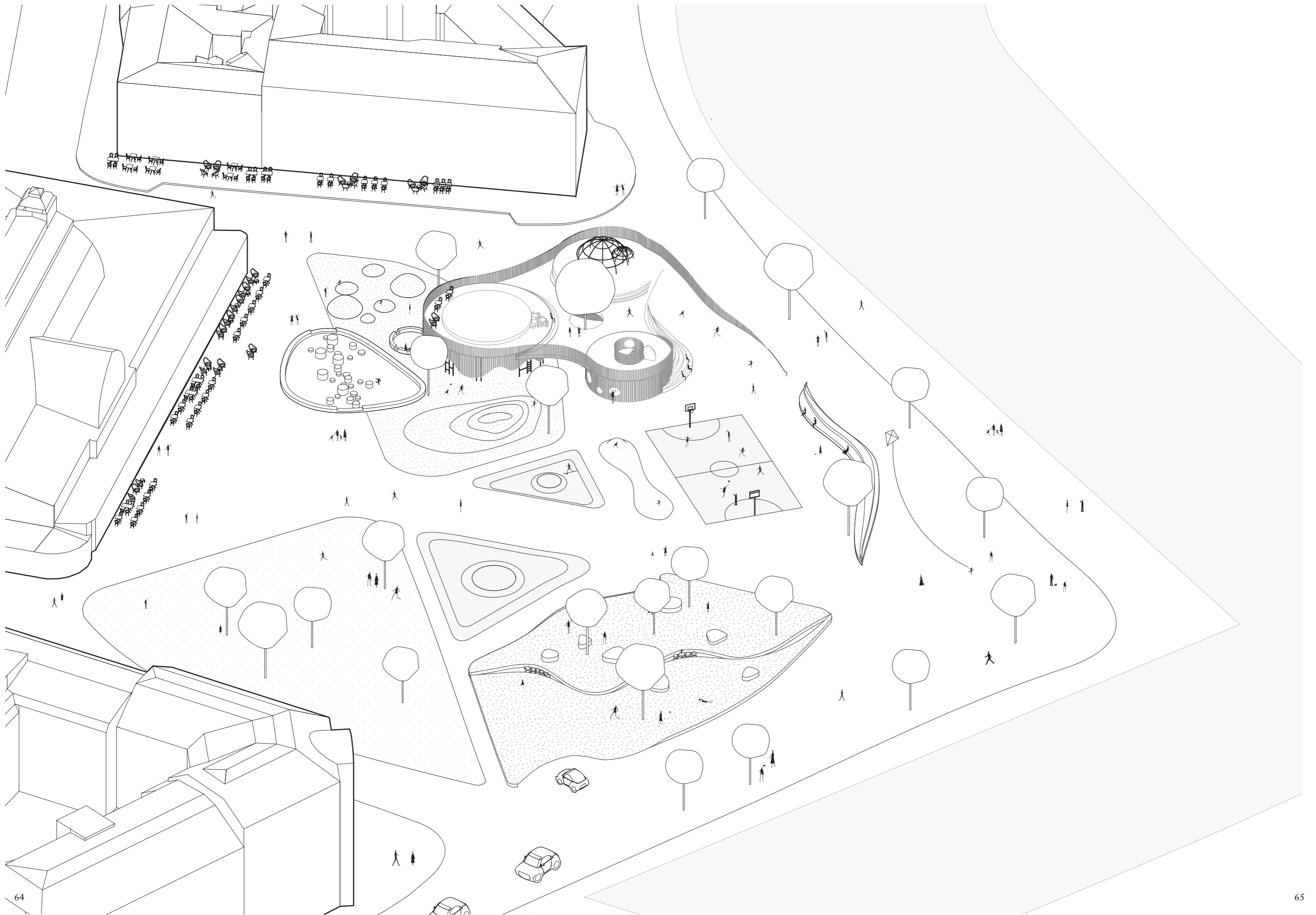


Fig. Diagram showing movement frequency of different levels of interaction





Enhance the entrance
to the markethall



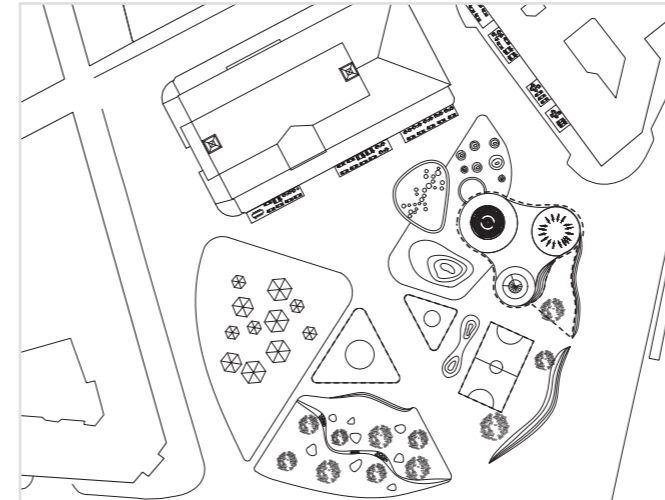
The market hall building becomes more visible by concentrating the flows.

Concentrating the flows



By concentrating the flows the pedestrians are found in designated paths.

Zone
bigger children

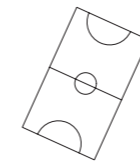


Bigger children require bigger space and are therefore concentrated more to the south of the site. The big zone contains play elements that are beneficial for older children.

