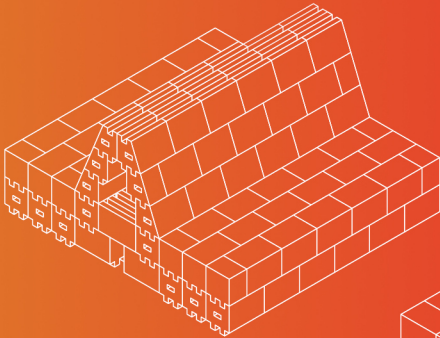
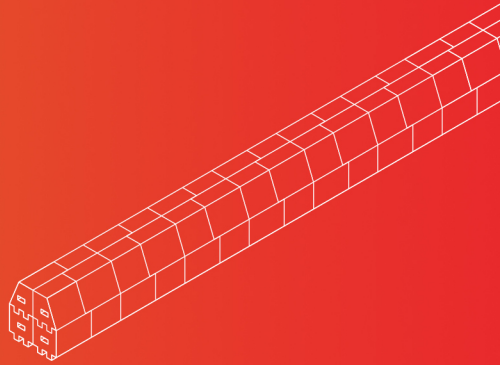
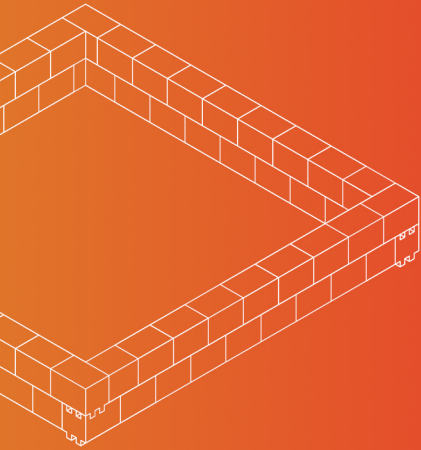




A Place for Play

playground design for
mass housing areas in Russia



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Abstract

Architects not so often focus on playgrounds. Indeed, it is a huge field, full of challenge and curiosity. The aim of this work is to design a playground, that would encourage children to stay outdoors enjoying the most interesting forms of play. Having studied the routes and the major aspects of playgrounds design, I decided not to impose a fixed form of organisation. Instead, an instrument was suggested for children so that they could participate in creating play spaces. In this way, I am dealing with the problem of limiting opportunities for play or, in other words, boredom and frustration that often occur on standard playgrounds. The work also addresses the issues of safety, parental fears, inclusiveness and community building. The design proposal, although intended for the mass housing areas in Russia, particularly in Moscow, may be adopted in various contexts due to its universal nature.

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10 *"That every child has the right to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and participate freely in cultural life and the arts.*

That member governments shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity."

Article 31 of the UN Convention on the Rights of the Child

Introduction

What is play? The first thing that would come to my mind even a few years ago is that to play is to pretend and to be foolish. At a certain point, maybe at primary school, I remember, my peers started to say "I don't play anymore". Play was often referred as something unimportant and meant for small children only. In fact, play is a way to learn about the world. Never in the entire life do we get to know as much as in the first years by playing. In this sense play is a huge investment. Play is also a valuable physical exercise. Play is important and it should not be underestimated.

Play can be different. It depends on the personality and the abilities. Children like to create and explore, to destroy, to take risk, and to challenge themselves. They use imagination to transform the reality and set their own rules. Children can decide what to do and how.

Adults must facilitate the play, I believe. It is what they are actually doing. If we look around, we might see all of those facilities designed for play: toys, games, visual content and physical equipment. No matter how exciting they are initially, some of them turn out to be boring one day, meaning that the play comes to an end. Limiting opportunities for play is not necessarily intentional like when we can not tolerate the mess or the noise – it can be fear or simply a poor understanding of the nature of play. Fortunately, the awareness is growing and the ideas of how to support the play are spreading.

My interest lies within designing play spaces. For me a play space is first of all an outdoor space, or a playground. Historically, the play used to take place outdoors due to the lack of indoor space. Nowadays the outdoor play is about sharing common facilities within the city, not to mention its benefits for the healthy development. In Russia we call a plain land plot with pieces of fixed play equipment (swings, slides, sandboxes and seesaws) a playground. However, in Moscow more inspiring playgrounds sometimes pop up attracting numerous visitors, both local and guests. This gives me as an architect hope for a bigger public demand for qualitative play spaces. Besides, play is a huge motivation factor itself.

An ideal place for play hardly exists, but it can become as play friendly as possible. As one way to achieve this goal I see small children and young people taking the design initiative while adults assist the creative process. Let the playful ones be encouraged!

01. Research

01.1 Background

01.1.1 _ where the playground design started

The start of establishing playgrounds is associated with the American playground movement in the late nineteenth century. Targeting mainly poor immigrants and the working class, it was driven by the ideas of efficiency in regards to children's play on one hand and the raising concerns about safety on the other hand.

Before the first playgrounds emerged children had been exposed to the streets. Spending time outside was natural since the city did not offer any better place for play in the cramped apartments.

*"With little money to spend on commercially available play equipment, even bats and balls, urban children became adept at making do with found resources. The greatest of these, of course, was the cityscape itself, and like the adult followers of the extreme sport *parcour* later in the century, they adapted the built environment to their own needs. Fire escapes, doorways, stoops, alleys, sidewalks, curbs, fire hydrants, storm drains, utility poles, manhole covers and even the pushcarts, parked delivery wagons and adult pedestrians were transformed by the *bricolage* of play."*

"In marking off streets for play, children posed a direct challenge to the adults who claimed them as their own world of commerce, transport and social intercourse."

C. Pursell (2011, p. 48–49)

The dark side of such freedom was the terrifying amount of loss of children's life caused by accidents. The streets were busy transportation corridors, and the danger of passing vehicles brought about the issue of giving purpose-made spaces for children. The following shows essential steps in the development of playgrounds.



Fig. 1 Playground in vacant lots, Harlem

The evolution of playground movement

_ Since the mid-nineteenth century public parks started opening in big cities. The first playground opened in Central Park in New York City in 1887.

_ Establishing of settlement houses to help immigrant workers in 1880s. Such facilities operated daycares, clinics, and playgrounds (empty lots supervised by enthusiasts).

_ In 1885 Dr. Marie E. Zakrsewska visited Berlin and observed children playing in the heaps of sand in the public parks. She reported that to the Massachusetts Emergency and Hygienic Association and the first sand gardens equipped with digging tools and building blocks started operating in Boston. The good example was followed by other states.

_ The mayor of Chicago commissions additional smaller parks in 1898 and in 1904 hybrid spaces with landscaping for adults and playgrounds for children, including playing fields for sports appear.

_ Recently acquired playgrounds in Los Angeles were checked for dependency on the parks' management. The first playground had a house for a supervisor of the games and play. The area was divided into two parts: "the girls' portion" with swings, seesaws and a summerhouse for dolls and the boys' one that contained ladders, ball games courts and an open-air gymnasium.

With the new joyful equipment came the regulations, not so much appreciated by children. According to C. Pursell (2011, p. 53), it was partially because "the children did not share the philanthropists' understanding of the city as a space dangerous to life, limb and morals, finding instead that the streets, dumps, railroad yards and harbour fronts were places full of potential for adventure and even a bit of profit." At the same time it was the philanthropists' vision of immigrant children as potential workers organised efficiently around the widely spread principles of Scientific Management.

_ In 1906 the National Playground Association of America was founded to improve the recreational facilities. It was focusing on the supervision of playgrounds and developing leisure programs.

_ Aiming to broaden the organisation's influence on more aspects of social life, the National Playground Association of America was renamed into the Playground and Recreation Association of America in 1910.

Apart from physical activity apparatus, such forms of play as drama, singing, folk dancing, storytelling and crafts were practiced, which demanded structuring

and supervision. Play was considered a way to inculcate the industrial spirit, sometimes imposed insistently. As a way to resist children happened to ignore the play workers or stopped going to the playgrounds.

_ The Cleveland Foundation set up a survey in 1914. In 1920 the report was issued with problems such as unsatisfying supervision and bad physical condition of playgrounds revealed. The list of needs included resurfacing, proper shading and new athletic equipment.

_ In 1920 a metal climbing structure "Jungle gym", more known as "monkey bars", was patented marking the interest in playground equipment.

_ The enthusiasm for mechanistic play dropped once principles of high efficiency proved to be difficult to impose on social activities. At the same time, economical efforts shifted towards American participation in the First World War.



