



LINNÉA HANELL

A PLACE TO PLAY

- children's design threaded in the urban fabric of Rosengård

Lund University
Sustainable Urban Design
Master thesis
Rosengård - Malmö

Master Thesis Report May 2021

Lund University, Sweden
Faculty of Engineering, Lund Institute of Technology
School of Architecture
Sustainable Urban Design, Master's program
ASBM01

Defense: 2021, May 19th
Publication: 2021, June 18th

All images, analyses, artwork and photographs presented in this book
are done by the author unless noted otherwise.

TITLE

A place to play - *Children's design threaded in the urban fabric of Rosengård*

KEYWORDS

urban design, landscape design, sustainable development, million program, children,
play, child-friendly city, independent mobility, affordance

AUTHOR

Linnéa Hanell

SUPERVISOR

Andreas Olsson, Lecturer Sustainable Urban Design SUDes, Department of
Architecture and Built Environment, Lund Univeristy, Architect SAR/MSA

EXAMINER

Lars-Henrik Ståhl, PhD, Professor, Director of Sustainable Urban Design SUDes,
Department of Architecture and Built Environment, Lund Univeristy

JURY

Jonna Ekholm, Architect and Urban designer at Gehl Architects, Architect SAR/MSA

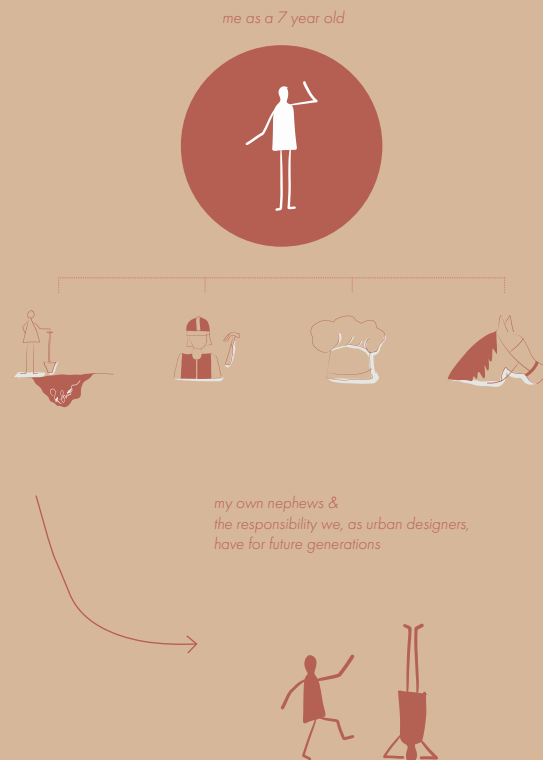
Peter Siöström, Assoc. Professor, Architect SAR/MSA, Chairman of Ax:son Johnson
Institute for Sustainable Urban Design, LTH

Lars-Henrik Ståhl, PhD, Professor, Director of Sustainable Urban Design SUDes,
Department of Architecture and Built Environment, Lund Univeristy



LUND UNIVERSITY

SUDes
Sustainable Urban Design



WHO AM I AND HOW DID I END UP HERE?

At the age of seven, I had already been an archeologist, construction worker, chef, and a stable hand. Many times over. In forests nearby and different courtyards, I exercised these professions to a very high degree. For me and my friends, it was our job. Not until decades later would I get back to these memories and think about what great significance they had on me and who I am today. Then it was a state of play, it came as natural as anything else. Today I understand that I had the opportunity to investigate, test, and formulate my environments and in that way, I also developed an understanding of my environments.

Spending time with my own nephews today, I can't help reflecting on what kind of environment we are giving them? The importance of play is crucial for our societies and the social sustainable development of our cities. That means, that the responsibility we as urban designers have for future generations is remarkable. This responsibility points out that we always need to be open to changes so that we fully can meet the need of our environments. The search for knowledge is therefore something that I will never give up. The subject of free outdoor spaces has followed me for many years and I hope to continue investigating it in my further work life. Urban design for me is how to make urban habitats work better and more properly. Urban design for me is to handle this challenge but still to be playful - both in the design and in the project itself. In the end, the human species is one of the most interesting habitats and we also have to remember appreciating it and having fun whilst living amongst it.

EDUCATION

2016-2019 - Bachelor's degree in Spatial Planning
Blekinge Institute of Technology, Karlskrona, Sweden

2019-2021 - Master's degree in Sustainable Urban Design
Lund University, Lund, Sweden



"All the mindful ones with their long nets
meet with a great laugh from the sea.
Friends, what are you seeking on the beach?
knowledge can never be caught,
can never be owned.

But if you fall like a drop
straight into the sea to be dissolved,
ready for any transformation -
then you shall wake with mother-of-pearl skin
and green eyes
on fields where the sea's horses graze
and be knowledge."

Knowledge by Karin Boye - translated by Jenny Numm

ACKNOWLEDGEMENTS

Doing a thesis in the middle of pandemics has been a challenge that I will never forget. It has meant isolation, loneliness and tristesse. My living room has been reshaped several times during this semester, all different setups trying to prevent bad posture. But one thing is for sure, without my partner Daniel Thulin by my side - I probably would never have made it. Every day of this project, he has been sitting next to me, every coffee and every lunch for more than five months, he has patiently listened to my restraints and concerns. Daniel, this you already know, but it is worth mentioning once again; I could never have dreamed of better support than yours. And that goes not only for this thesis but for my whole five years of study.

I also want to direct the biggest thanks to my Karlskrona family on SUDes - you know who you are. Thanks for helping me keep it all together and supporting me when I needed to. You have followed me during the last five years and my graduation is very much dedicated to every single one of you. You truly are a dream team. I also want to thank Maria Flores who actually is the one who got me started with this specific subject from the beginning. Thank you for listening and understanding, without you this project would have been something completely else.

Last but not least, the biggest of thanks to my invaluable supervisor Andreas Olsson. Without your endless energy and support, I never would have ended up where I am now. You have the ability to see us students as equals and always give the right encouraging words. From the start you have let me - sometimes a hyperactive confused wreck who preferably wants to be everywhere - frame my project exactly as I wanted to and tended me the right way when I needed to. Thank you for making urban design fun.

PREFACE

20% of your, and every adult's, whole energy consumption goes to the brain. That is outstanding and way more than any living mammal on the whole planet earth. Our brains have the ability to sort, order, and evaluate every single impression without us even noticing it. But it hasn't always been like that. Until the age of eight, the brain takes 50% of the whole energy consumption. Children have not yet learned how to sort, order, and evaluate the impressions they get. Instead, they are very present in environments and actions - and values most impressions equally valuable. That means that you and a child can enter the same certain environment, but yet you have totally different experiences. Isn't that fascinating?

This thesis project finalizes my five years of study to become an urban designer. The fact that I have been mixing my studies with three years of spatial planning and two years of urban design, I truly believe has affected why I have chosen to investigate a human aspect of urban planning and design. During the whole education, one thing has been the most interesting for me - to investigate a new kind of recipe for livable sustainable urban areas. The responsibility we have to future generations as urban designers is invaluable. Something this thesis seeks to indicate. I have realized that to build child-friendly cities we must start to see children not only as citizens of tomorrow but as the citizens they are today. I have strong hopes that architects and urban designers can do so. And that they are not only a part of but also the ones promoting the future sustainable society.

Lina Hult

June 2021



ABSTRACT

In urban areas, the battle of space is more important than ever. The spaces and environments we grow up in are shown to be crucial for the identity we develop throughout our childhood. Therefore, the way our cities are designed and developed can largely impact who we become. The whole perception of society starts with children's play, yet we tend to deprioritize their playing environments. For decades adults have been framing spaces for children and their play. All over the cities, we see the same kind of play-kit, beautifully fenced off to favor the child's safety and control the "mess". A place where time and space are very much controlled. However real-life can be "messy" and in play, time and space are totally dissolved. Children are on a journey to become independent human beings and we must help them in that process. Too much control and restriction may inhibit their journey.

The project is taking a starting point in James Gibson's theory about Affordances and Marketta Kytta's conceptual framework for a child-friendly city. The project seeks to reclaim our outdoor spaces and build a generation of healthy, happy adults who are ready to take on the world. The design seeks to give the children tools to feel a sense of their own autonomy showing how it feels to be an actively engaged human being. It is about helping to expand the horizons of childhood and to honor and respect children's appetite for experience. The proposal is implemented in an area of Rosengård, Malmö, and turns into a design that decentralizes play in the urban environments and lets play take place all over the city.