Games with
rules



Skate park



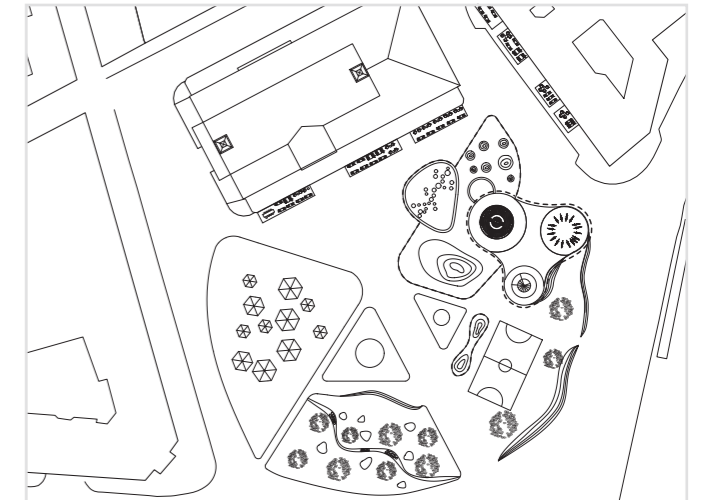
Multi sports arena

More physical
challenges



Big hill

Zone
smaller children



Smaller children are concentrated towards the north of the site. Near the outdoor seating where parents and a high flow of people are to be found. The smaller zone contains play elements that are suitable for younger children.

Tactility



Water play

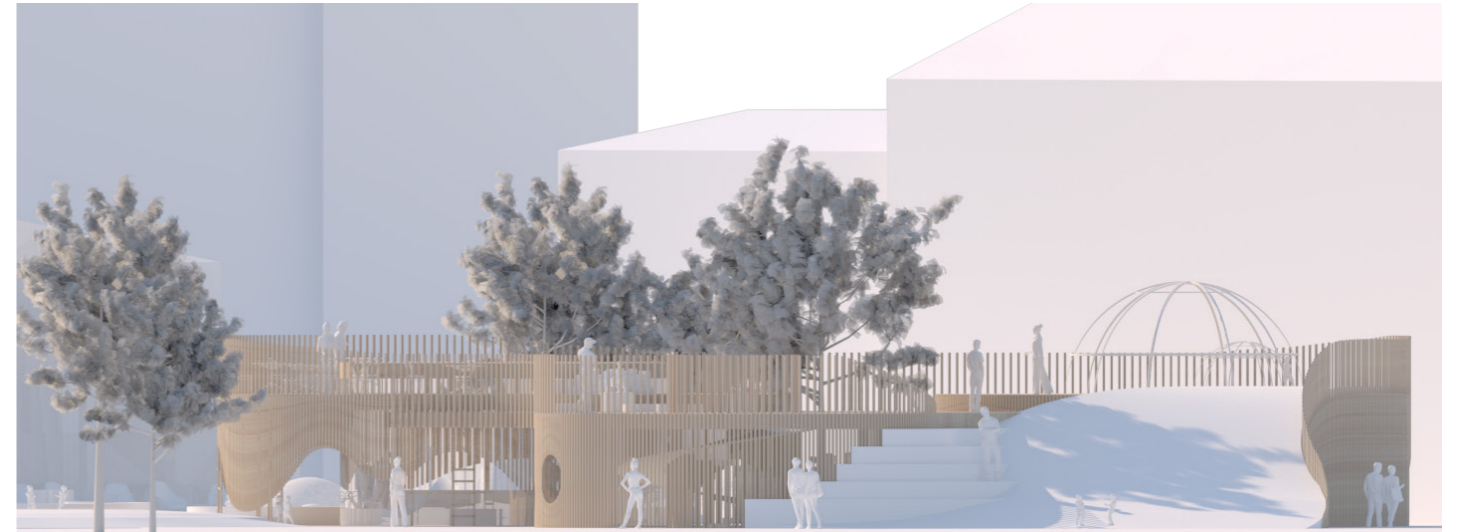
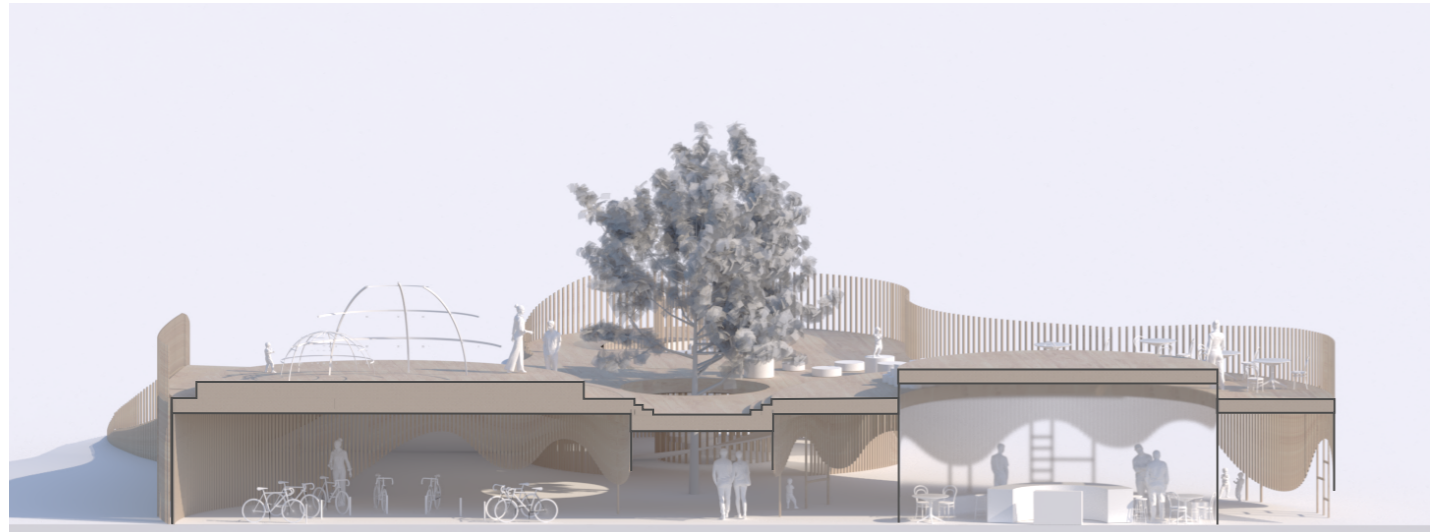