Fig. 2 Playground – supervised game

After the American playground movement new approaches on children's play emerged. They often confronted the tradition of regulated leisure activities. It should be recognised though that the first administration attempts to organise children's life in the city saved thousands of them from the dangerous environment, in which some had to fight to survive.

Based on *The Safe and Rational Children's Playground: Strategies and Technologies Since the Nineteenth Century*. Carroll Pursell. History Australia, vol. 8, no. 3 (2011): 47–74. doi: 10.1080/14490854.2011.11668388



Fig. 3 Basketball



Fig. 4 Sandbox with children, looking out

01.1.2 _ a short history of playgrounds in Russia

In Czarist Russia playgrounds building was the initiative of philanthropists as a way to assist low-income families in raising children. The location of playgrounds followed the logic of occupying children in the after school hours, so they were placed in the residential areas. The first playground was established in Saint-Petersburg at the end of the nineteenth century. By the start of the First World War, the number reached more than hundred playgrounds in the whole country. Since playgrounds were a voluntary initiative, the city only gave the site, while independent committees financed the provision.

In the early twentieth century swings and merry-go-rounds were attributes of folk tradition and fair, rather than of a children's playground. Instead, the latter was only equipped with a wooden shed to store toys and a table with benches. The play itself had more educational character – somehow playgrounds became an instrument of managing the urban population.

"Visiting the playgrounds was free; there was a mandatory registration procedure. In order to be granted access, the child's parents had to fill out a special form stating their family status, income, occupation and the health condition of the child. That's how social data was gathered. The playgrounds were open both to preschoolers and teens, who often stayed there for several hours up to an entire day. The number of children attached to one playground varied from several dozen to 100 or even 150 for the larger ones. Each playground had its own administrator, sometimes with several assistants, who also wrote work reports published as brochures: sharing experiences and analysing mistakes was an important step."

Strelka Magazine (2016)

_ After the Revolution in 1917 the Soviet state took control of all areas of life. From that moment playgrounds were tribunes to raise proletarians by imposing propaganda.

_ In 1931 with the establishment of "Ready for Labour and Defence" standards the focus shifted towards physical development. Playgrounds became part of school yards and parks and new equipment was introduced. The period of use extended to winter. New activities, that did not require supervisors, emerged.

_ After war the playground design approach was more humanistic. Soviet troops saw European examples and the city planning agenda adopted it. Along with better equipment came new artistic tendencies, for example, some design motives were borrowed from Russian decorative art.

_ In the 1960s the mass housing development allowed to scale up the adjacent

area for recreation facilities. Landscape architects were invited to participate in the designing of playground, especially paying attention to zoning for safety. As for the visual aspect, playground equipment became much less monumental (no Stalin's social realism) and more climbing apparatus was introduced.

_ With the construction of microdistricts, the playground design started to lose individuality. It affected the design of playground equipment. Artists and architects were only invited to participate in exceptional projects, while most of the country's playgrounds became the responsibility of public utility services.

Based on *From shacks to castles: the development of Russian playgrounds*. Svetlana Kondratieva. Strelka Magazine, 26–12–2016. <https://strelkamag.com/en/article/history-of-russian-playgrounds>



Fig. 5 Playground at Aivazovsky St, Moscow



Fig. 6 Rocket playground

01.1.3 _ playground classics: pioneers and mind setters

Adventure Playgrounds

"There is always a certain risk in being alive, and if you are more alive there is more risk."

H. Ibsen, as cited in A. Bengtsson (1972, p. 8)

By nature children are explorers. Searching to fulfill the need to test everything around they sometimes cause damage to the adults' environment, which is simply not designed for them. This frustration can more seriously lead to juvenile delinquency, drug taking and aggression. In 1930s danish landscape architect Carl Theodor Sørensen first addressed the problem with adventure playgrounds. The below are five main principles of the original ones.

Adventure playground is a place where children were *liberated*.

They used *real tools* and experimented with *timber, earth, fire and water*.

Challenge was the essential part of the play – that is how children learned to take responsibility and estimate the consequences.

Children were *not supervised*, but rather gently *assisted* in navigating through seemingly chaotic world of their owns.

They were *builders* and they were independent.

Early experience. Emdrup

The first adventure playground was built outside Copenhagen during the German occupation. C. Th. Sørensen and the Workers' Housing Association initiated the idea. The situation was tough with the lack of materials and the necessity to mask the playground behind a high bank. Children with different social backgrounds enjoyed the play lead by John Bertelsen, who documented some episodes of his work in a diary.

"We have been very busy today. The brick huts have been demolished and rebuilt in a different design by new owners. Building and digging continue to fascinate the boys and, indeed, the girls; it is usually the boys who master the actual construction of the huts whilst the girls demonstrate their ability when it comes to the decoration."

"Rain, rain and rain again! There is scarcely any firm ground – everything is afloat. Yet in spite of this a faithful group still shows up. They insist on getting to the playground even if it means rowing here in an open boat! We are forced to spend most of the time under the open shed, where the children are amusing themselves with drawing, painting and working in clay."

"As the Housing Association has asked me to organize some games in the hope of increasing interest in the playground and thus raising the number of daily visitors, I should like to clarify my views on the overall purpose of the playground. We have now been in existence for nearly two years and the playground is visited by approximately 200 children daily. It is these children who have created the adventure playground and turned the whole concept into a practical reality and I do not believe that now, at this late stage, any resort should be had to compromise. Instead, we should do our utmost to obtain necessary materials, so that the playground can become, as landscape architect Sørensen and I originally intended, a playground where the children themselves are the creators."

"The attitudes of parents toward the playground vary considerably. Some are annoyed because children get dirty while playing; others are enthusiastic as it gives the children a place where they are allowed to play freely, and for quite a few parents the playground helps to ease the problem of the prevailing shortage of child institutions in the area."

J. Bertelsen, as cited in A. Bengtsson (1972, p. 19, 20, 21)



Fig. 7

Although it was originally a Danish idea, adventure playgrounds are widely known thanks to the success they had in the UK. The true apologist of adventure playgrounds is Lady Allen of Hurtwood. After she shared the knowledge of Denmark's experience in *Picture Post*, adventure playgrounds soon became popular and numerous attempts to create them followed. The reason for that was because children had already been used to play with junk materials in the bombed cities of Britain. Exciting but dangerous, such pastime needed a safer framework and adventure playgrounds soon became such.

The important thing for adventure playground functioning, according to Joe Benjamin, the leader of Grimsby playground, was the provision of materials and tools (as cited in A. Bengtsson, 1972, p. 27–34). Building was the most beloved activity, which then would turn in something bigger. Children gave names to their huts and sheds and established public utilities in them taking different roles, such as police, first aid and shops. The play took form of a social project with common sense based rules regulating the relations. Often the play leader mediated the process – that required delicacy and profound knowledge of different age groups, as well as interests and abilities. Real attributes, whether it would be some built adjustments, the fireplace or functioning of an improvised canteen, were most desired, which also meant more responsibility. Among the activities were craft groups, organised by the volunteers with the intention to bring as much diversity as possible. As Joe Benjamin noticed, the daily routine pattern shifts from the slower morning towards more lively afternoon with increasing building activities, interrupted by arguments about lacking materials. During the rest of the day the construction is abandoned to start energy releasing games with a certain amount of risk, that makes children forget about the time.

Due to the constant occupation and the respect to the property of builders, there was hardly any aggression on the playground. At the same time, demolition was an important part of the adventure playground, satisfying the need for taking things into pieces. Though being criticised from external points of view, such a natural behaviour was accepted providing that similar actions do not happen outside the playground – yet again, the matter of responsibility.

In 1962 the London Adventure Playground Association was established to give better understanding of social and educational values of play, as well as to help set up new adventure playgrounds. The organisation was spreading information by publishing sheets that contained theory and practical advice.

The evidence of the great success in the development of adventure playgrounds was the playground for handicapped children opened in London in 1970. Its main goal was to provide special design adjusted to different needs and the individual treatment. When asked about the difference from other adventure playgrounds, the leader Dorothy Whitaker noted that it was hard to distinguish because of the attempts to bring in all the possible equipment.



Fig. 8



Fig. 9



Fig. 10

Even though Denmark is the home country for adventure playgrounds, the idea did not turn into anything real as soon as in Britain. However, the discussion was opened both in Denmark and Sweden once the works of Lady Allen gained popularity and thanks to the International Playground Association's activity. Despite of the debate on the risk taking elements, eventually adventure playgrounds started to open in Scandinavia, but few knew about the problems of running them.