TABLE OF CONTENT

01. BACKGROUND	12	02. ANALYSIS	34
Introduction		Choice of site	
Project aim		Site today	
Research question		- Building structure and architecture	
Project framework		- Public space and activities	
Method			
02. PLAY	16	03. DESIGN PROPOSAL	46
Adults and children		Early sketches	
UNCRC - play as a fundamental right		Concept	
Space for children		Strategy	
The meaning of play		Design	
Affordance		Play	
Framework for a child-friendly city			
KFC		04. ZOOM IN PROPOSAL	65
03. ROSENGÅRD	27	Rosentorg	
Why Rosengård?		Rosenhill	
Housing policy in 60s/70s		Odlingsrosen	
History			
Context		05. CONCLUSION	104
		Concluding remarks	
		Further research	
		Resources	

01 BACKGROUND

INTRODUCTION

Kids work and think differently than adults. They see the environments at another level, they have another pace and they appreciate their surroundings differently. So how come that we often deprioritize children in urban design? Our self-esteem is highly affected and shaped by our living environment. We devote people around us to define ourselves, in the same way, we use our surroundings and living environments to describe who we are. The living environment becomes an important part of our identity. How children perceive their environments becomes especially crucial because it shapes their identity at an early age and in the long run also who they become. Children do not have the right to vote and they are highly dependent on adults making the right decisions for them. How we plan, design, and manage the built environment is of great importance for children's environments and their future.

The whole perception of society starts with the children's play. The importance of play is invaluable when it comes to children's ability to grow up in fostering and developing environments. If we want to develop democratic, responsible, and equal citizens we need to consider how the environments for children's play are formulated. Children's play is one of the earliest and most crucial lessons where children learn how to be around others

and how to act and interact with other people. Children are highly dependent on the expectations and possibilities their environment gives them. The outdoor environment is crucial for democratic values in our societies. In these spaces, children see each other and learn about values, tolerance, responsibility, and understanding of society as a whole.

Children and young people under the age of 18 make up a fifth of Sweden's population. On the first of January 2020, the Convention on the Rights of the Child (UNCRC) turned into Swedish law. This formulates the importance of focusing on children's rights, which requires a high consideration of the physical design of the environments where children live and spend their time. The architects possess responsibility for these environments and to create spaces for all in the city. This is of extra importance for children since it is shown that children and young people are the residents who use their local area most frequently. The children we design for today will soon be adults, and then they will have the power to influence society. In Rosengård, one-third of the population is under 18 years. This means that the outdoor environments for children in areas like Rosengård are of extra high importance for their future development.

"... the play is a child's job."

One of the educators interviewed in Eriksson Bergström, 2017, translated by me



a network of paths and spaces that expand the horizons of childhood

a varied play system as an obvious part of the urban structure

How can children's play and movement become decentralized so that it can take place all over the city? How can urban environments and public spaces be designed to foster sustainable urban development?

The project is taking a starting point in James Gibson's theory about Affordances and Marketta Kyttä's conceptual framework for a child-friendly city. With a background in articles 3, 12, and 31 in UNCRC, the meaning of play in public spaces will be analyzed and discussed.

PROJECT AIM

This thesis project aims to investigate how the last decades' focus on conventional playgrounds can be broadened so that children's play and movement can take place throughout the whole city and in all urban spaces. The design will set focus on the fundamental right to play, where the children will be placed in the heart of the design. By doing so, the project will develop a framework to challenge the urban norm.

RESEARCH QUESTION

How can children's play and movement become decentralized so that it can take place all over the city? How can urban environments and public spaces be designed to foster sustainable urban development?

PROJECT FRAMEWORK

This thesis project will be encountered between the buildings. In the street, park, square and everywhere where everyday life takes place. What happens on the way to school and on the way to visiting the store? Or in space, you just happen to spend time waiting for mom to finish work? That's what this project will focus on. This because I am convinced that it is in the spaces of everyday life where architects can make a real difference. By focusing on public space, the project will complete the centralized playgrounds that already exist and therefore make up a holistic approach of play design. Due to the Covid-19 pandemic and the time limitation of the project, this thesis project will only set its starting point in research and in that way be an evidence-based project.

Lastly, this project seeks to distinguish the difference between place and place culture. This means that this thesis wishes to discuss only place, which means the architectural and urban structures that may, or may not, formulate certain living conditions. The project will therefore suggest physical structures firstly and foremost, and not focus on sociological structures. With that said, it does not mean that urban design and social structures may not affect each other. An urban designer's work is to ensure the quality of urban life for all. This means that this thesis only raises one out of many ways to formulate a city for all - by designing for children and play. Democracy is a messy process, but what we know for sure is that it is not a state - it is a living statement. We must work hard to contain it, this project formulates one way of doing it.

METHOD

The project is taking a starting point in James Gibson's theory about Affordances and Marketta Kyttä's conceptual framework for a child-friendly city. With a background in articles 3, 12, and 31 in UNCRC, the meaning of play in public spaces will be analyzed and discussed. This will foster a set of rules of how urban design can be part of sustainable development and how physical gestures can make public spaces more playable. The project will turn out into a research-based and place-based design. Parts of Rosengård (Malmö, Sweden) - Törnrosen och Örtagården, will be investigated and the knowledge will then be implemented in a design on the site.



UNCRC - PLAY AS A FUNDAMENTAL RIGHT

The Convention on the Rights of the Child (UNCRC) is a legally binding international agreement that states that children are individuals with their own rights, not the property of parents or other adults. It contains 54 articles that are all equally important and together formulate the right of the child. At the beginning of 2020, The Convention on the Rights of the Child became law in Sweden.

The UNCRC can be a new entrance for city planners and urban designers. Children's rights to good living environments and play environments have so far not often been heard in the debate of densification of the city. Instead, children's need for space is often considered as a special interest that is added after other planning conditions are met. When planning and designing places for children, Articles 3, 12 and 31 are particularly interesting. Article 3 tells us that in every action that concerns a child, the institution (or state) is responsible for considering the best interests of the child. Article 12 describes the right of children to form their own opinion, to express their opinions freely, and to be listened to. Article 31 has often been called the forgotten article. It expresses the child's right to rest and leisure, that play and recreation should be adapted to the child's age. The child also has the right to participate in cultural and artistic life, just as everybody else.

ADULTS AND CHILDREN

Since our brain develops throughout our childhood, our age highly impacts how we experience different environments. That means, that adults and children often have a different approach to different environments. For example, adults are very vulnerable to sensitive codes. Adults often think that things are designed to be used in one certain way and therefore we use them only in that way. A typical example is how often children are told to only go down by the slide and never ever run up for it. But children have a totally different approach and are always curious to see what is possible. They want to try everything out and often use things in unexpected ways. For example, children want to try out what happens if they run up the slide backward? Maybe it means more fun?

Also, adults worries and requires control all the time. They worry about their children getting hurt and that things will break. "Watch out, it might be dangerous." "Have some patience, it might break." These are things that I often hear at the playground. But children want to discover new things. They are always testing their limits and sometimes that means that they fail. Failing and falling are a natural part of the state of play.



ADULTS

Frequently uses their eyes	<i>Evaluate a place based on what it looks like</i>
Do things of a reason	<i>Play is physical activity, important for learning, body development etc</i>
Always in a hurry	<i>Time is a scarce commodity</i>
Passive consumers	<i>Values products. The more expensive - the better</i>
Vulnerable to sensitive codes	<i>Things are designed to be used in a certain way - only use it that way</i>
Appreciate order	<i>Messy is ugly and a sign that something is wrong</i>
Worries and requires control	<i>worries that children will hurt themselves and that things will break</i>
Bigger	<i>Appreciate bigger places and overview</i>

CHILDREN

Uses their whole body	<i>Experience a place with high presence and with all senses</i>
Play is life!	<i>If something is fun, it's fun. Play is happiness, freedom, adventure etc</i>
Proper play is FLOW	<i>Looses track of time</i>
Creative and wants to affect	<i>Values the play environments - what is possible to do?</i>
Curious to see what is possible	<i>Want to try everthing out. Uses things in unexpected and surprising ways</i>
Appreciate rich play environments	<i>Messes down. Intense play is often messy</i>
Wants to discover new things	<i>Testing their limits (and sometimes failes)</i>
Less	<i>Appreciate smaller places and cozy cubby-hole</i>

SPACE FOR CHILDREN

Can we play here? Children do not ask each other that. They ask "shall we play?" or "what are we going to play?". For children, the place "here" is given. The play develops within its condition, and therefore the play furthermore becomes what it can become. That means, that the quality of play, therefore, is highly affected by what kind of place we are giving them. If the place is not good enough, you have to play something else or nothing at all. Or when you become older and you are allowed to, you go somewhere else. It is we, as adults, who have learned to analyze and look for alternatives, we tend to analyze what could be done. There is a significant difference here, because the child just does - intuitively and holistically. Something we must consider when we are designing what kind of space we are giving our children.