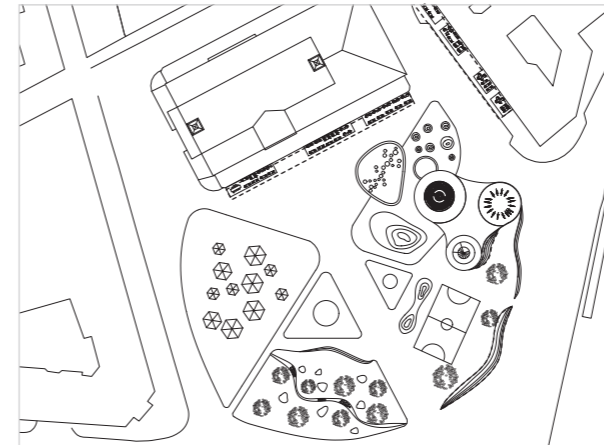
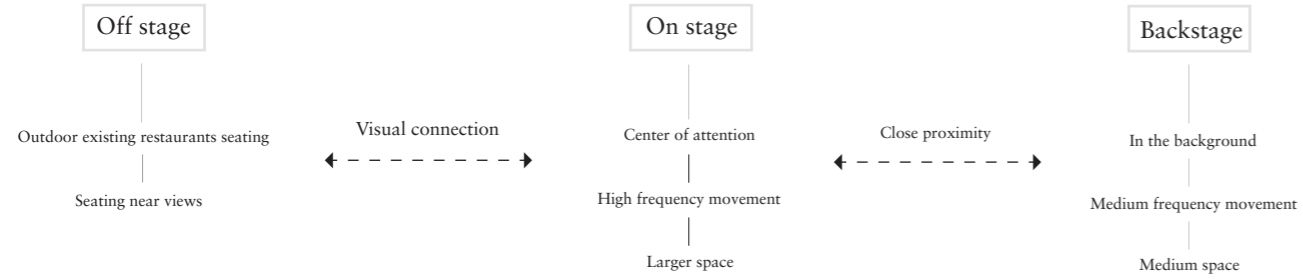
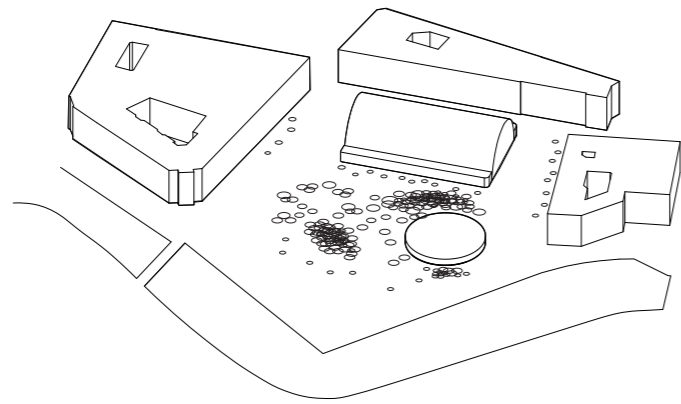
Sandpit

Balance



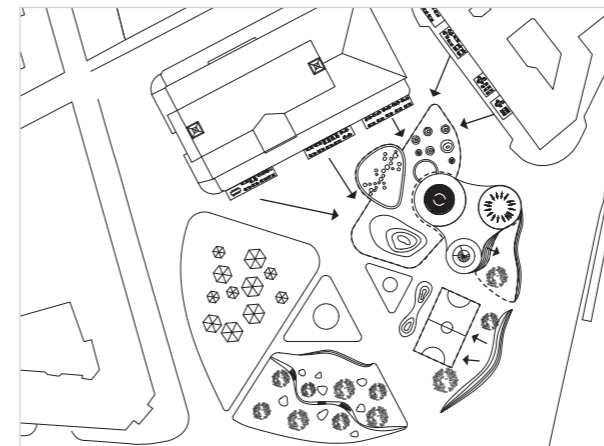
Hills





Off stage

Outdoors seating that has views towards the proposal, and seating towards the views to the canal and activities.