Richard Andersen in his article "From an educational point of view" (as cited in A. Bengtsson, 1972, p. 84–87), reflecting on the misunderstandings in running adventure playgrounds, challenges the common perception of play itself. He argues that "claims for the necessity of purposefulness in children's play are destructive" since the nature of play is in opposition to work. The benefits of play emanate from the process itself, regardless the result. Play can take either ritual or experimental form. To give an example from adults' world ritual play would be the church service with its established procedure, and the experimental one – a theatre drama with its new and surprising elements. "In the adventure playground, care is taken to encourage the experimental form of play, while in the traditional playground, with its skipping-rope, swings and seesaws, play is mostly orientated towards the ritual form." For the future, that we ourselves are not able to predict, it is more important to keep the child open-minded by encouraging to play in the experimental way. Among the reasons for the attempts to go wrong, Andersen mentions the following factors:

- mono functionality (cave-building)
- limited scenarios, when for example a hut is one family house
- parents allowed to assist in the development

This underlines the exceptional meaning of playground staff in providing endless possibilities and thus ensuring the ongoing of the play.

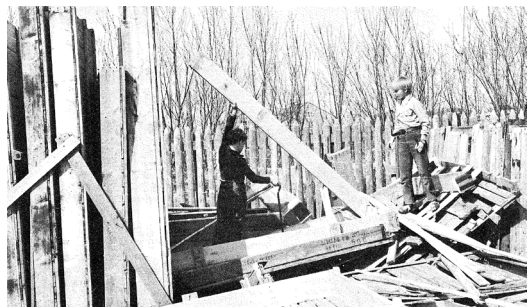


Fig. 11

A more detailed picture of adventure playgrounds functioning reveals from the recommendations given by Ulf Brammer (as cited in A. Bengtsson, 1972, p. 90–99), the Danish Playground Association secretary.

Location

1 per every thousand residential units (when single plan contains hundreds of them).

Area

4 000 m²–6 000 m². The ground should be uneven.

Number of children

80–200 (ideal 150) Children need to form groups, so they should be enough for that. They also need to know the members and the leaders, so they should not be too many.

Activities

- main building so sited as to allow for extension (must include: storage, first aid, place for winter activities, the leader's office, lavatories – everything on approx. 100 m²)
- building material storage area
- communal area, bonfire site
- stables for domestic animals
- section with fixed equipment
- paddle pool (sand or water)
- asphalted area for roller-skating, cycling or skating in the winter
- open-air stage for performance
- garden, nature area

Methods of enclosure (protection from wind and dust as well as against vandalism)

embankment + fence planted with shrubs

Staff

4–5 per 150 children

Seasons

May–September, excluding July are the most active months. By the end of autumn houses should be cleared away to build new better ones in spring. During the cold season the playground turns into activity centre.

Opening hours

For schoolers afternoon hours + whole Sunday are desirable. The staff would prefer normal working hours. It is best to be closed on Sunday, but ordinary days to stay until 5.00 / 7.00 in the summer.

Finance

80% state subsidies + 20% monthly subscription
Adventure playground could be a part of a park – such typology developed in Scandinavia was called playpark (Flatås Playpark, Gothenburg). The model implies integration of functions within a community, which can be especially valuable for a new one. A school,

daycare or nursery can share facilities with the playpark and exchange the play and sport areas.

Another possible integration model was the indoor adventure playground. Children, as well as adults love to stay inside. They go outside because they need to know what is going on and to meet with friends. Apart from that, the enclosure is preferable to them, that is why they look for small spaces to hide and build huts from whatever is available. Indoor spaces are also important for the play to go on without interruptions due to bad weather. Experiments with indoor playgrounds were made in Denmark and Sweden taking various forms:

- part of an art project / exhibition (In 1968 the Museum of Modern Art in Stockholm was partially turned into a playground for a few months)
- permanent solution: new building (main house, common for danish playgrounds) or transformation (Bus depot in Copenhagen converted in a covered playground in 1970)

Based on *Adventure playgrounds*. Arvid Bengtsson. London: Crosby Lockwood, 1972.

The rise of adventure playground concept in 1960s, though it did not become a commonplace, spread a specific approach in Scandinavian design for play, characterised by the deepest respect for children as individuals and an overall understanding of the nature of creative play. When compared to the ways playgrounds evolved in the other parts of the world, this one seems to be the most humanistic, since it prioritises personal development and well being above ideology and fears.

The following examples from Europe and America represent more artistic attempts of modernist architects and designers. The emphasis was made on the visual and spatial aspects so as to go beyond prescription and develop children's ability to think and act creatively.



Fig. 12 Group Ludic, France



Fig. 13 Aldo van Eyck, the Netherlands



Fig. 14 David Aaron, U.S.



Fig. 15 Isamu Noguchi, U.S.



Fig. 16 Enzo Mari, Italy

01.2 Problems and challenges

01.2.1 _ children in the city: what is wrong with the playgrounds today?

The awareness about special needs of different groups of people has become naturally an important city planning agenda in developed countries. In the already built context we are now fixing what was done wrong initially by working out strategies of inclusion. Indeed, when starting from a scratch, we have the possibility to enable everyone to be active users of the built environment if we keep in mind the natural variety.

As for design for children, same logic applies. No doubts, children are special. They are smaller in size, they literally see everything from a different point of view. They use their energy in a different way, they are less experienced and have less knowledge about the world around, but they are continuously absorbing and processing information. Adults make a favour when they reserve special places for children in their environment. Unfortunately, it is often driven only by regulations and without real commitment, so the lack of connection between such places and the real life becomes obvious. Instead of assisting in the exploration process, that would lead eventually to independence and the readiness to face future challenges, most play spaces only protect. Such situation may seem satisfying to most parents (after all, children are outdoors, which is good for their health), but in a longer perspective that is not enough.

More problematic aspects will be discussed in the following sections, all part of the main essence – the limitation of play resulting from increasing traffic, safety concerns and the overall negative attitudes towards children and young people in the urban context.

"Whilst thankfully we recognise that children need so much more than a diet of chicken nuggets and twizzlers, equally the same can be said for a "play diet" that is restricted to a concoction of springy chickens and twisters... If we are to really improve the quality of play opportunities, we also need to provide children with access to more natural and creative play settings that help stimulate the senses and encourage greater use of the imagination."

Packard, as cited in A. Shackell, N. Butler, P. Doyle and D. Ball (2008, p. 14)

01.2.2 _ hazards / risks

Risk taking is an integral attribute of gaining life experience through play. To be prepared to deal with real challenges, it is important for children to always test the limits. Thanks to the experimental nature, responsibility develops and children become able to recognise dangerous situations themselves.

Differentiation between hazards and risks has to be made in order to avoid unnecessary limitations of freedom and joy. Most often poor maintenance poses threat, alongside with low-quality design of equipment. This includes hard surfaces, excessive heights, protruding elements, hooks and head entrapments. Another real source of danger, the car traffic, yet again is a matter of competent risk assessment, as is undesired contact with strangers. Joe L. Frost (2008), an expert on play and playgrounds, considers the lack of spontaneous play, natural elements and loose equipment much more harmful.

When speaking about possible risks, questions about regulations inevitably arise. Lawsuits have, in fact, huge influence on the designer's approach to play spaces. In Russia the situation is more similar with America in terms of expanding regulations with probably different proportion of causal factors, such as fear, ever-growing standards for safety and the huge responsibility with expensive injury litigations, that rests on the shoulders of park managers, schools and kindergarten administrations, and individuals. The latter even leads to preventive initiatives reducing opportunities for play.

On the contrary, in Europe, especially in Scandinavia, Germany and England, the society is less risk averse regarding playgrounds. Often seen by Americans as messy and full of hazards, they are much more fun and challenge, i.e. provide more benefits for cognitive and physical development. In 1998, when the European playground safety standards were prepared, adventure playgrounds were excluded, because they are supervised, fenced and have self-made equipment. Besides, the numbers and records made throughout history, show that the extensive opportunities for play improve the ability to recognise and cope with potential hazards.