A place is considered to be a structured physical space of a certain permanence, to which one can ask questions - and get answers. A place must be able to have some permanence so that we can return to it. A space, on the other hand, requires a certain emotional commitment. Therefore, not all physical environments constitute spaces, even if spaces always have a physical location. For example, a preschool's physical environment becomes a space for children because they are shaped by the children as well as they shape the children. The children have developed an emotional commitment to the place and therefore it becomes a space for them. The physical environment is of great importance when it comes to children's play, learning, and interaction. The physical environment is constantly included in the social inputs and the composition of the physical environment has a direct impact on children's play and how they create social relationships. In this way, the environment in which children spend time can create both opportunities and limitations for children's discovery of society as a whole.

The interaction between the child and the physical environment is extremely active. The environment is a tangible contrast and intensely experienced part of the context in which the child lives. Immediately, children take possession of space and materials. All people constantly interact with the environment in one way or another, but children's interaction is often characterized by the fact that they invent new and alternative functions of the environments and materials they encounter. Children's activities can thus be both hindered and stimulated in different types of places. Mainly three things in children's environments are important- spatiality, natural environments, and flexibility.

Spatiality is mainly about offering different types of rooms, where all types of them are of high importance to each other. For example, hiding places and secret rooms are a kind of spatiality, defined and undefined spaces another, and the possibilities and resources of the space a third. Physical arrangements that can be moved or in some way changed, are shown to be extra important to be able to frame the play. In this way, the children can find and make their own spaces by moving attributes in the physical environment. Offering variety and diversity when it comes to spaces and places is of high importance.

Natural environments are often seen as a neutral environment that does not establish function or other values. The natural environment does not have a special purpose and thus the child easily can reshape it for its own needs. It seems like children show more commitment and creativity when the environment's uses are not defined in advance. Children observe and use the environment, and become more or less emotionally involved in the interaction between them and their environment. The environment can, therefore, through its compliance and changeability, be seen as a co-creator of

children's play. A natural environment can be analyzed as an environment with a high degree of unity and at the same time a high degree of complexity. An important factor of this is that children have a biological need to connect to nature. To see the seasons change, the colors of the environment, to feel the soil in their hands, to follow the process from seed to beautiful flower, and to smell the ramson grow in the spring. Discover and create understanding for the whole system, what is a better lesson than that?

Flexibility is a concept that indicates a large and varied scope for action within the physical framework. Physical attributes, such as a door that can be opened or closed as well as a room with a large surface contribute to the flexibility of a room. The concept also includes the interpretation of multifunctionality. In a space with a lot of flexibility, some elements challenge and stimulate children's ingenuity and creativity. In the long run, this means that children must also learn to take a stand on, and learn strategies for, to act and negotiate. A space with less flexibility is in general more difficult to interact with. Important here is that to offer flexibility as a whole concept, both of the explained spaces above must be offered as well. Otherwise, we risk creating homogeneous spaces for children.

"(...) play is like a language: a system of communication and expression, not in itself, either good or bad."
Årtemalm-Huggér, 2006, translated by me

THE MEANING OF PLAY

The whole perception of society starts with children's play. If we want to develop democratic, responsible and equal citizens we need to consider how the environments for children's play are formulated. Children's play is one of the earliest and most crucial lessons where children learn how to be around others and how to act and interact with other people. Play is the highest form of research and an important tool to learn and become an adult. Children learn, develop and understand their identities in relation to others such as playmates, teachers and parents. Children are also highly dependent on the expectations and possibilities their environment gives them. Studies show that from the age of seven, girls start to play differently to boys, and at the age of 18-19 80% of the sport-rinks are being used by boys only. This means that the environment we give children, highly communicates what kind of space we want children to take in the urban environment.

As we can read in the quote below to the right, the play fosters and frames the children, whether we want it or not. Through the environments we design, we can affect children's ability to learn values and an understanding of society as a whole. The outdoor environment is often seen as a neutral space of freedom because its natural materials do not have social structures or pre-programming. The outdoor environment can be seen as a context-free environment, which makes it a blind spot when it comes to children's education to be around others. Thus, it does not mean that the natural environment has a lack of power structures, rather that the children get to explore the environment and its structure for themselves.

AFFORDANCE

Affordance is most easily described as the relationship between an object and a person. We can call it the visual clues to the intended function of the object. Affordance enables a particular kind of interaction between an object and a person because of the design of the object and the properties of the human. It means that an object such as a chair affords sitting on because of its design based on human properties. But an object can also mean different affordances depending on who is interacting with it. This means that we quickly can understand the intended function of the object based on experiences and humans' understanding of how things are supposed to work.

Every person has their own intention and perceptions, hence the concept of "affordance" becomes accurate when we are talking about play in time and space. The concept takes into consideration that every individual has their own scope to discover affordance. It gives us a tool to understand the interplay between humans and the physical environments and non-living things. When children interact with the physical environments, one can understand this by observing what affordances the children often discover, explore, and use. Some environments have affordances that are easy to collectively discover, while other environments are more difficult to interact with.

In an observation made in a preschool in Sweden, a sequence of play where children discover the affordance of a chair as "riding on" whilst the educators see the affordance of the chair as "sitting at". The children can only reach this understanding by the acts of searching, testing, and discovering appropriate affordances of their environment. That means that children also contribute to developing the play at all times. The individual aspect of the affordance theory can here be understood as the children discover

their own affordance in the physical materials that are available. The chairs' more common affordance - to sit at, is abandoned and replaced with an individual affordance. In this way, it is possible to understand affordance in relation to a specific individual, from an individual perspective. One can see it as a puzzle where affordance is the space between two pieces of the puzzle that fits together. The affordances exist only in a relationship between the piece of puzzle "individual" and the piece of puzzle "environment".

The individual aspect thus is about different affordances being discovered by two different individuals. Affordances are created and defined individually and from an individual perspective. This means that the affordance has great significance for children's perspectives, their influence, their verbal negotiations with each other, and understanding of each other.

Children are highly dependent on the expectations and possibilities their environment gives them. In relation to the context, children adapt their discovery of affordances based on the expectations of the environment. Space and situations can be categorized into two fields: the first is about what creates expected actions (FPA - fields of promoted actions). In spaces or situations like this, children discover the affordance that is intended and planned for children to pay attention to. For example, meals belong to this field, as well as more didactic play environments. The second field means a more free range of possibilities - where the individual is more allowed to individually and in groups collectively discover and use different affordances (FFA - fields of free actions). Both of the fields contribute to the child's development and learning. With support, some regulation and education in FPA, children can act more independently and freely in FFA. This means that both fields are necessary and constantly act in

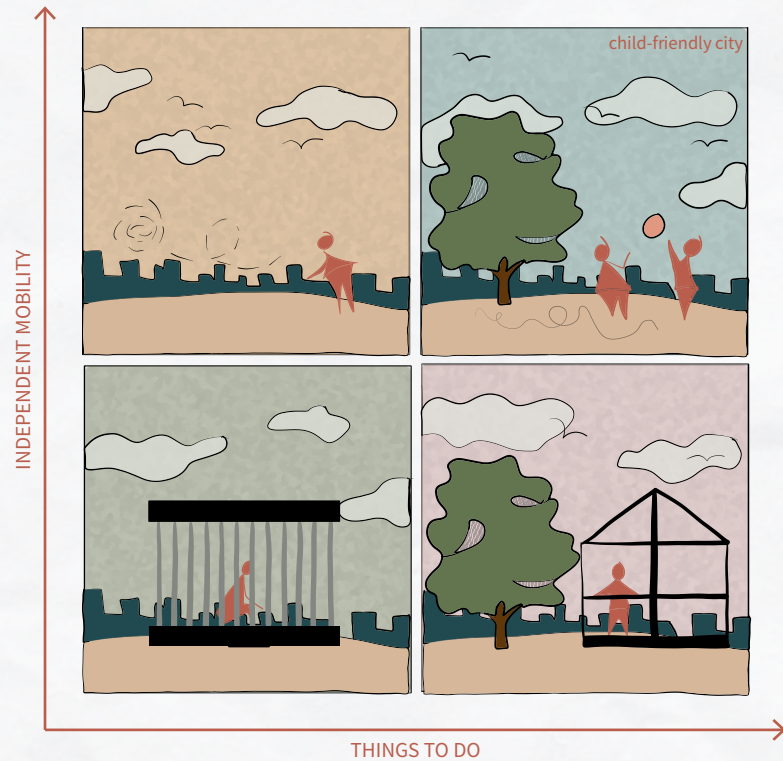


relation to each other.