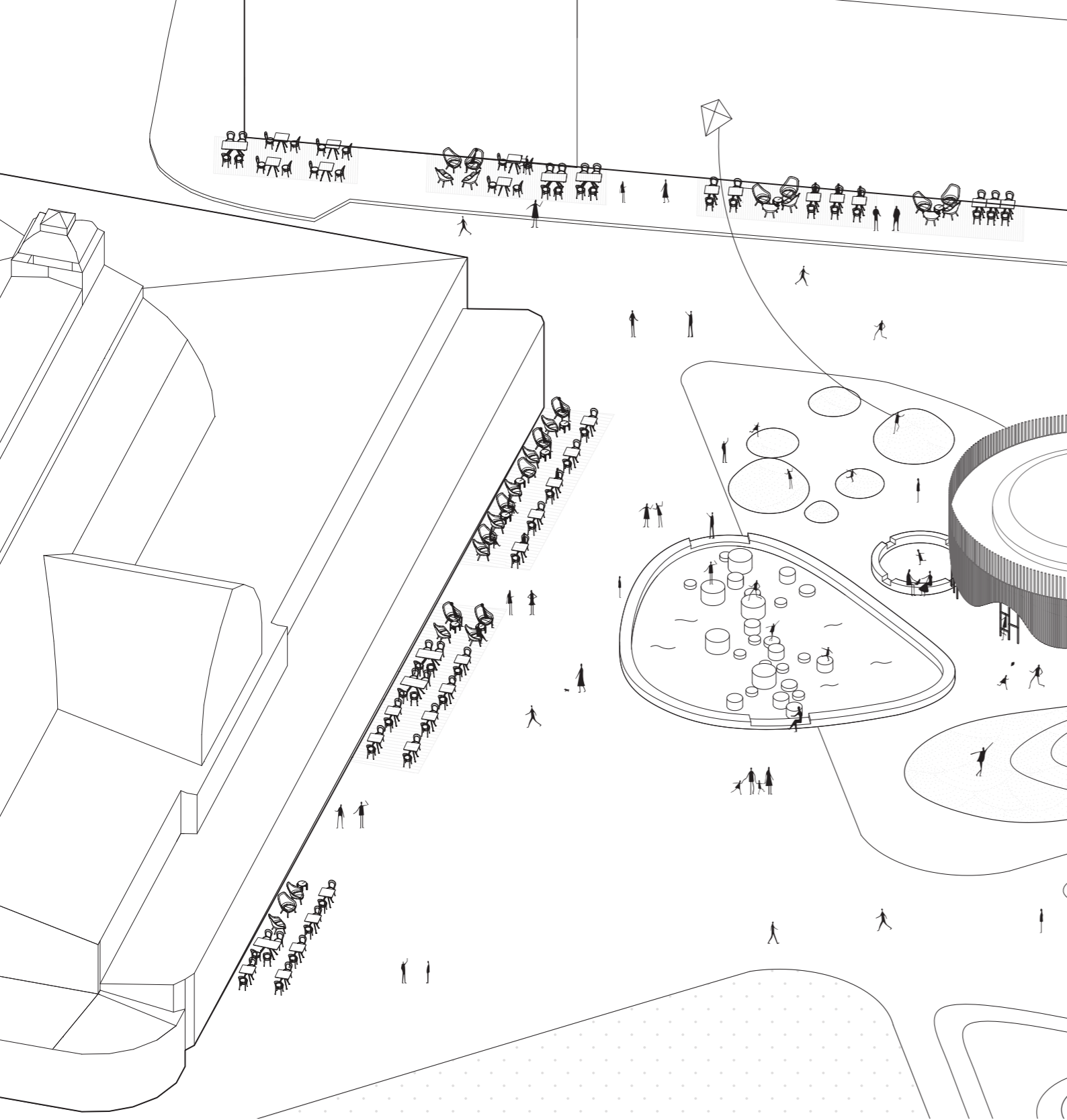
On stage

In a visual connection towards the off stage. A space where the smaller children are in the center of attention near the market hall and the bigger children can be seen from the seating possibilities near the canal and the proposal.