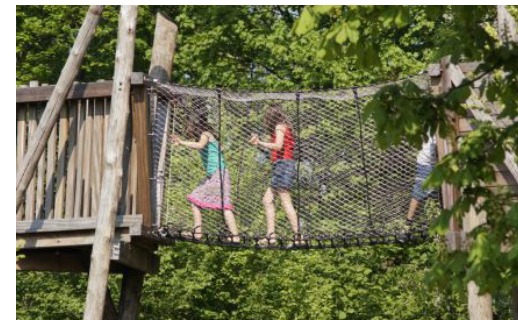


Fig. 17 Canopywalk, Amsterdam

One of the inspiring examples of a truly challenging play space is the "Canopy Walk" in Vondelpark in Amsterdam. Consisting of elevated platforms (approx. 4 m above the ground) connected by various types of net bridges, it always attracts children and even adults. While trying that myself, as many other adults, I was more scared than children. It is hard to imagine how happy I would have been, had I had such an experience in my childhood.

In conclusion, adults tend to recall memories from when they were young with a relief feeling. They are happy today that their children play in a safer environment rather than they used to. Of course, there is a rational point in it, but if we think of the lost benefits of play coming alongside with a certain amount of risk, is it worth it?

01.2.3 _ equipment

Children enjoy using play equipment because of the challenges it provides. Playground equipment facilitates movement. Without it swinging, sliding, climbing and rotating are almost impossible. The presence of equipment marks the place – it is signing that children are supported and welcomed here. Furthermore, at some playgrounds, dedicated to a specific theme, playground equipment often creates the setting.



Fig. 18 Naturlegeplads, Copenhagen

As a rule, play structures are permanent, which, consequently, implies repetitive use. This, in turn, may likely lead to boredom if the equipment does not allow for flexibility, in other words, is prescriptive.

Apart from creative use, successful play equipment is suitable for different abilities and age, such as, for instance, wide slides or "wobble dish", that can accommodate a companion if the assistance is needed.

Finally, for a proper functioning, maintenance is needed to avoid users' frustration or serious damage. Community engagement in inspections can become a great contribution. When the play space is in order, children are more likely to respect and love it.



Fig. 19 Naturlegeplads, Copenhagen

01.2.4 _ natural elements

Life in the city imposes stresses, which are absorbed in the rural area. Playground design is in a way a compromise, aiming to compensate the lack of natural elements. Research shows that playing in the natural landscape increases motor fitness and coordination. Besides, it provides opportunities for an open-ended process of investigation and learning, because it is not predetermined in its design.

Introducing planting and features such as fallen trees, logs, boulders, uneven topography, ditches and puddles can increase the value of play. Having said that, it is important to keep in mind the atmosphere we are going to create and the way it can blend with the surroundings, so that the listed do not seem out of place.

move – dig – manipulate – climb – build – pick – pour – touch – hide – jump



Fig. 20 Äventyrslekplatsen, Malmö

01.2.5 _ accessibility

Play spaces often do not meet the needs of disabled children and their parents, causing social exclusion for many of them. Well-designed playgrounds offer the same amount and quality of play for disabled children as is available to the rest. At the same time, it should be recognised that not all equipment can be completely accessible to everyone, as well as the fact that special provision and complicated adaptations are not always favoured as necessary because they may increase the feeling of exclusion. Children with special needs want to be part of ordinary life, just like anybody else.

The following are elements that ensure positive play experience for disabled children:

- absence of physical barriers
- facilities welcoming accompanying adults (seating places, shaded spots)
- equipment that can accommodate the companion
- opportunity to use natural and loose materials
- challenging features

While inclusive play spaces are mostly focused on the internal design, it is also important to keep in mind the journey to the site itself, which includes getting to the site and entering the site. Making the way to the playground easier affects the decision to visit itself.

01.2.6 _ vandalism

The fear of vandalism is often bigger than the reality. Such attitude imposes unwanted limits on the decision makers' perception of play space design. In general, there are two strategies to address the problem of vandalism. One is to provide "indestructible" solutions and the other one implies establishing links with the problematic groups.

"I'm convinced that much vandalism happens because there is no provision for older children. So many people focus on toddler provision because they don't want to "attract anti-social youths" that there is little to interest older children. In these circumstances it wouldn't be surprising if those older children felt alienated and disaffected with their community. We have a lot of anecdotal evidence that where more exciting provision is put in place for older children, vandalism reduces."

Collings, as cited in A. Shackell, N. Butler, P. Doyle and D. Ball (2008, p. 85)

Having touched the issues of safety, equipment provision and vandalism, the natural question of fencing arises. And if in case of problematic location, for example, close to a busy road, the choice to establish a boundary is understandable, such motivation as the parents' sense of security can become an issue considering that fencing discourage children from attending the play space and leads to segregation. Another reason for fencing is the presence of unwanted visitors on site – dog owners, problematic youth, strangers and so on. On the other hand, finding a solution in work with the local community by promoting responsible dog-ownership and the overall sense of belonging will benefit in a longer perspective.

Finally, where the fence is inevitable for some reasons, the possibility of alternative boundary may be effective too. Shrub planting, change in level and natural or sculptured forms serve as a fence along with providing additional value for play.



Fig. 21 Sagolekplatsen, Malmö

01.2.7 _ participation: architect needed?

Designing a play space is a complicated process. In order to bring to live a playground and maintain it in a proper condition according to the changing needs of children, complex cooperation between different people is needed. That involves making decisions regarding spaces and physical objects, in other words, the architect's professional participation at some point or another.

In today's world economic and political factors are becoming more and more crucial, as a result, leaving the architect less power to influence the design and construction process. At the same time, the community empowerment is rising, also forcing the architect to restrain his or her ambitions. Such situation, especially within the public facility design, brings an issue of the architect's role by introducing the need for the new functions of advocate, listener and mediator. To reflect on it, as well as on the other parties' roles, I am providing an overview of the playground design key stages, suggested in "Design for play", a guide

to creating play spaces. The approach described in this publication is referred as design-led, meaning that the equipment, landscaping and play value are considered parts of the integral thinking from the start, which results in better play opportunities.

1. Preparation

The stage involves research and evaluation of the local provision for the further definition of what type of space is needed and setting up the goals. Establishing links with the local people as soon as possible is crucial for the long-term success, because the trust and support gained will result in participation in planning and promote the responsible use.

2. Design

The commissioner develops a brief, in which the information gathered during the first stage is summarised and the collective aspirations of the project are expressed. After that the play space designer is invited – he or she begins with asking the children (it is important that children tell what they would love to do instead of what they would love to have) and the adults about their vision and tries to broaden it to allow for innovation and change. The design process is very experimental by its nature and implies constant communication, evaluation and learning from mistakes within the timeframe and budget limitations. With the community engagement it is hard to avoid disagreements, that, in turn, require listening to the concerns and finding compromise. Eventually this will lead to a fairer proposal as long as the process is open.

3. Construction

This stage is handed to the contractor, while the architect is monitoring and overseeing the process. The participation of the commissioner is limited to informing the community on the progress. However, once the links with the local people are established, it is important to maintain them through the unsettled period of change, especially taking into account the emotional attachments to the place. This can include meetings on site and listening to the community representatives. Another way to support the communication with the residents is to involve volunteers. Their help will reduce capital costs and develop the sense of ownership.

4. Use

The period after construction is crucial. Newly designed play spaces attract children and young people quickly increasing the use, which is a good chance to test and make the final adjustments. Any damage from vandalism should be fixed immediately to provide a clear message that the site is cared for. The community's role in looking after the playground is essential and defines its successful functioning.

5. Maintenance

While some wear and tear is a positive sign, damage and litter is unacceptable on the playground. Regular maintenance routine includes cleaning and technical inspection. Again, local community groups play an important role in overseeing the playground condition and reporting any problems.

6. Review

The design cycle of a play space does not end because it is evolving all the time like a living organism. Over time changes in use occur, some parts prove to be problematic or dull, some, on the opposite, have success and need extension. What is more, children are growing up and developing, so the distribution of interests and abilities is never the same. Therefore, it is important that the process of play is observed and an experimental approach to the site is established. The "evaluation groups" led by designer may consist of children of different ages and adults. Based on the reports about using the site re-configurations can be made to improve the quality of play and satisfy the neighbourhood.

Play space designers with the understanding of imaginative play may come from different backgrounds and disciplines. Projects developed with the professional approach are not only creative, but also ensure work in partnership with commissioners, community and other stakeholders. The designer opens up the people's minds, shows opportunities beyond their everyday experience and helps to express expectations and identify the sense of place for the specific location. Such input is valuable on each stage and multiplies its benefits if it is consistent through the whole process. Finally, it is the professional designer who records children's design wishes, interprets them and assists with the implementation, thus fulfilling the main users' aspirations.