Through the scope of affordances and children as acting individuals, we can understand that children do not only adapt to the structures they are surrounded by. They embody previous norms and values and are also involved in influencing their environment and therefore also claim to create new cultures and contexts. Children are considered to be able to contribute to society's norms and values and they are today seen as active and involved in creating and changing the environments and childhood they are participants in.

FRAMEWORK FOR A CHILD-FRIENDLY CITY

A child-friendly city and children's everyday freedom is in spatial terms explained as the relationship between two dimensions: things to do and children's independent mobility. The first dimension focuses on children's mobility, especially under their own steam. The possibility for children to move around freely in their own neighborhood is crucial for child-friendly cities. For example, a child should be able to go outside and play with friends and go to school by themselves and also feel that their neighborhood is welcoming and safe.

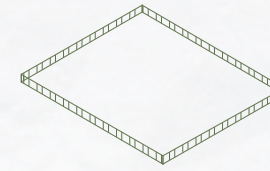


Framework for a child-friendly city shown in a diagram

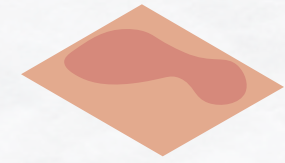
The "KFC"



KIT



FENCE



CARPET

Thinking about children's opportunities to be and getting around should therefore be central in urban planning and urban design. The second dimension is the number and type of spaces and facilities the environments offer. It is basically about how many things there are to do in a certain environment. In this dimension, the scope of affordances becomes of high significance. Important is that both dimensions have to act together, one alone cannot cater to a child-friendly city.

Seeing a child-friendly city in this way, the ultimate goal of the child-friendly urban designer is to turn the playground inside-out and to decentralize the play throughout the whole city. In that way, we allow time and space to be dissolved and in the same way helping to expand the horizons of childhood. Rather than building play reservations, the job of the designer is to remove the fences (and the KFC) and invite children into all urban areas beyond. In this way, children can enjoy rich, engaging experiences that encounter them with the people and places that are surrounding them. It simply includes and counts the children as the citizens they are today.

KFC

The last decades have been focusing on a centralized play design. The conventional playground. It is often described as KFC - kit, fence, carpet. A model and design that is far from site-specific and is ready to be placed anywhere, all over the world. Several reasons have made us concentrate on children's safety and control their play instead of focus on what actually makes children's play so interesting. Time and space are to a very high degree controlled in the KFC, which of course favors adults. We know when and where we can expect children to play in these environments. One thing that we often tend to forget in these environments is the most important part of the playground: other children. In negotiating with others and cooperating with other children and their environments, children learn about society. One size does not fit all, we need to design spaces that are interesting and complex for everyone.



ROSENGÅRD

WHY ROSENGÅRD?

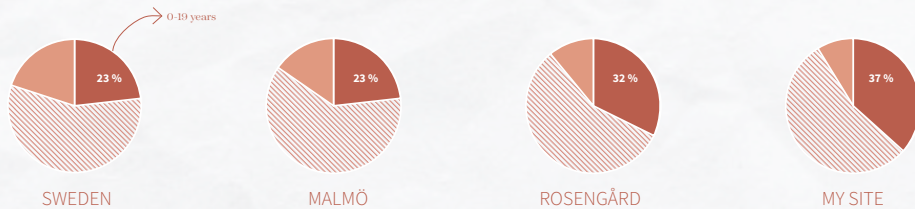
My site is located in Rosengård. Rosengård is located in the southeast of Malmö. The reason why I chose this specific site is that the municipality has plans on developing the site, and the battle of space, therefore, becomes important. What do we invite and what do we let take space in our future cities? Another important aspect of why I chose this specific site is that more than one-third of the population is encountered as a child. That means that there are a lot of children growing up in these environments. Rosengård is a typical example of the urban planning ideal of the modernist era. The entire neighborhood is characterized by a consistently implemented traffic separation. The design of the area follows clear neighborhood principles with a centrally located center. The area contains a lot of parking space and green spaces that is often perceived as leftover areas, which means a lot of space to develop further in sustainable terms. Since one-third of the population is below 18 years, the outdoor environments are therefore of special importance.

HOUSING POLICY IN 60S/70S

In the mid-1960s, the modernist era reached its peak. The new and the modern represented something positive and the future was just around the corner. Sweden had experienced exceptionally rapid modernization and urbanization. When it comes to living standards and economic growth at this time, everything indicated that it would continue rising. Through the social housing investigation and its recommendations from the

mid-1940s, the foundation for Swedish housing construction had already been founded at this time. One result was that municipal public housing companies were formed and housing construction became subsidized with government housing loans. Thanks to technology and finance, larger constructions and continuous housing areas were promoted. The investment came to be called the million program scheme. The goal was one million dwellings built in ten years. Rosengård in Malmö was one of the areas that were built during this decade.

To achieve the goal, industrialized and mechanized construction was needed. That required a rationalization of the design sector and the building materials industry. Large-scale production was favored by prioritizing projects on large scale (comprising at least 1,000 dwellings) through so-called advance notice of housing loans. The turnkey contract really took off at this time, where construction companies were given responsibility for both design and execution. The architecture was highly characterized by an architecture legacy of functionalism and modernism. The urban design was characterized by large-scale, sparsely placed buildings and low-slatted houses or taller panel houses. Everything from city plans to facades was characterized by rectangular shapes and to a large extent, the urban development was guided by function zoning. Objectivity and rationality permeated the architecture from this time, and in many of the areas, this is still visual to this day.





HISTORY

Rosengård is located in the eastern part of Malmö, two kilometers from the city center. The area consists of five sub-areas: Törnrosen, Örtagården, Apelgården, Kryddgården, and Herrgården. The land was until 1960 an agricultural area and the name comes from the estate that was located on the site. The estate, which belonged to the Kockums family, is partly still preserved between Örtagården and Herrgården. Rosengård was planned for 20,000 people, where the houses were built with prefabricated elements both in height and length. As mentioned before, Rosengård is a typical modernist housing area and is similar to many other developments that took its form during the million program scheme. Everything in Rosengård was planned to be easily accessed by car and Rosengård center was intended to relieve Malmö city center. Therefore, the whole area was planned for high car density and lively vehicle traffic. One of the most important parts of the city plan was Amiralsgatan, which is the main traffic route through the entire area where connecting streets dock to. Today, Amiralsgatan is still a busy street and in some places, it is measured up to 60 meters wide.

As a whole, Rosengård is characterized by a traffic separation and with large parking areas, both on the ground and underground beneath courtyards. It was built and planned for a parking standard of 1.5 cars/household. The cars permeated the entire planning of the residential area. Therefore, much care was taken to separate car and pedestrian traffic and to a large extent, many of the intersections are elevated and the pedestrian route takes another path than the vehicle one. Much care was also taken to create large green areas between the buildings with separate playgrounds for the children in almost every courtyard. Pedestrians and cyclists can reach Rosengård from all directions through elevated intersections with surrounding streets. Thus, the different neighborhoods are, to a high degree, separated from each other. Great consideration was also given to the commercial interests and small shops were banned out in the area to promote the large shopping center in the middle. This meant that all services in the area were located in the middle of Rosengård, across the wide traffic route Amiralsgatan. Rosengård center became Malmö's first large center facility. Today this is not the case. Although Rosengård center still is the main one, smaller services are located throughout the whole area.



MER TV, SNABBARE BREDBAND.

10H 612

04 ANALYSIS







ANALYSIS URBAN STRUCTURE

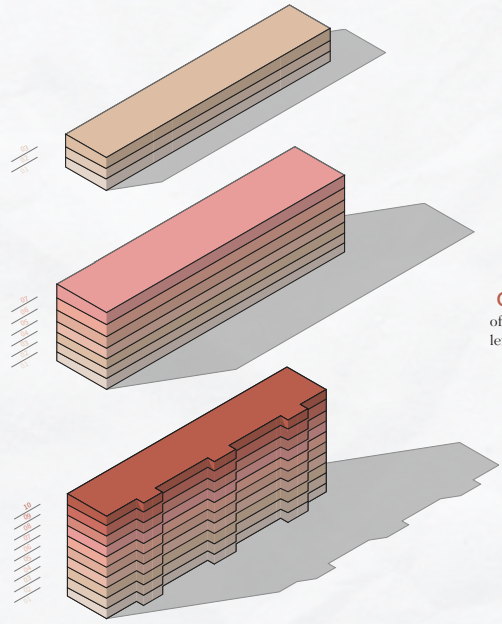
The west side of Västra Kattarpsvägen is called Törnrosen and the east side is called Örtagården. From this site, it takes only 30 minutes by bus to the other side of the city (Western harbor), and not even 20 minutes by bike to reach the inner city center.