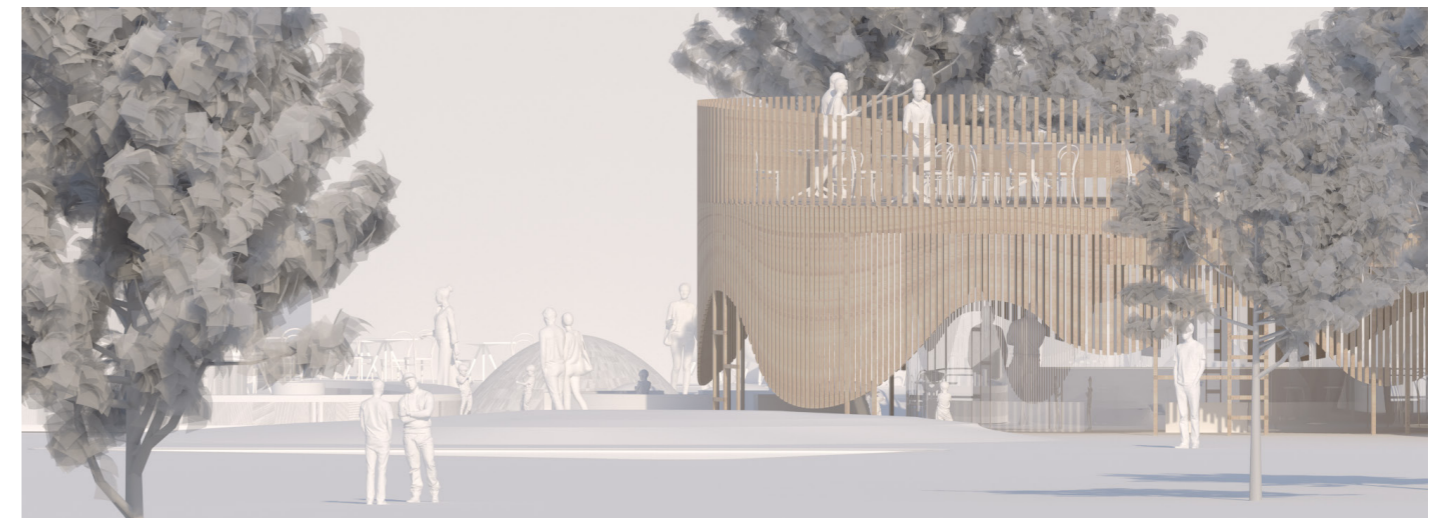
Backstage

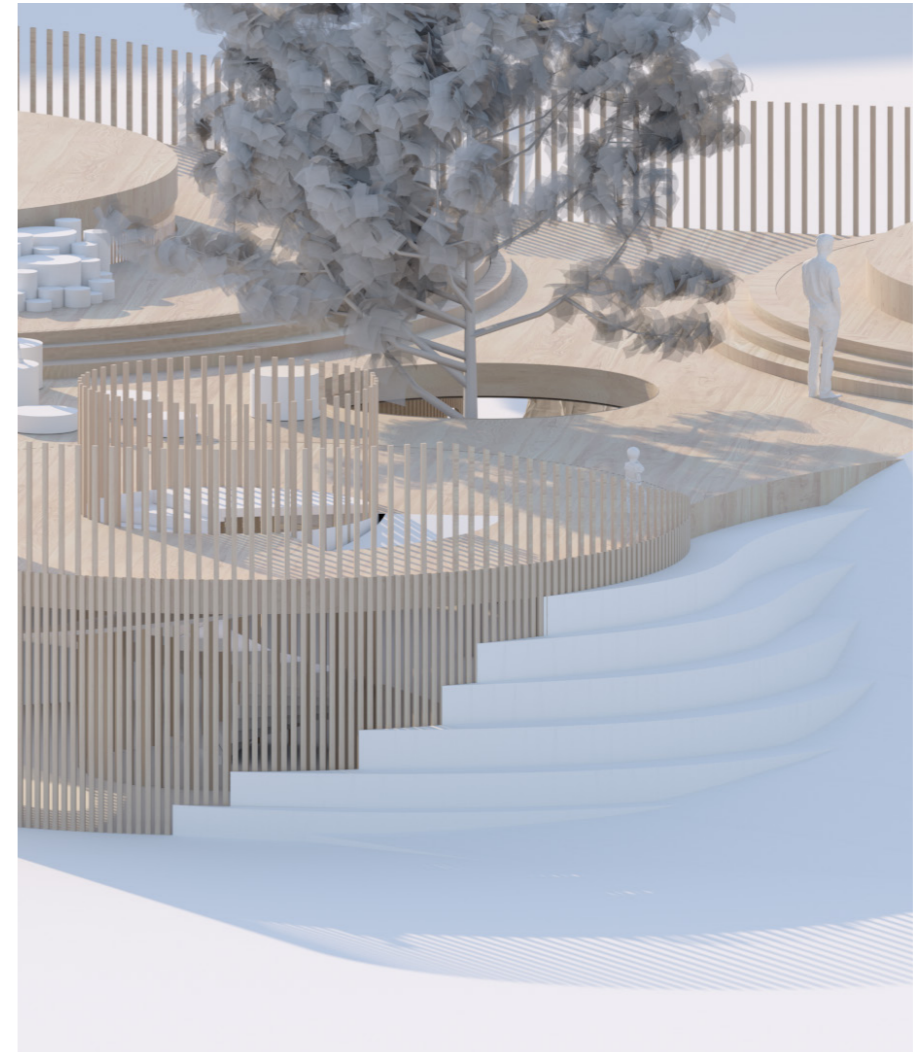
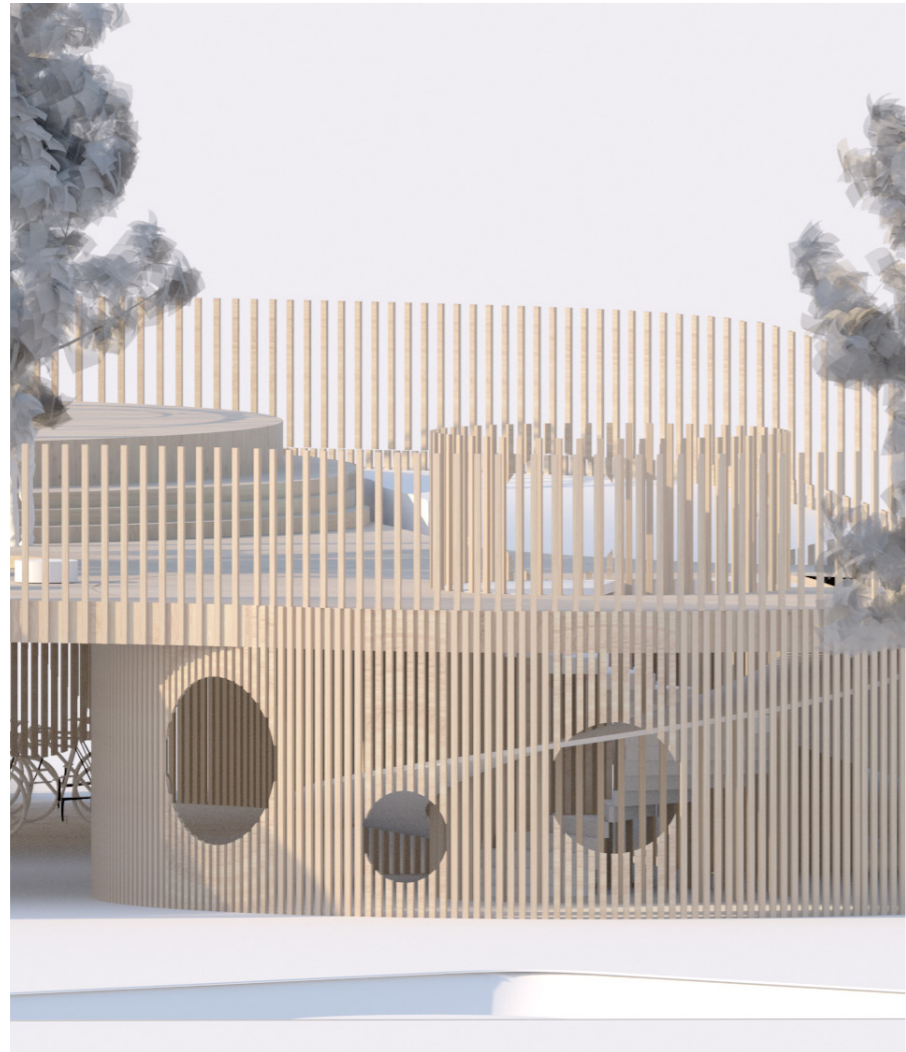
Activities that are in close proximity to on stage activities but further away from off stage. Skating, hills and landscape that are more in the background.



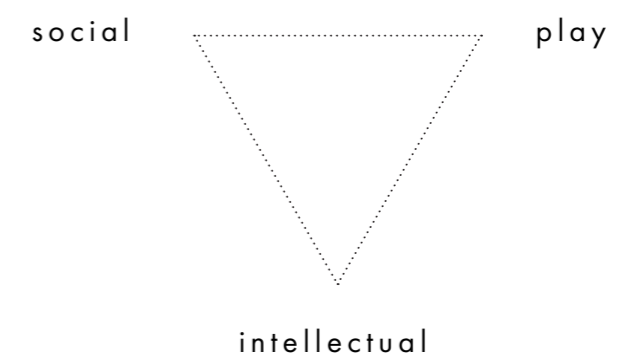
The relation between the offstage, which is mainly passive activity such as people in the outdoor market hall seating and the on stage where smaller children are

playing. Children are in close proximity to their parents and also in the center of attention, where they are near high flows of people just passing by.