Based on *Design for play: A guide to creating successful play spaces*. Aileen Shackell, Nicola Butler, Phil Doyle and David Ball. Play England, 2008. E-book.

01.3 Field observations

Focus

As part of acquiring knowledge about the play I visited a number of playgrounds. My primary focus was the way such outdoor places functioned, in other words, the play itself. I was interested in the interactions occurring on sites and the role of particular parts of the playground. However, remembering the parental fears, much attention was paid to the physical elements, such as play equipment, greenery, fencing, etc., and their spatial organisation from the perspective of safety.

The matter of choice

Scandinavian countries, as well as Germany, the Netherlands and the UK are far ahead in providing children with truly fascinating playgrounds, that encourage creativity, curiosity and movement, not limiting the play. Coming from a very risk averse society with little understanding of the importance of play, I was happy to learn from playgrounds in Lund, Malmö, Copenhagen and Amsterdam. When choosing playgrounds for the study visit, among the factors considered the main ones were publications in city guides and the ratings on Google Maps. As a result, the playgrounds reviewed here are quite outstanding, but one can easily find similar solutions replicated on less exceptional sites. Another positive aspect is that the location of the best playgrounds was not necessarily central – Äventyrslekplatsen and Musiklekplatsen in Malmö, Naturlegeplads, Bredegrund Byggelegeplads in Copenhagen and the one on Van Beuningenstraat in Amsterdam. Each and every community deserves a play space as close to where children live as possible. On the other hand, I understand, that the playgrounds I visited may be used by children from the neighbourhood areas or by families on a weekend, if they decide to take a journey to the Valby park in Copenhagen (Naturlegeplads), for example.

Time factor

Regarding the best time for a playground visit, it turned out to be completely unpredictable, together with the notorious weather. While Google Maps reviews provide fair enough information about playground including the adults' visions on what, in their opinion, makes a good one, as for the popular times, I could not rely on the instrument. Initially, I assumed that after lunch hours on weekends the playgrounds would be crowded most of all, but it did not prove to be a pattern. Instead, it happened several times during approximately an hour of stay, that I noticed waves of visitors every twenty minutes. The social context affects visiting hours too. The staffed playgrounds of Copenhagen target daycare, school and after school groups, which is why I found one of them closed on Sunday. Despite some difficulties, I appreciate the experience gained during my tours in February and March 2018 and plan to continue my observation of playgrounds in the future.

01.3.1 _ Lund

Lund, Stadsparken

Tuesday, 30.01.18, 14:50

+5 C

partly cloudy

Location _

Central location within the city park – close to the main entrance. Two schools nearby (Katedralskolan, Polhemskolan).

Context _

Stadsparken is a popular place visited by people of different ages practicing any kinds of outdoor activities, mainly sports. The park is a part of many city routes due to its permeable structure. It also features a swimming pool and a gym.

Users, visitors _

At the time of the visit the playground was used mostly by preschoolers accompanied by parents. No crowd. Adults were actively engaged in the play. Even though they were observing the playground, there was no feeling of control.

Theme _

Part of the playground is dedicated to industrial, handicraft and art exhibition held in Lund in 1907. It represents "towers" that are climbing facilities for the smaller children.

Zoning _

Theme part, separate area with swings, artificial slopes and a climbing net are placed in a way that all different kinds of activities do not interfere. At the same time, playground's proper size allows for interaction and visibility so that a parent of different aged children can easily observe them both.

Play equipment _

No dangerous equipment, proper maintenance. Quite many pieces of fixed standard equipment, that may eventually become boring. However, the climbing net and the rubber hills provide endless opportunities for movement, that children seemed to enjoy. The swings are very well represented on this playground. The materials they were made of, as long as the surfaces underneath, seemed safe. Some models were designed specially for very small children. Nest swings attracted most users, probably because it was possible to share them.

Materials, surfaces _

Soft rubber, grit, ground.

Colours _

All natural colours, except for the thematic structures and some prefabricated elements painted in bright colours.

Weather protection, recreation _

The open pavilion provided in the eastern part. Several tables with benches outside. A group of people having a picnic.

Greenery, natural elements _
The playground is surrounded with bushes; old trees in the south. Hedges are used to accentuate zones.

Fencing _
No fence. The playground is blended naturally into the landscape / cityscape.



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01.3.2 _ Malmö

Malmö, Sagolekplatsen

Saturday, 03.02.18, 13:00

- 1 C
cloudy
snow

Location _

Central location close to the city library (Stadsbiblioteket).

Context _

The surrounding area is a large green plot within the city canvas. At the same time the old city and various cultural facilities are close. Apart from the nearby housing blocks' residents, visitors come from other places, combining it with the library, which also offers opportunities for children.

Users, visitors _

Several small groups of children (2-6 years old) with their parents or grandparents, occupying different zones. Due to the cold weather, the stay was quite short and people used to change.

Theme _

From the playground's name, it's theme is a fairy tale. Quite abstract metal sculptures in the west part leave enough space for imagination.

Zoning _

The soft rubber landscape occupies the majority of the space. Climbing facilities, swings and the rainbow slide are standing slightly apart, making the hills and the sculptures zone more attractive and prominent for play.

A bike parking spot and a small toilet are adjacent to the playground. This addition makes an impression of a very user-friendly playground.

Play equipment _

All the play equipment is customised, except for the swings. The climbing rocket and the rainbow slide are manufactured, while the metal sculptures have a unique design.

Regarding the use, I noticed that structures like the climbing rocket can serve to maximum 2-3 children at a time, leaving the rest in the queue. As for the metal sculptures (huge plant, mushrooms), children seemed to enjoy them, probably because they provide more challenging opportunities for climbing and hiding. The material, though seems somewhat brute, is in fact, safe and organically blended into the play environment.

Materials, surfaces _

Soft rubber, grit, ground.

Colours _

The colour scheme is very rich and natural. The only object standing out the palette is the rainbow.

Weather protection, recreation _

No place to hide from the rain. Tall trees surrounding the playground provide sun and wind protection.

Numerous benches along the perimeter.

Greenery, natural elements _

On the playground itself, there are several young trees. The massive wave-shaped hedge.

Fencing _

Low fence hidden by the hedge. Several entrances with quite tricky childproof locks apparently due to the close car way.



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Malmö, Spirallekplatsen

Saturday, 03.02.18, 14:30

- 1 C
cloudy
snow

Location _

Central location next to Malmö Konsthall. Two minutes walk from Triangeln station.

Context _

The playground is a part of a small park (Magistratsparken), surrounded by vivid streets in the area adjacent to the old town of Malmö. The proximity of important traffic junction and cultural facilities (Malmö Konsthall, Malmö Opera), as well as housing blocks with public functions in the first floors makes the place an active point in the city canvas.

Users, visitors _

Judging by the location, the playground must attract quite different groups of visitors, apart from those living close by. At the time of observation there were relatively a small number of children playing (2-6 years old), all accompanied by parents. Short stays, frequent changes of visitors due to the cold weather.

Theme _

The principal motive is reflected in the geometrical shapes of the equipment. Most of the climbing structures (one would want to say "sculptures") have spiral elements as basic idea. Thanks to the minimalist design, the concept is solid and easily understandable as an attraction for children.

Zoning _

The playground, relatively small, is basically a group of climbing structures installed on the circular "islands" of soft rubber. The trees, surrounding the play area, form a transition to the park itself and serve as natural climbing structures as opposed to the metal ones. Several benches in line make a small recreational zone.

Play equipment _

While usually the climbing structures are only part of a play space, it is not the case at the Spirallekplatsen, where they play the key role. The features offer a wide range of physical experiences, but do not impose any fixed way of using them. During the observation it was noticed that children often needed an adult to spot them while climbing. Apart from the spiral elements, the playground is equipped with the conventional features, such as swings of various types and the sandbox, not to mention the tree branches, especially popular among children.

Materials, surfaces _

Steel structures, wood (swings, sandbox), rubber, grit, ground.

Colours _

Reserved colour scheme. Natural combination of steel, wood and the ground colours with the only accent of pinkish soft rubber surface.

Weather protection, recreation _

It is possible to hide from sun under the trees. Otherwise, no shelter

available. Some benches along one side of the playground.