This area is the entrance to the whole Rosengård when you come from the city center. It was built in the '60s and was the first area in Rosengård to be developed. The architecture and city planning are therefore typical for the modernist era, with large open courtyards that have a very vague distinguish between public and private. Which has lead to that it is quite hard to navigate in this area. It is green and lush, but also quite unprogrammed which means that some spaces are experienced as leftovers. The traffic is to a very high degree separated and the bikes and pedestrians do have alternative routes than the cars, with overpasses and underpasses. The streets are highly used by cars, often in a high speed. The streets are quite wide and a kind of public space where you do not spend time in. Especially

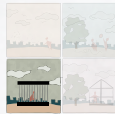
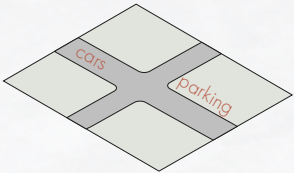
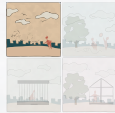
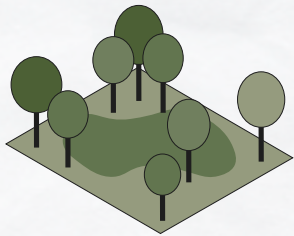
the dimensions and character of Västra Kattarpsvägen is contributed to the area being a bit fragmented. The car takes a whole lot of space in the public space. Man-made surfaces conduce a lot of parking both between the houses and in public space. This limits the horizons of childhood and inhibits children's independent mobility throughout the area. Almost every courtyard is favored by a conventional playground. And apart from that, there are also a lot of sports rinks, especially football rinks in this area.

The typology is pretty much classic panel housing from 3 stories all the way up to 10 stories. A study that the city of Malmö did, shows that almost 40% of all parking spaces in this area are not used. This because the area is built with a parking norm from the modernist era, with parking garages under almost every courtyard as well as parking on ground level, which means a lot of parking. This together with the fact that not all families in this area own a car means a lot of leftover space in public spaces.

BUILDING TYPOLOGY



ca **40 %**
of parking spaces are
left over space



PUBLIC SPACE





school/preschool



common playground



green area



culture



common sports area



swim area



car connection



pedestrian connection



connection out of site





ANALYSIS PUBLIC SPACE

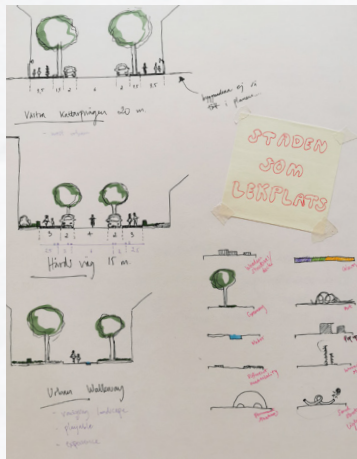
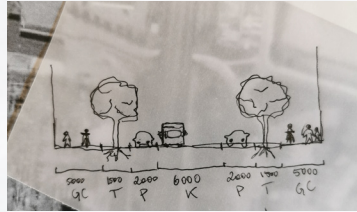
The typology of public space is vast unprogrammed green areas, man-made surfaces dominated by cars and parking spaces. The play is catered by conventional play-kits, mainly in the courtyards. The main route is västra kattarpsvägen in the middle, but the main connection for bikes and pedestrians is the extension of Bennets väg, and this is also the route that connects Rosengård to the rest of the city by bike or by foot. There are a lot of things happening in this area, mostly schools and pre-schools. Many of them is located in the bottom floor of a regular apartment building. In the immediate surroundings, we find a sports and swim area in the east and an area for culture in the west.

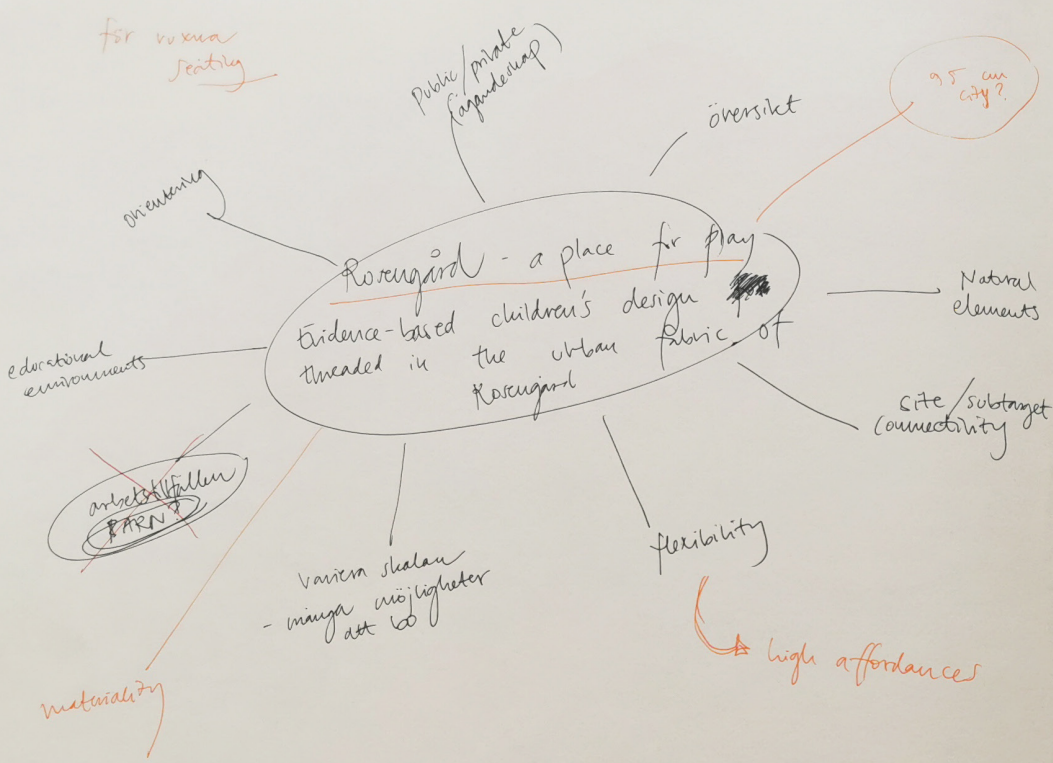


15

PROPOSAL





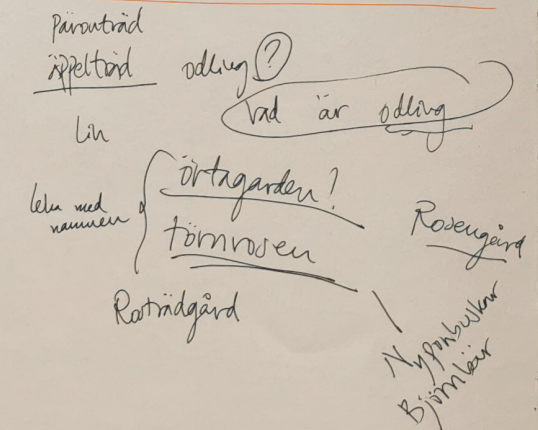


A PLACE FOR PLAY

Handledning 2021.03.03

öppning väst-öst öppna luften
nytt stänk hela vägen
till bdet

olika bostadsformer
- bostadsrätter



"arrangera byggnader för att främja
publika stråken"

va inte rädd för
att göra ludiga saker

Urban
Naturligt stänk

starka urbana
komplettera med gröna stråk

strik

Förstärkt stänk
till park

nod-ryddig viktning

Arbetsplatser

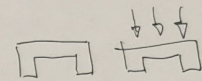
Kontor
Co-working

Konstmuseum
Publik utställning

Kopplat till

9.15 onsdag
IKSC

Byggnader längs med väg



HUR KOPPLA PARKEN?

Sy ihop det nya
med det gamla

punktöverbaserad arkitektur
- man ska se skulpturen på vad det är
för typ av byggnad

FICKPARK?!
Vad är det? Vad gör det?

Skippa park i söder
Vad har stänk klyfter
Samman man mer än
så?

PARKLEK

VARFÖR ETT PROJEKT JUST HÄR?

mid-öst

What can urban design influence?

SNOW rank. 1

WIND 2

SUN 3

Toolbox

Effect
Caus
Structure

Wood forms
white stone buildings

Implemented the principles in Rosegården

Nostalgia → Andromeda!

Arkitektur

- biblioteksfilial - östergård

- odling - konst + natur

STRÅK

överbrygga barmäns
playable public spaces

ta vara på
föreningar
området
- Yalla trapp

By designing for children and play, develop sustainable environments for children to grow up in

My vision is to create a network of paths and spaces that expand the horizons of childhood, which means: a varied play system as an obvious part of the urban structure. A vision that seeks to link the area together with the help of design for children and for play. The network

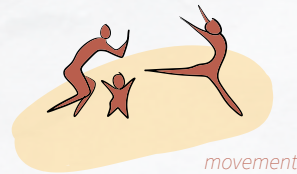
will provide a wide range of uses and at the same time offer children to move along with a higher sense of freedom than before. To achieve that the project has been framed by three leading words which are : movement, discover and experience.