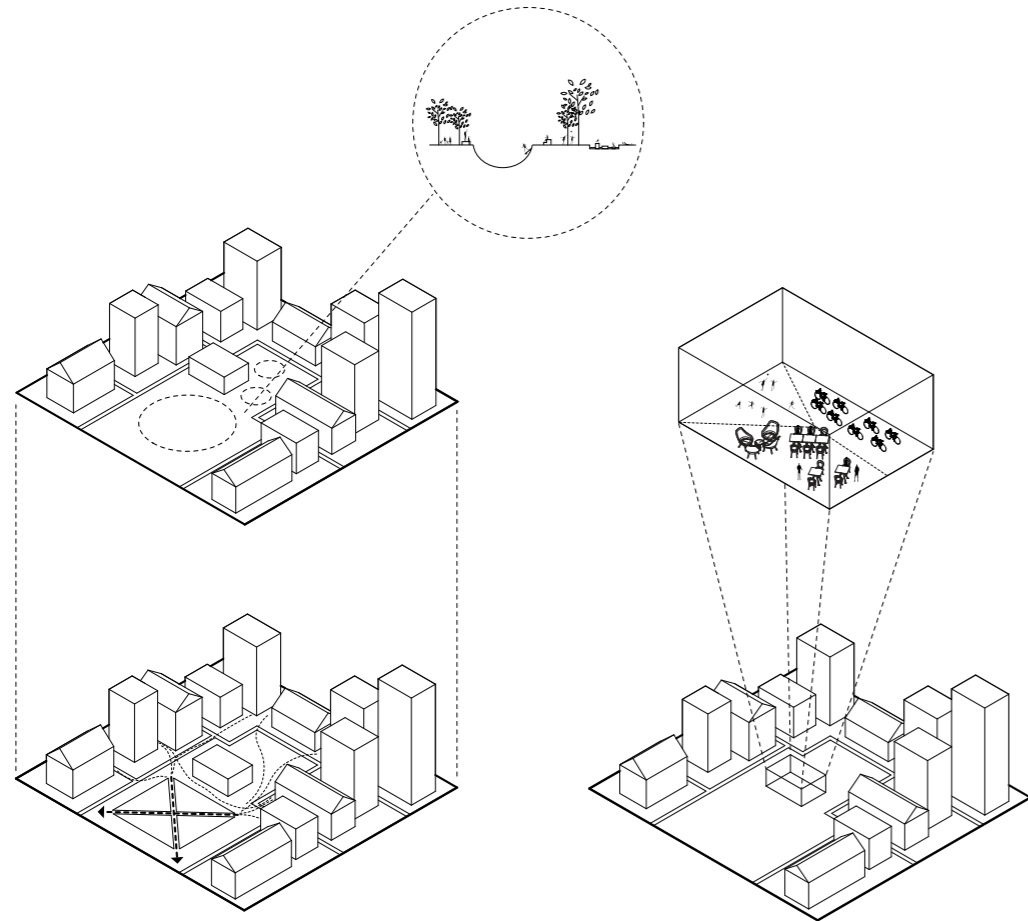


Toolbox



A toolbox that gives tools on how to approach and implement different aspects and elements in the design. These are based on what we have found interesting in our research to achieve a playhybrid that is simultaneously a playground and a building.

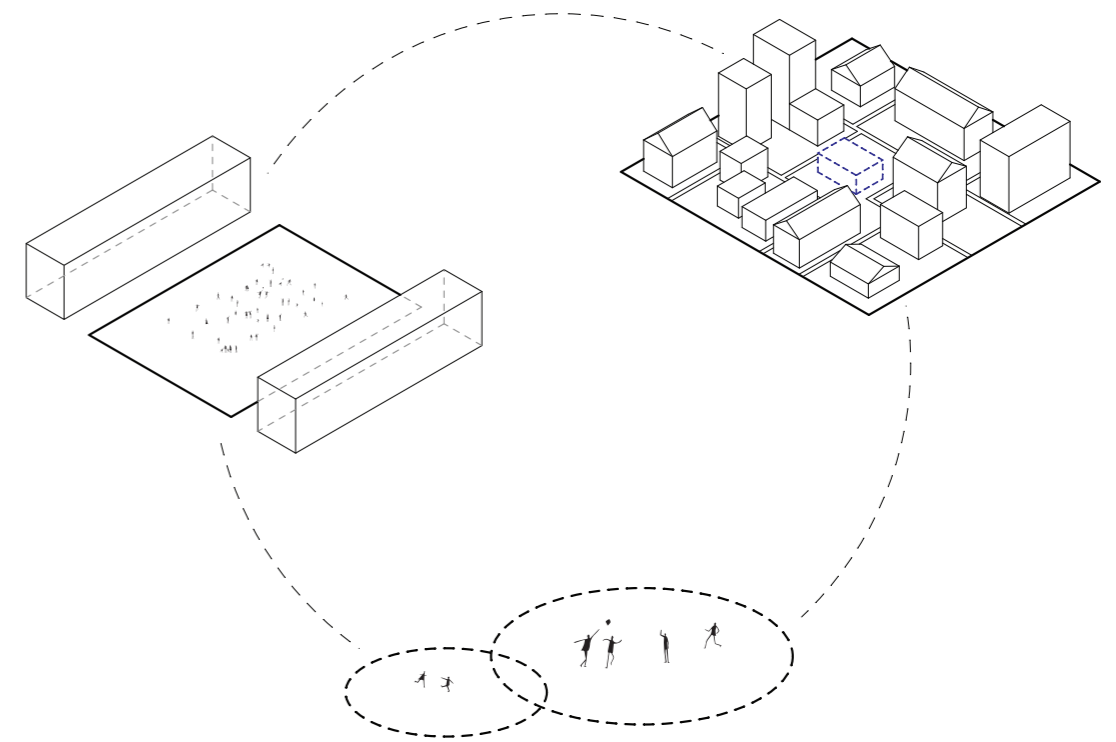
It is a way to approach and create a variety of playgrounds, to rethink the concept of playgrounds and to challenge the way the majority of them are designed today.