Greenery, natural elements _

The playground is situated within a small park, so there is no need for any particular greenery solutions.

Fencing _

Low wooden barrier hidden by the hedge along one side, marking the border of the park itself. Other sides are surrounded by rather dense bushes, which creates a safe feeling considering the proximity of the street traffic.



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Malmö, Äventyrslekplatsen

Sunday, 04.02.18, 12:15

- 3 C
partly cloudy

Location _

Southern part of Malmö, close to Hyllie station. Bus connection with the central part of the city (about 20 - 30 minutes in total).

Context _

Quiet residential district, mid-rise buildings, well developed sport infrastructure. Several schools and community centres close by. The playground is located in a green area, adjacent to Kroksbäcksparken – a park with artificial landscape of seven hills.

Users, visitors _

Not many visitors at the time of my observation due to the low temperature. As noticed from the further study visits, more people tend to gather at the playground in the afternoon in winter time. There were several children (2-6 years old) at the playground, accompanied by adults. Some teenagers were playing ball games on the designated area.

Theme _

No particular theme. However, the use of natural elements in the design makes it easy to trace the integral concept. The landscape features play the main role, pushing aside the manufactured equipment, which in its turn is supporting the idea of "natural play".

From the name of the playground one can recognise the reference to the adventure playgrounds, known for the freedom and openness they used to offer for children. Though adjusted for today's common understanding of risk and safety, the described playground's design is trying to follow the same principles.

Zoning _

The playground is organised as a continuous route with various challenges along. It is possible to start at any point, depending on where one enters. Concrete landscape, partially filled with sand, is the biggest artificial zone, that probably attracts most attention from the first sight. When I was visiting the playground, children were having fun at the wide waving slide, situated upon a hill. Apart from these two major parts, the rest is basically the route (or the path) itself, marked with the use of different materials (logs, stubs, rocks) to hop. There is a loop leading into a small grove – it must be interesting to walk on the elevated wooden decking during the wet season.

Play equipment _

Although, the playground is designed for a free use close to the nature, it is possible to find occupation with conventional play equipment too (swings, bars, slides).

Materials, surfaces _

Wood, stone, concrete, grit, ground.

Colours _

All colours are natural, except for some parts of the slide, that stand out a little bit.



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Weather protection, recreation _
 No shelter. Well thought out outdoor lighting, making possible to extend the hours of use during the dark periods of the year.
 As for the recreation, the playground has a spacious area with tables and benches. No toilet (might be inconvenient, considering the scale and the location within a big park).

Greenery, natural elements _
 Several young trees planted in the recreational area.

Fencing _
 No fencing, except for the ball games zone.



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01.3.3 _ Copenhagen, Amsterdam

Copenhagen, Naturlegeplads
Saturday, 10.02.18, 13:00

0 C
partly cloudy



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Copenhagen, Nørrebroparken (Monstrum)
Saturday, 10.02.18, 15:30

+ 1 C
partly cloudy



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Copenhagen, Bredegrund Byggelegeplads
 Sunday, 11.02.18, 12:00

+ 1 C
 cloudy

The "adventure" part of the playground was closed at the time of my visit.



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Copenhagen, Den Blå Planet
 Sunday, 11.02.18, 13:50

- 1 C
 cloudy
 wind, snow storm, rain

The playground is available only for the visitors of the National Aquarium.



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Amsterdam, Van Beuningenstraat, Carve
Saturday, 10.03.18, 15:00

+ 15 C
cloudy



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Amsterdam, Vondelpark
Saturday, 10.03.18, 17:00-19:00

+ 10 C
cloudy

Aldo van Eyck (1-3)
Vondelpark Towers, Carve (4-6)



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02. Analysis

02.1 Mass housing agenda

02.1.1 _ Moscow and New Moscow mass housing districts

Residential development in Russia has been following the mass standards for more than 70 years. Progressive at the time when they were introduced, these standards have gone through many changes becoming less and less adjustable to the new challenges of the urban life. In the post-Soviet period, when the main interest laid in making profit, the situation even worsened: imagine a seventeenth-story apartment block with a vast empty courtyard, on the periphery with poor connection to the city infrastructure. Only a short while ago the public appeal for comfort in outdoor environment started raising and the real estate prices in the bad quality housing districts relatively dropped. However, thousands of people, especially those who move from former industrial Russian cities in search for welfare, still consider their housing a shelter to hide in and, thus, do not feel any sense of belonging in a wider context of place. They have to limit their expectations and be satisfied with lower standards of living.

Apart from the city of Moscow itself, mass housing areas are continuously developing. In 2012 new territories in the southwest were added as part of the extension project "New Moscow". The new construction was initiated – same problems remain.

1 480 km² inhabited by 250 000 people added

70 000 new inhabitants in 5 years (it was planned that by 2035 the number of new territories' inhabitants would reach more than 1 000 000)

11 000 000 000 000 RUB cost (approx. 178 000 000 000 USD, current rates)

750 000 000 000 RUB investments (approx. 12 000 000 000 USD, current rates)

8 000 000 m² of new housing built in 5 years

by 2025 the plan is to have 60 000 000 m² of new housing built

02.1.2 _ new issues: renovation and the international competition for standard housing design concept

Russia is an extremely centralised country and so are the Russian cities. The European urban design trends started to spread from the very centre of Moscow and as part of an ad hoc political will. Nevertheless, the agenda was successfully adopted by the professional community and the citizens, leading to establishment of the new democratic institutions in the city, among which are the architectural competitions. The most recent was an open international competition for standard housing and residential development concept design, aiming "not just to provide the city with the necessary amount of housing but to integrate it into existing urban context and to form a comprehensive and comfortable living environment" (KB Strelka, 2017). The competition brief asked for a proposal based on the principles of multifunctionality, adaptability, environmental friendliness and economic expediency. Along with the apartment layouts, the participants were expected to design adjacent areas and infrastructure facilities, using the aesthetic approach to the residential environment.

As for the real estate market itself, the new trends are only starting to be introduced in the economy segment. It takes time before the exceptional projects become commonplace, not to mention the enormous number of the already built housing areas without any sign of comfort in the outdoor environment. The following sections will focus particularly on facilities for children as they are seen by the officials and planners and in the residents' everyday routine.



Fig. 22 Prospect rendering of a housing block, Moscow

02.1.3 _ city planning officials' vision of children facilities design

To provide an overall view on the city's provision of playgrounds one should look at the residential areas, regular parks and territories adjacent to kindergartens and schools. Most of the playgrounds are organised by the local municipalities without involving an architect. The professional input is usually limited to a consultation with a specialist from the equipment producing company, whereas general considerations about the spatial organisation follow the safety rules. In other words, the officials have quite a formalistic approach lacking comprehensiveness and understanding of the importance of play spaces, which results in the poor opportunities for imaginative, free play.

At the same time, certain playgrounds, mostly located in the central parks, reveal a great potential of cooperation with play space designers and architects, such as the playground in the Bauman Garden, designed by Wowhouse (in recent years the office participated in numerous projects in the public realm, that lead to the most positive changes in Moscow). Another outstanding example is the playground in Gorky Park, designed and produced by a famous Danish company Monstrum.



Fig. 25 Bauman Garden, Moscow

02.1.4 _ leading developer companies' approach to designing infrastructure for children

Designing outdoor spaces in the residential neighbourhoods is the developers' responsibility. The safe high-quality environment is one of the key factors affecting the commercial attractiveness of the product, after all. Traditionally, the inner courtyard of a housing block always had a kindergarten or a playground or, less commonly, a school as a central element – considering that the most frequent users of such spaces are families with children, the tendency remains the same. It is hard, though, to distinguish an integral strategy for providing children's facilities, since they are seen by the leading developer companies as part of the entire infrastructure.

As a rule, even developers who try to follow the modern standards for the outdoor environment employ ready to use solutions. In these cases, the alternative suppliers of play equipment, including the foreign ones, make possible the positive change. The practice of engaging professional play space designers is extremely rare, however, it proves to be the most successful and desirable by the residential community.



Fig. 23 Newly opened kindergarten, Moscow



Fig. 24 Playground by Monstrum, Moscow



Fig. 26 Newly built playground, Moscow

Below are the most common features constituting the collective image of playgrounds in mass housing districts today.