VISION

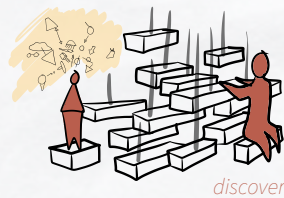


a network of paths and spaces that expand the horizons of childhood

a varied play system as an obvious part of the urban structure



movement

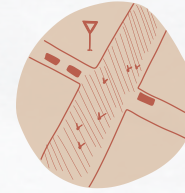


discover



experience

STRATEGY



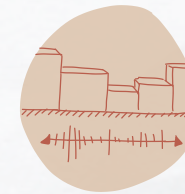
PEDESTRIAN PRIORITY

In the area, the pedestrian should always have the highest priority. In this way, the horizons of childhood will be widened and also create better living conditions for all. Overpasses and underpasses are eliminated.



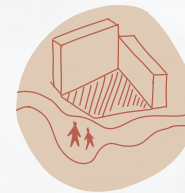
CLEAR ORIENTATION

The proposal should seek to offer a clearer orientation in order to move around more freely in the neighborhood. Small investigations can make a big difference. It could be about ground material, colors, or themes that dock on to each other.



VARIATION IN SCALE

The proposal should offer a higher differentiation in scale. By a higher sense of variation in scale a child could have an opportunity to live in the neighborhood its whole life and move between different housing solutions throughout life changes.



PUBLIC/PRIVATE

To more easily feel ownership of the environments, a clearer distinction of public and private should be implemented. In this way, children more easily can adapt to and develop their environments.



FLEXIBILITY/HIGH AFFORDANCES

All environments should offer high flexibility. Spaces and objects should offer a high affordance, some more than others. In this way, the proposal will develop complex urban areas where children can discover, formulate and experience their environment in many ways.

MASTERPLAN

1:2000 in A1





A PLACE TO PLAY

The proposal seeks to link the areas together with the help of design for children and play. It is a proposal beyond playgrounds and towards a children's infrastructure - that means a varied play system as an obvious part of the urban structure. This is done by a continuous path that seeks to offer environments with a high affordance of play. A network that is providing a wide range of uses and yet offers children to move along with a higher sense of freedom than before. This path completes the conventional playgrounds that still are taking their place in the courtyards.

Children and play are prioritized in all the design solutions so that everyday freedom is widened and offers a higher degree of everyday freedom for children in the neighborhood. Furthermore, the proposal seeks to decentralize the play and offer a higher affordance for children and their play. This is a way to create a common ground for the area so the identity of a place to play is strengthened.

Buildings are placed to frame the play path and the streets are designed so that they frame and promote the urban play path. Amiralsgatan, as well as Västra Kattarpsvägen, are narrowed down and designed so that the speed of the vehicle is slowed down and so that the continuous path is allowed to interact with it.

-  Play path
-  New buildings

FLOWS AND PATHS

1:2000 in A1



The main flow for vehicles will still be Västra Kattarpsgatan, although it is designed a bit differently, not totally straight as before and narrowed down. The streetscape, therefore, becomes completely different. The bike and pedestrian network is developed a lot, and that is where all the play takes place and pretty much what this project is all about. It means some new connections within the area between important nodes, but also out of the area and in the surrounding environments.

- Connections by foot or bike
- Connections by car

URBAN PROGRAM

- 1 library branch office
- 2 library of things
- 3 associative activity
- 4 after school centre
- 5 preschool
- 6 tool shed
- 7 green house
- 8 sports association
- 9 Rosengård centre
- 10 workshops
- 11 art / exhibition hall
- 12 local shops
- 13 "food truck" area



Public functions

This project is mainly about the play path, but in order to successfully design that, it was needed to add some new buildings. Except for more housing, the buildings that are added are many of them developed to cater to children - or play - in one way or another. They are located throughout the area and mean new functions such as a library of things, associative activities, after-school center, preschool in proper environments and tool shed to borrow things for certain play and activities.

DESIGN PRINCIPLES - PLAY PATH

The design toolbox set up some rules for how the design of the actual play path further has been developed.

WAYFINDING



WATER

Water is in its natural element playful. It could be used along the play path in order to frame it or to strengthen the flow.



COLOUR

Different colours, both on the ground and on objects, contribute to a playful environment.



MATERIALITY

Different materiality on the ground and on objects gives a tactile experience. It contributes to the diversity in these environments.



ART

Art could both be beautiful to look at and fun to interact with. In that way, it becomes playful and could attract even adults to take part in the play.



NATURAL ENVIRONMENTS

Natural environments are unprogrammed and playful in themselves. These environments children easily can discover and change as they want.



LEARNING ENVIRONMENTS

Playful elements could also easily be educating. For example - an apple tree educates the children how the seasons and climate change the ability to get food.



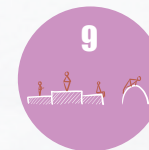
TRIGGER ALL SENSES

Children are very present in the play. Therefore all senses must be triggered in different environments. Tactility, sound, taste, smell and visual system should all be encountered.



DIFFERENT DIMENSIONS

Younger children appreciate smaller rooms, while older appreciate bigger ones. Therefore different sizes and dimensions should be considered in the environments.



PERMANENT STRUCTURES

In order to discover and experience the environment, the play path should consist of permanent structures in different ways.



INTERACTIVITY

Children want to test things out and use things in unexpected ways. Therefore the children should be able to interact with their environments.



PLAYFUL LIGHTNING

To make the environment playful all day, playful lightning should be added as an additional layer of the play path.



SHELTER

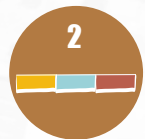
Time and space are dissolved in the play, therefore some places should be sheltered to enable play in different weathers.



water



trigger all senses



colour



different dimensions



materiality



permanent structures



art



interactivity



nature



playful lightning



learning



shelter

The design toolbox is used differently in different spaces. This map only shows an indication of how they are distributed, of course many of them goes hand in hand and overlaps, but this is a way of getting an overview of how it is used throughout the whole site.