social

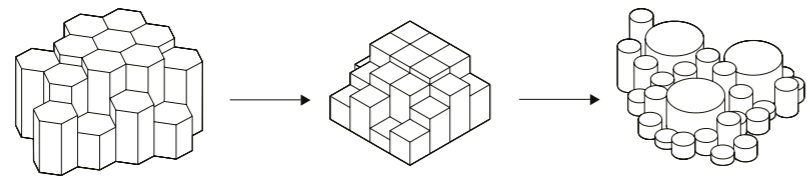
By creating different levels of interaction, creates an invitation to attract different people. People have different needs therefore the playhybrid and the space around it aim to be inviting for different groups. Attract people to the design proposal by concentrating the flows and work with existings

flows on the site. Also in relation to urban space with knowledge of the theory of distances by Jan Gehl. Double programming by integrating programs that in turn integrate people. Programs that are active during different hours of the day



play

Creating a space that is accessible and is integrated in the urban city. The importance of creating diversity in play and experience. Children have different needs therefore the space is sectioned into different play zones that are appropriate to different ages and needs.



intellectual

Ambiguity in relation to affordance results in a less predetermined and a more creative relationship between the user and the object. Affordance is ultimately about all the different opportunities that

an object provides. Creating play elements that can be used by children in many different ways provides a freedom of opportunities.

	Play	Social	Flows
City			
0-5 year old	<ul style="list-style-type: none"> Tactile elements Balance 	<ul style="list-style-type: none"> Playing independent Connection to passive activity 	
5-10 year old	<ul style="list-style-type: none"> Movement More physical challenges 	<ul style="list-style-type: none"> Bigger groups Playing independent 	
On stage	<ul style="list-style-type: none"> Center of attention Activities that need more space 		
Backstage	<ul style="list-style-type: none"> In the background Close proximity to on stage 		
Offstage	<ul style="list-style-type: none"> Passive activity 		
Distance 25 meters	<ul style="list-style-type: none"> Playing independently 	<ul style="list-style-type: none"> Intimate Facial expressions Get more emotional involved 	
Distance 100 meters	<ul style="list-style-type: none"> Bigger groups 	<ul style="list-style-type: none"> Overview See body language See people in motion 	
Playelements	<ul style="list-style-type: none"> Play becomes a process Wide range of affordances 	<ul style="list-style-type: none"> Multigenerational Co-creating a new meaning with the object 	
Double programming	<ul style="list-style-type: none"> Integrating play with other activities 	<ul style="list-style-type: none"> Multigenerational 	