- central position in the housing block courtyard
- flat surface covered with rubber material of blue, red, yellow or green colour
- standard fixed manufactured equipment of primitive colours as well
- rare young trees in the newly built areas, grass – optional
- low fencing protecting from contacts with dogs, but hardly enough for keeping children away from the inner courtyard car traffic

In general, typical playgrounds are monotonous and not so attractive for children. The problem is, they become boring too soon, unable to occupy children with an imaginative and inspiring play. This leads to the more serious issues – the weak motivation to spend time outdoors and the lack of physical activity, crucial for the healthy development.



Fig. 27



Fig. 28

The following example illustrates the organisation and functioning of a microdistrict, the most popular housing type in Russia due to its affordability. Located on the peripheries of big cities, they provide an opportunity for people from remote economically depressed areas to improve their financial situation and open up better perspectives in terms of education and health care.



02.2.1 _ Butovo Park

Butovo Park is a large microdistrict in between two highways, that connect Moscow with the southern part of Moscow region. The microdistrict consists of three massive blocks – some parts are already built, some are under construction. Several developer companies are taking part in the project, including the leading ones on the housing market.

In total the microdistrict will include 81 houses from 9 to 25 floors high (17–25 floors, as a rule), providing 1 400 000 000 m² of economy class housing.



02.2.2 _ location, proximity, connections

Moscow has a concentric structure: from the centre each ring expands towards periphery. This feature is being translated on the territories outside Moscow as well. The official borders are not so clear in reality, so proximity of the city is, in a way, a matter of individual perception. The location of Butovo Park may be described as "almost nearly Moscow", 3.5 km away from the external ring road – a nice compromise between Moscow and Moscow region.

Regarding the connection with the city, various options of public transport going to the metro stations are available. Also, many inhabitants use their own cars. In general, it takes about 10 minutes to get to Moscow.

02.2.3 _ infrastructure

By the end of construction the plan is to have 6 kindergartens, 4 schools, a hospital, cultural educational centre, fitness centre and a church, as well as some basic facilities. At the moment the lack of infrastructure is felt and often people have to commute to the more developed microdistrict nearby to do shopping, for example. The situation is more complicated in case of social institutions – not enough kindergartens and schools to meet the growing demand (more information in 02.2.6 _ story of Svetlana and her children).

Regarding public spaces, the quality of outdoor facilities varies depending on the responsible developing company. It happens sometimes, that what was planned in the project is not realised (car parkings). Overall, the intention is to improve the outdoor environment according to the European standards with each new construction.

02.2.4 _ housing

The main unit of a typical house in a microdistrict like Butovo Park is a section. The section has a vertical configuration with a core, consisting of a staircase and a lift hall. On each floor there are several apartments. Usually there is one entrance in the section.

In terms of inner structure, there is no difference between houses, even if they have various shapes. In a way, the sections are multiplied to fit in the larger master plan, which in its turn is affected by such factors as insolation, wind directions, traffic lanes and so on. Consequently, it makes more sense to distinguish different types of apartments depending on their size (studios, one-bedroom, two-bedroom and three-bedroom apartments), rather than housing typologies.

02.2.5 _ outdoor spaces

The characteristic feature of the microdistrict's spatial organisation is the large open spaces in between houses. This is caused by the necessity to provide insolation according to the standard rules together with the economic motives to build high rise.

Such open spaces are difficult to organise in a human scale, so they become monotonous and faceless and do not develop the sense of belonging among people. What is more, they often spontaneously become parkings and the cars block the access to the courtyard facilities. In some new projects the developers are trying to solve the above problems and turn the gaps into high quality public spaces. However, it takes time before the place making efforts give results, so there is still some unsettled feeling.

The shading studies conducted in DIVA plug-in for Grasshopper revealed a lack of daylight in the inner spaces due to the high rise, despite considerable distances between housing blocks. I assume, that such problem would be the same in other microdistricts taking into account uniform standards for residential areas master plans.



Fig. 29 Bus stop

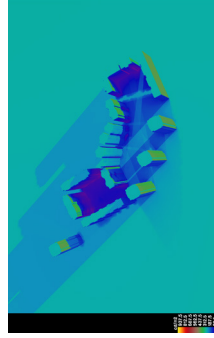


Fig. 30 The courtyard

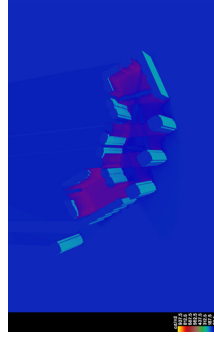
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12:00



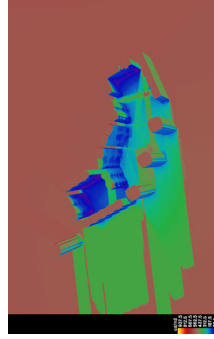
15:00



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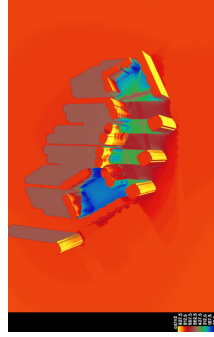
Spring Equinox, 20.03



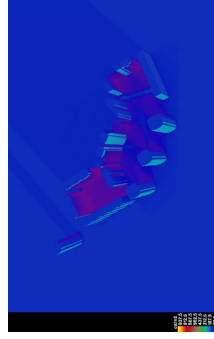
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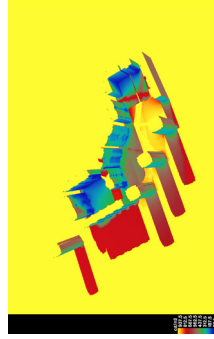
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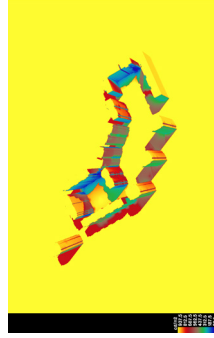
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Summer Solstice, 21.06



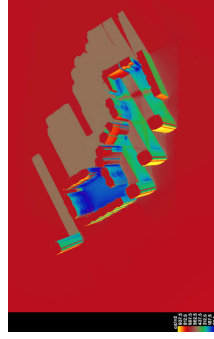
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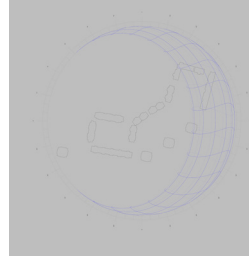
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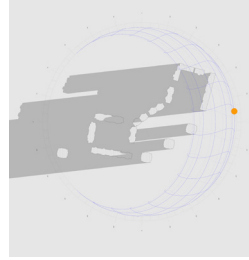
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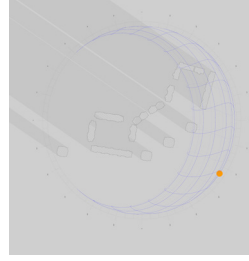
Winter Solstice, 21.12



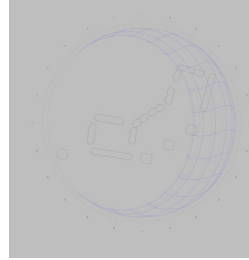
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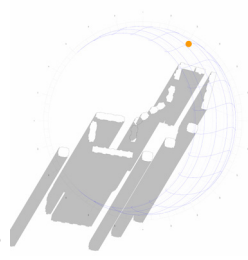
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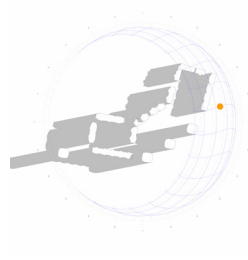
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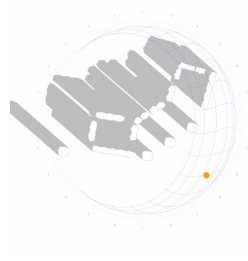
Spring Equinox, 20.03



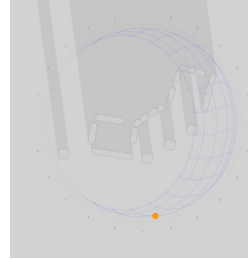
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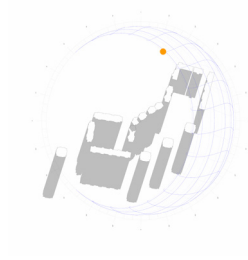
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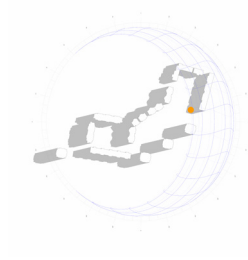
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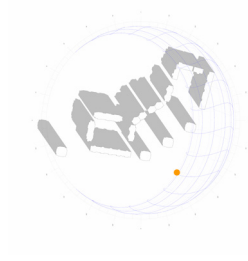
Summer Solstice, 21.06



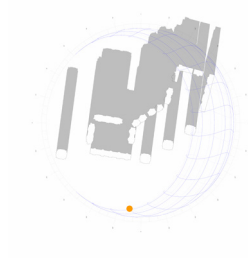
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18:00



02.2.6 _ the story of Svetlana and her children

The following is a personal view of Svetlana, my friend, on her family life with two children in Butovo Park. The overall aim of this interview was to provide a better understanding of context from the inside. Svetlana kindly agreed to contribute to this project by sharing her experience with me. I appreciate her openness and thus try to do my best in transferring the information carefully and without distortion.