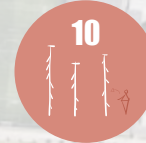




ZOOM IN PROPOSAL

ROSENTORG

children is set in the heart of the design
--> intersection becomes play space



colour

materiality

art

trigger
all senses

different
dimensions

permanent
structures

interactivity





perspective taken
from here

shared space





HOUSING

LIBRARY BRANCH OFFICE

LIBRARY OF THINGS

CAFÉ GREEN HOUSE

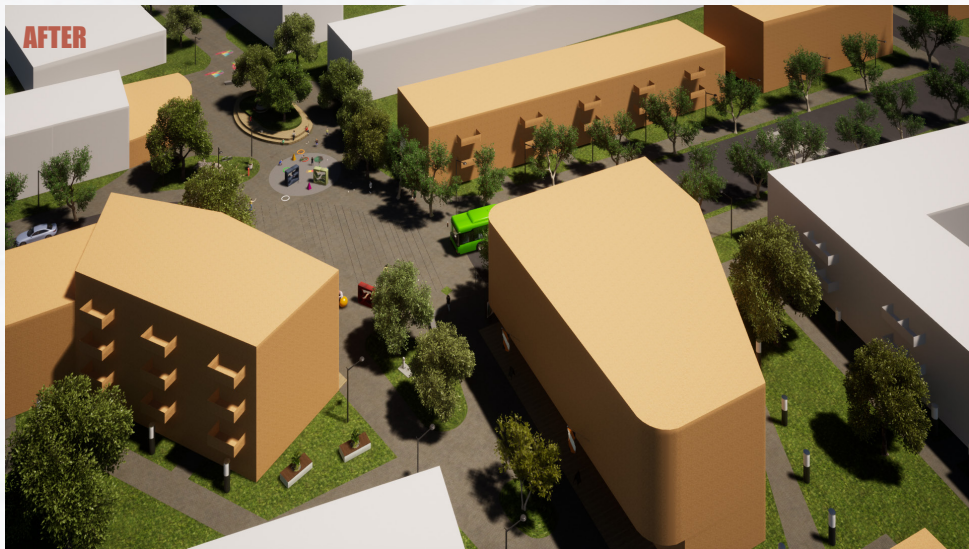
WORKSHOPS

LOCAL SHOPS

70

71

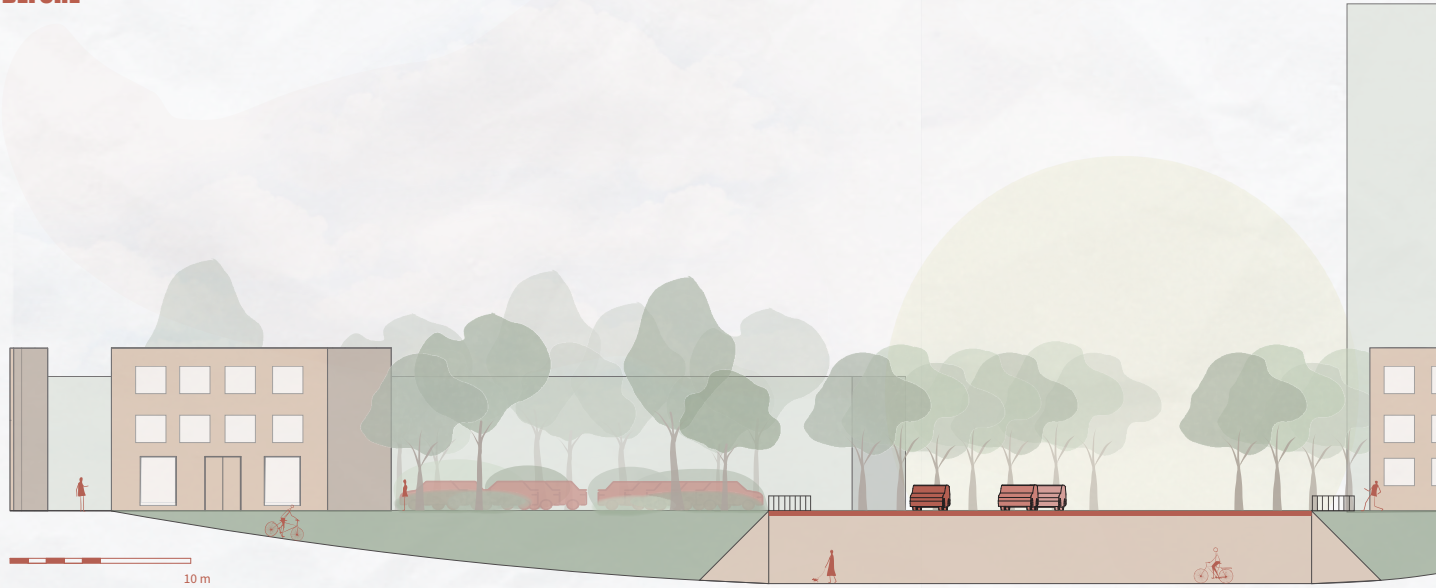




Bike and pedestrian are placed on the same level as everything else, instead of being elevated as before. A continuous materiality shows that car's are not prioritized in this area, and also shows the direction and movement of the urban play path. All to support the everyday freedom of the children.

The orange buildings are the new ones, mainly public buildings surrounding this square. The play environments offers high affordances, but yet creates a public space that will make it better for everyone.

BEFORE



A cross-over section of the space. Showing the difference between before and after. The underpass is gone, play is invited through spaces and objects with a high affordance, and the space gets an overall more urban feeling that are more about human scale.

AFTER



BEFORE



AFTER



With my proposal, it hopefully would look a bit more like this. Playable with objects of high affordance and a public space that is for everyone. The shared space invites the play and the street gets a totally different character with different dimensions and design. Once again - the orange buildings are the added ones.

ROSENHILL

children is set in the heart of the design

--> play and landscape intertwined framing urban space



colour

art

nature

different
dimensions

permanent
structures

playful
lightning

shelter





added hills

perspective taken from here

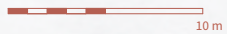
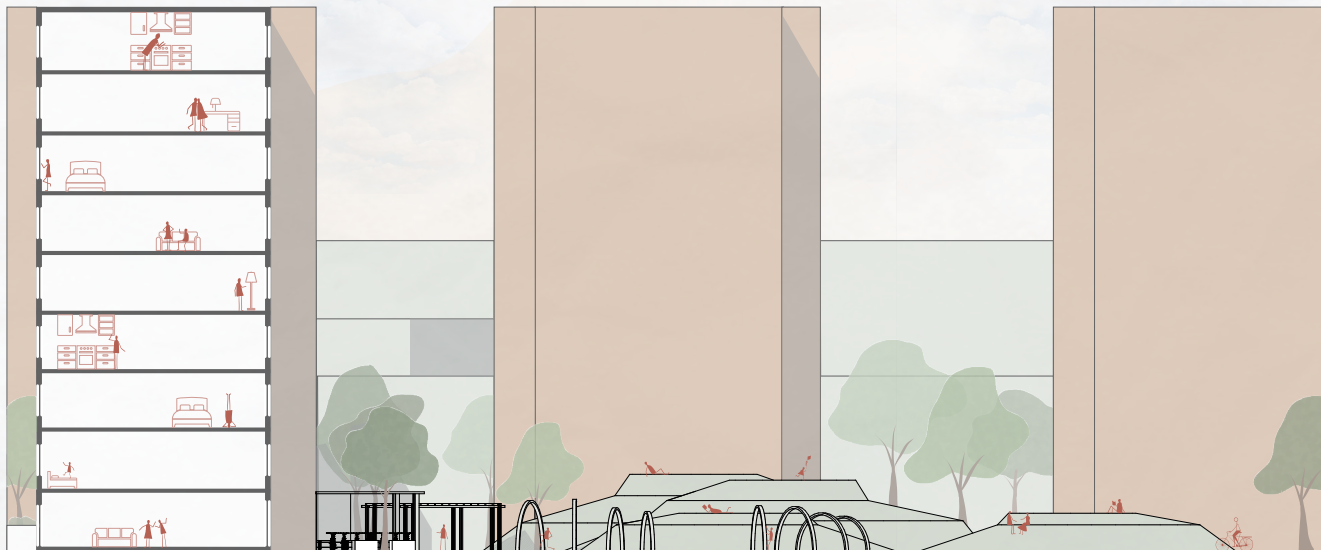


BEFORE



This is how it looks in a section. Today quite unprogrammed, turning into a more livable and playable urban space with a high affordance and flexibility. The hills also help to take down the scale of the high buildings in some sense and create a variation in scale.

AFTER





This design shows how unactivated areas can be activated using landscaping and urban elements in one solution. Landscaping, in terms of hills, frames the path and offers a flexible play environment both next to the path and along it. The design supports a clearer orientation and offers opportunities for children to participate in the environments and let time and space dissolve. In this area there are no new buildings, the design only enhance what's already there.