References

- Artursson, Karin. Bergsten, Peter. Åkerblom, Petter. (2019, October) Växande storstäder måste ge utrymme för barnen. *Svenska Dagbladet*. <https://www.svd.se/vaxande-stader-maste-ge-utrymme-for-barnen> Publicerad 2019-10-05
- Bengtsson, Arvid. (1974) *The Child's Right to Play*. I.P.A, Sheffield, England.
- Boverket (2012) En urbaniserad värld. <https://sverige2025.boverket.se/en-urbaniserad-varld.html>
- Gehl, Jan. (2010) *Cities for people*. Island press.
- Gehl, Jan. (2006) *Life between buildings: using public space*. The Danish Architectural Press.
- Gehl, Jan. Gemzøe, Lars. Kirknæs, Sia. Søndergaard, Britt. (2006) *New city life*. Copenhagen : The Danish architectural press.
- Gielen, M.A. & Leeuwen, L. van (2016). *Ambiguity as a virtue in design for play*. Benesch, H. & Friberg, J. Growing with design. HDK, University of Gothenburg.
- Göteborg Stad. (2010 January) Basarerna på Kungstorget. Vårt Göteborg, Göteborg Stad. <https://vartgoteborg.se/gamla-goteborg/basarerna-pa-kungstorget/#>
- Göteborgs Stad, Park- och naturförvaltningen (2020). Park- och naturförvaltningens riktlinje för lekplatser - lekvänlig stad för alla.
- Göteborgs Stad, Park- och naturförvaltningen. (2014) Parker och naturområden - Riktlinjer för jämställdhetsarbete. https://goteborg.se/wps/wcm/connect/7857827d-cb5c-4a37-a598-461e8fc9db6c/Parker+och+naturomr%C3%A5den_Riktlinjer+f%C3%B6r+j%C3%A4mst%C3%A4lldhetsarbete.pdf?MOD=AJPERES&fbclid=IwAR3fBpLoc52K3puhAjxkjAMaW9E0JrkK0BY49ZwSBP_8w4MwS9hg7Gr16Fc
- Jansson, Märith och Klintborg Ahlklo, Åsa. (2016) *Plats för lek. Svenska lekplatser förr och nu*. Ab Svensk Byggtjänst. Stockholm.
- Kollarova, Denisa & Van Lindgren, Anna. (2016) *Aldo van Eyck - Seventeen playgrounds*. Lecturis.
- Mildh, Lo. (2019, february 12) Statistiska Centralbyrån. <https://www.scb.se/hitta-statistik/artiklar/2019-fler-barn-bor-i-storstader-i-framtiden/>
- Moss, B. S., (2012) *Natural Childhood*. <https://nt.global.ssl.fastly.net/documents/read-our-natural-childhood-report.pdf>
- Noguchi, Isamu. (1957) Isamu Noguchis letter to Edward Durell Stone, December 3, 1957. The Noguchi Museum Archives. <https://www.noguchi.org/isamu-noguchi/digital-features/ten-architects/>
- Norman, Donald A. (2013) *The psychology of everyday things*. New York, NY : Basic Books
- R. Caljouw, Simone & Withagen, Rob. (2017 July) Aldo van Eyck's Playgrounds: Aesthetics, Affordances, and Creativity. University Medical Center Groningen. <https://www.frontiersin.org/articles/10.3389/fpsyg.2017.01130/full>
- Statistik och Analys stadsledningskontoret Göteborgs Stad. Retrived (March, 2021) <http://statistikdatabas.goteborg.se/pxweb/sv/>
- Unicef (2021) Convention on the Rights of the Child. <https://www.unicef.org/child-rights-convention/convention-text#>
- Wooley, Hellen (2016, 18 january) Why UK playgrounds don't provide enough play opportunities. Department of Landscape Architecture, University of Sheffield. <https://sola-blog.com/2016/01/18/why-uk-playgrounds-dont-provide-enough-play-opportunities/>
- Österberg, Jenny Magnusson. (2018, mars 27) *1177 Vårdguiden*. <https://www.1177.se/Vastra-Gotaland/barn--gravid/sa-vaxer-och-utvecklas-barn/lek-och-sagor/sa-utvecklas-barn-av-att-leka/?fbclid=IwAR-28wh1Z-7HtCDvApJYT1I12oB56keNqyW41sUTufxoOBkptj7uESto0wgQ>
- Figures:
- Fig. 1. Statistiska Centralbyrån. Retrieved (2019, february 12) <https://www.scb.se/hitta-statistik/artiklar/2019-fler-barn-bor-i-storstader-i-framtiden/>
- Fig. 2. Ho, Chester. Retrieved (2021, March). Unsplash. <https://unsplash.com/photos/KTGOOnAdtvOQ>
- Fig. 3. Suister, Ed. Retrieved (2021, March) Uncube Magazine. <https://www.uncubemagazine.com/blog/9318763>
- Fig. 4. Retrived (2021, May) https://www.play-scapes.com/tag/aldo-van-eyck/?fbclid=IwAR2uiHiiIgtSzHmA4YJQBl5tKUOB5isG8SvVvaH5nEtFDt19GeB_e2LpJnc
- Fig. 5. Retrived (2021, May) South coast plaza. https://www.southcoastplaza.com/stories/2016/12/noguchi-garden/?fbclid=IwAR3MxoNmgKHOszkuNYZvEqDo_tH8ZE292UBEq53C53dkm79K6IEGn-QPzyWM
- Fig. 6. Retrived (2021, May) Noguchi museum. https://www.noguchi.org/museum/exhibitions/view/in-search-of-contoured-playground/?fbclid=IwAR2zLEzd_1E8lKHc4xLF9chHi1i4ngqfOaXaXytSBN-Rxjp-5DOat-8nKgNc
- Fig. 7. Retrived (2021, May) South coast plaza. https://www.southcoastplaza.com/stories/2016/12/noguchi-garden/?fbclid=IwAR3MxoNmgKHOszkuNYZvEqDo_tH8ZE292UBEq53C53dkm79K6IEGn-QPzyWM
- Fig 8. Retrived (2021, April) Cobe. <https://www.cobe.dk/place/israels-plads>
- Fig. 9. Retrived (2021, February) Lev Design. <https://levdesign.com.br/o-modelo-big-de-apresentacao-estudo-de-caso/>
- Fig. 10. Retrived (2021, April) Realdania By & Byg. <https://www.realdaniabyogbyg.org/projects/blox>
- Fig. 11. Hjortshøj, Rasmus. Retrived (2021, March) ArchDaily (https://www.archdaily.com/880388/israels-plads-square-cobe/59c9fc50b22e38ca7c000128-israels-plads-square-cobe-photo?next_project=no)
- Fig. 12. Retrived (2021, April) Mapchitecture. <https://mapchitecture.tumblr.com/post/33890910804/maritime-youth-house-by-plot-copenhagen>
- Fig. 13. Luftfoto, Dragor. Retrived (2021, April) ArchDaily. https://www.archdaily.com/893920/blox-oma-ellen-van-loon/5af0804ff197c617000024-blox-oma-ellen-van-loon-photo?next_project=no
- Fig. 14. Higab. Retrived (2021, January) <https://www.higab.se/fastigheter/stora-saluhallen/>
- Fig. 15. Statistik och Analys stadsledningskontoret Göteborgs Stad. Retrived (March, 2021) <http://statistikdatabas.goteborg.se/pxweb/sv/>
- Fig. 16. & 17. Trafikkontoret Göteborg Stad, enheterna Analys och Stadsliv. (2019 July) <https://stadsutveckling.goteborg.se/siteassets/alla-bilder/slutrapport-wifimatningar-fotgangare-mikael-reidal.pdf>

Discussion

We were both in the beginning of the thesis interested in researching a subject that we think is current. We were inspired by Copenhagen and their approach to architecture. How they integrate kids and playfulness in their city. A city that is for people. We looked at the different reference projects that are in a sense a hybrid between playground and a building. We choose Kungstorget in Gothenburg as our site because we experience a lack of integration of kids in the city. They are often found in isolated places, and we wanted to challenge the idea of playgrounds and want to see a variety of playgrounds that are more integrated and democratic.

Throughout the process it has been challenging for us to define what is a hybrid. It is something that has been an ongoing process throughout the thesis. However, we did want to challenge ourselves to create something that we have never done during our education. We have learned about different subjects related to the subject, that were unknown to us before.

To find proper methods in relation to the subject, has been a process that also has been challenging. It has been a learning curve that has cleared up more towards the end of the thesis.

If we had more time, we would focus more time on the design methods and make the implementation of these tools a bit clearer. Since we were lacking clear methods of implementation in the beginning of the thesis, we had a phase where we tried different ideas but they were lacking a clear guidance from the beginning. Therefore, we had to rethink our ideas and methods many times.

The design proposal is a result of literature studies and reference projects and we are in the end proud of ourselves for trying to challenge ourselves to try to rethink the way we design spaces for kids and create a space that integrate kids with other generations in the urban city.