BEFORE



AFTER



ODLINGSROSEN

children is set in the heart of the design

--> parking becomes learning and play environments



1

water



2



3



4



5

nature



6

learning



7

trigger
all senses



8

different
dimensions



9



10



11



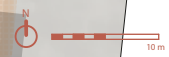
12

shelter

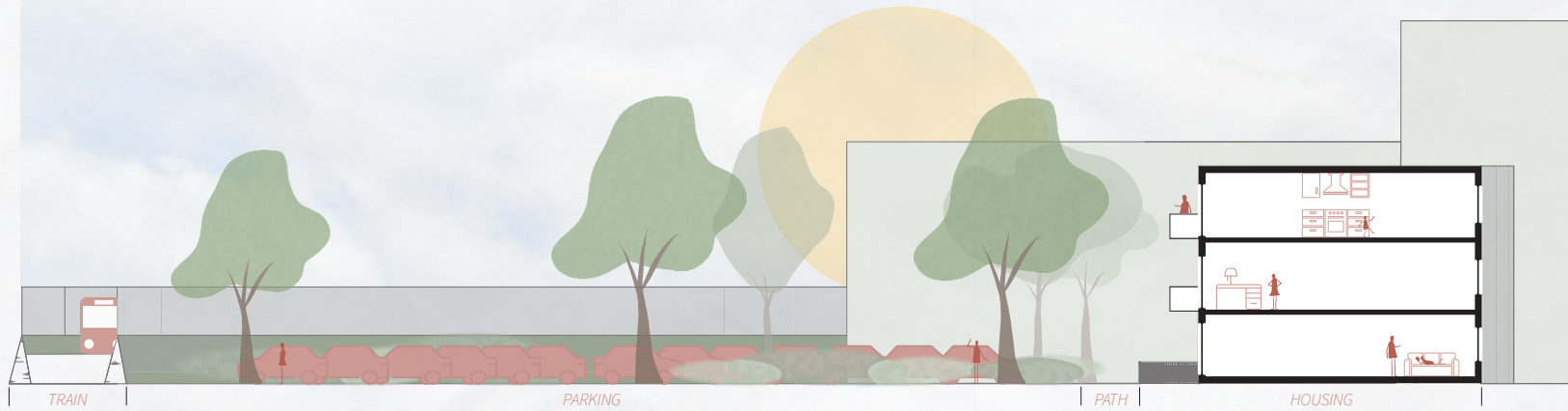




perspective taken from here

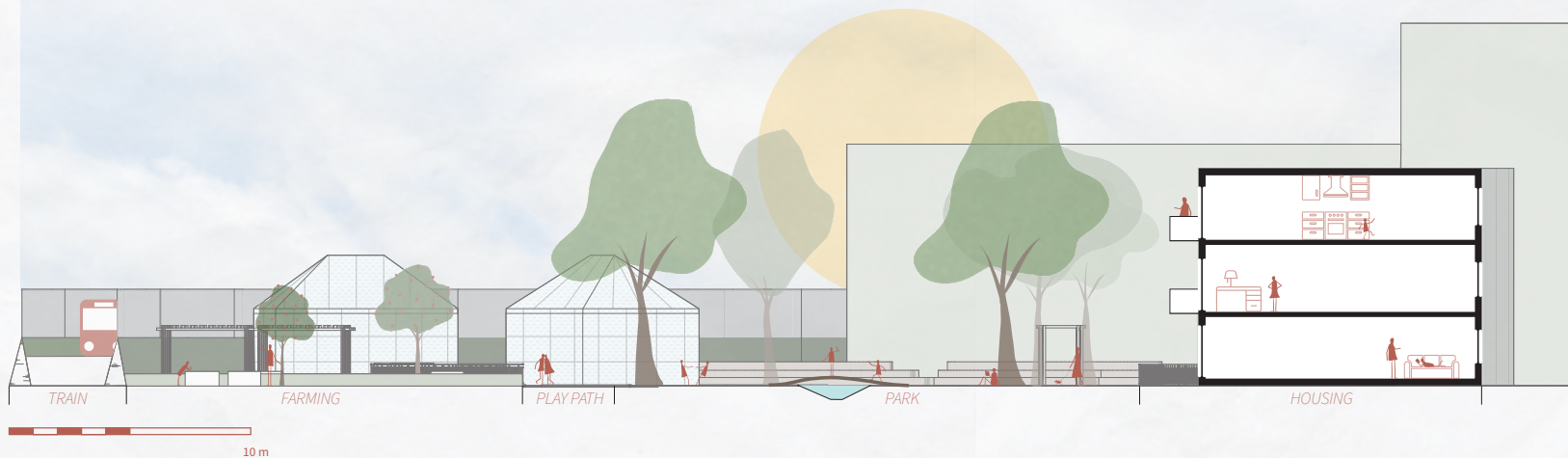


BEFORE



These sections shows the transformation of the area, how it looks today and beneath the proposed suggestion. The farming in the west, and a smaller park in the east, followed by existing housing. The farming is an extension of already existing farming in the south.

AFTER





The last set of design, offers a more natural yet urban space. It supports both farming, flooding and playing at the same time. It offers a space where children can plant a seed, watch it grow, see the seasons change and the water affect the environments. Taste a fruit, smell a flower, feel the thorn of a rose and lastly jump over the stream and into grandma's little garden to taste a cinnamon bun. A space that in the end will create good living conditions for all individuals in the neighborhood, hopefully inviting even adults to take part of play and join the fourth dimension.

BEFORE



AFTER



CONCLUSION





CONCLUDING REMARKS

So what have I learned throughout this project?

A lot of course. My main learning has definitely been what it means to really be present on a site. Ever since I started on SuDes I have been trained in working in several scales simultaneously, and the whole master has emphasized the importance of really being on the street, on the ground, even when in plan designing. In this project, I think I actually succeeded in that. Every strategy and every design principle has grown out from actually being present on the site on the street, on the ground. I think it has to do with- that I throughout the whole project been visiting the site more times than I can count, I really know every corner of it. Sketching some, back to the site, back to the sketching, back to the site, and so forth. So that really has gained a certain amount of understanding that I couldn't gain otherwise. The design really is harder and not at all specific without that kind of presence.

Another thing that really has become visual for me through this project is that urban design is of course designing great places for all people, making beautiful parks and brilliant urban spaces, but it is also something much bigger. Urban design can really be used as a tool to explore and challenge urban norms. And that is what I want it to be, of course, but now it is also visual that it can be so.

I've learned so many things connected to my subject and what difference it can make to set a certain subject and also a group of people in the heart of the design. In my case children and play. By doing so, the project got a totally different outcome than it would without the research behind it. A conventional urban design project probably

has been focusing on totally different things. Children are our future, and by seeing them as the citizens they are today instead of the citizens they are tomorrow we let them participate in the urban environments and make it their own. They will most certainly thrive better in these environments throughout their childhood and maybe even still live here when they are adults.

Lastly, I want to say something about the struggles in this project. When I started in January I really wanted to make a refined dialogue project. But due to the pandemic, naturally, some difficulties came up regarding meeting children and school classes on-site, living and acting in these environments. So the limitation of time connected to workflow and priorities lead me to just focus on the research and foster a research-based design. The next step, or even a totally different project maybe, would of course be (!!!!!) to involve children in the neighborhood and let that frame a more participatory design. Probably would the design appear totally different when the children have made their say in it?

All in all, I have had so much fun doing this project. It really has framed what I have been interested in during my five years of study. Free urban spaces with a focus on a human scale and human pace. And maybe the main learning actually is that I managed to project manage this whole thing by myself - in my living room during a pandemic. With some help from my supervisor of course. When I started more than five months ago I never would have guessed that I would end up with this kind of project. And that is an overwhelming sense of feeling and now I just feel gratitude. So thank you so much.

RECOURSES

Betsky, A. (2017). *Architecture Matters*. London: Thames & Hudson.

Brown, C., Delannoy, A., McCracken, D., Gill, T., Grant, M., Wright, H., Williams, S. (2019). *Special issue: child-friendly cities*. *Cities & Health*. 3. 1-7. 10.1080/23748834.2019.1682836.

Eberle, Scott. (2014). *The Elements of Play: Toward a Philosophy and a Definition of Play*. *American Journal of Play*. 6. 214-233.

Eriksson Bergström, S. (2017). *Rum, barn och pedagoger. Om möjligheter och begränsningar för lek, kreativitet och förhandlingar*. Stockholm: Liber AB.

Form/Design center (2019). *Lek! Design för lek i staden. Utställningskatalog*. Malmö: Graphiken.

Gehl, J. (2010). *Cities for people*. Washington: Island press.

Greeno, James. (1994). *Gibson's Affordances*. *Psychological review*. 101. 336-42. 10.1037/0033-295X.101.2.336.

Jacobs J. (1961). *The Death and Life of Great American Cities*. New York, NY: Vintage Books; 1961.

Kyttä, M. (2003). *Children in Outdoor Contexts. Affordances and Independent Mobility in the Assessment of Environmental Child Friendliness*. 951-22-6858-2.

Kyttä, Marketta. (2006). *Environmental Child-Friendliness in the light of the bullerby model. Children and their Environments: Learning, Using and Designing Spaces*. 141-158. 10.1017/CBO9780511521232.010.

Malmö stad (2014). *Planprogram för Törnosen och Örtagården*. Stadsbyggnadskontoret Malmö stad.

Ristilampi, P-M. (1994). *Rosengård och den svarta poesin. En studie av modern annorlundahet*. Stockholm/Stehag: Brutus Östlings Bokförlag Symposium.

Tykesson, T. (2002). *Bostadsmiljöer i Malmö, Inventering: Del 3: 1965 - 1975*. Malmö: Länsstyrelsen Skåne Län och Malmö kulturmiljö.

Tykesson, T., Magnusson Staaf, B., Hansson, C., Reiser, A., Brunberg, K. (2001). *Guide till Malmös arkitektur*. Stockholm: Arkitektur förlag AB.

Withagen, Rob & Caljouw, Simone. (2017). *Aldo van Eyck's Playgrounds: Aesthetics, Affordances, and Creativity*. *Frontiers in Psychology*. 8. 10.3389/fpsyg.2017.01130.

Woolley, H.E.. (2007). *Where do the children play?.* Proceedings of the Institution of Civil Engineers - Municipal Engineer. 160.

Yogman M, Garner A, Hutchinson J, Hirsh-Pasek K, Golinkoff RM. *The power of play: A pediatric role in enhancing development in young children*. *Pediatrics*. 2018;142(3):e20182058. doi:10.1542/peds.2018-2058

Ärlemalm-Hagsér, Eva. (2012). *Lärande för hållbar utveckling i förskolan: Kunskapsinnehåll, delaktighet och aktörskap kommunicerat i text*. *Tidsskrift for Nordisk Barnehageforskning*. 5. 10.7577/nbf.417.

THANK YOU

LINNÉA HANELL



LUND UNIVERSITY

SUDes
Sustainable Urban Design