The questionnaire can be found in Appendix.

housing _

Svetlana was born in 1978 in Khabarovsk, a city in the southeast of Russia. She had lived there until about fifteen years ago, when she got a job offer in Moscow. *It is common in Russia to leave the hometown for bigger cities, mostly Saint Petersburg and Moscow, in search for better career opportunities and to improve the quality of life.* In the first years in Moscow Svetlana was living in Chertanovo, a district that became a part of Moscow in 1960. It was built up in a new and experimental way at that time. Although the concept of microdistrict is being seriously questioned nowadays, Chertanovo seems a better place to live in terms of infrastructure and facilities, according to Svetlana, in comparison with where she lives now.

A few years ago Svetlana got married and had her first baby. Soon after that the young family got a housing loan. They chose the newly built Butovo Park, the southern district outside Moscow, which was well connected with the city. The location allows for commuting easily to the place, where the parents of Svetlana's husband live in Moscow region. *Transportation is one of the most crucial aspects for people looking for a place to settle. To make it clear, it is considered reasonable if it takes up to an hour and a half to get to work.* The flat is situated on the 17th floor and Svetlana likes the view very much. It would not be so nice to live on the lower floors because of the road close by. She only regrets they did not take the last floor (21st) – the soundproofing in the house is quite poor.

the family _

Svetlana had taken maternity leave when her first son was born. After he reached the age of three, the family did not manage to get a place in the kindergarten, so Svetlana had to quit her job to look after him. Meanwhile, they had a second child. *This situation is very common. Due to the lack of daycare facilities women*

have no other choice but to stay at home and often decide to have another child. In about three years Svetlana is planning to take up her career path slightly in a different field. At the moment her focus is the family, while her husband is at work from early morning until evening. He is doing his best to help her bringing up children as well as with the household chores, especially on weekends. Fyodor (5 years old) is an active and emotional boy. He keeps busy learning new things every day and often does it on his own. For 30 minutes a day Fyodor is allowed to play computer games, most of them are educational. At home he likes to play with his numerous toys, but his favourite occupation is going out with the bike or scooter. With the birth of Tikhon Svetlana has less free time. On the other hand, she is managing to do a lot more thanks to self discipline. Fyodor is a loving and not jealous older brother. He gives support and understanding to his parents. Tikhon, being 10 months old only, is really empathetic towards Fyodor.

06:30 – the family wakes up

08:00 – dad leaves for work; breakfast, games

11:30 – 14:30 spending time outdoors (one hour less in winter)

during the day Tikhon sleeps every 2,5 hours; Fyodor sleeps after going for a walk

18:00 – 19:30 / 20:00 spending time outdoors if it is not too cold

21:00 – mom and Tikhon go to sleep

22:00 – dad and Fyodor go to sleep

life in Butovo park _

During nearly 5 years after the move the place has not changed a lot. Svetlana describes it as intimate and enclosed, which is a good point, in her opinion. Among disadvantages, she mentioned the lack of shopping facilities and no space for parking regardless the actual project. Too many cars are parked on the adjacent territory, as a result.

A huge problem is the fact, that there is no hospital in the microdistrict, only the ambulance. It takes more than two hours to arrive because of some bureaucratic issues, which is why Svetlana chose to be registered in a hospital of the nearby settlement. Interesting thing is that Butovo Park is officially considered a village. If it is something really urgent, "the villagers" just cross the road, find themselves in Moscow and call the ambulance from there, so it arrives immediately.

Most often Svetlana takes children for a walk to the pond nearby. It is situated in the actual village with country houses not far from their block. About the courtyards in the microdistrict itself, the inhabitants are quite satisfied with the quality of playgrounds available: nice soft rubber surfaces, big open spaces and many children getting to play together.

There is only one kindergarden in the whole microdistrict. Each group holds 36 children, making it too overcrowded. When Fyodor hears me and Svetlana discussing the possibility of attending kindergarden, he gets really anxious and we have to assure him, he will not. Another option is a small daycare centre in the basement, still unreasonably expensive. The school is under construction.

Svetlana's social circle is formed through her contacts with mothers of children of same age as Fyodor. She says, they stick together and organise birthday parties. Fathers are good friends too.

Not having any supermarket in Butovo Park, only small groceries, the family drives weekly to do shopping in bigger malls. Svetlana also orders other stuff for children online.

spending time outdoors _

The playground offers more than enough equipment for any age, such as sandboxes, swings and climbing bars, as well as bike and scooter lanes. Svetlana mentions, that everything is easy to observe. Compared to Moscow and other cities in Moscow region, playgrounds in Butovo Park are better equipped. *Obviously, the developer generously provided the territory with all kind of stuff one might expect to see outdoors. At some point it looks as if it was stacked or exhibited in the densest way possible.* Fyodor and his friends almost never get bored. If they do, they just leave that particular playground for another one. The space in between the blocks is really huge and totally dedicated to children, which the inhabitants find reasonable. It is curious, how the weather affects the choice in which place to play. Svetlana spends the morning hours with children right in the courtyard of their house. When the sun goes, they change the location. If it is windy (it is quite windy in the microdistrict due to specific shapes and the heights of the buildings), the pond is an option.

The community mostly consists of young families – well educated people with nice jobs. There is no social housing in the district, so everyone has bought the apartment or has taken a loan, to be more precise. Recently some immigrant families arrived starting to rent the apartments. They are very quiet and prefer to keep separated. If any misunderstandings occur, they have the following scenario, as a rule: a child takes somebody's toy or bike without asking and then leaves it somewhere else. Luckily, children take it easy, so it is more of a problem for adults.

risk and safety _

Svetlana is always watchful – she considers each object on the playground a potential source of danger, but is less worried in terms of unwanted contacts with strangers. A serious problem is the presence of cars on the streets within the housing block. Some drivers park their cars on the pedestrian lanes, others ignore the speed limit making the outdoor environment unsafe for children. When leaving the designated areas for play, they are not always aware of the traffic.

Failures and fallings happen in Fyodor's everyday life, still he does not get upset and tries to handle the situation.

Comparing the way children spend time outdoors with the way she used to, Svetlana notices, first of all, the increased parental control. Today it is impossible to meet a school-age child walking alone in the street, while it was completely normal back in 1980s. Playgrounds as such were not provided, except for a single sandbox or swings. She believes, the facilities available now offer wide opportunities for development and education. On the other hand, it seems like as a child Svetlana and her peers had to be more inventive due to the limited range of play equipment and toys.

some details _

The playground has no protection in case of bad weather, so if it starts raining or gets windy, Svetlana and boys have to go home. There are benches, but no shelter or any leisure facilities like tables or bbq places are provided. The fence around the playground is quite low. It defines the space designated for play and thus free of cars. Unfortunately, there is no particular area for ball games, however, small children are allowed to play with the ball anyway. Regarding the overall condition of the area, Svetlana is pretty much satisfied with the cleanliness – everything is kept in order. Even though very few trees have been planted, the bushes and flowerbeds are maintained properly.



Fig. 31

02.3 Typology, programme

02.3.1 _ family centre: what? why? how?

Local child and family centres provide leisure and educational facilities. For parents, who are in the waiting lists for daycare, such centres can offer an alternative pastime. It is especially relevant for the new mass housing districts, located far away from normal city infrastructure.

At the moment, there is a strict distinction between outdoor and indoor environment. A normal school, daycare or educational centre building would trap children indoors, whereas a playground does not have a shelter to escape from rain. In my design proposal I would like to experiment with interior and exterior spaces, trying to connect them both visually and physically.

The typology I am referring to is quite flexible in sense of programme and official regulations, which allows me to focus on the outdoor environment, since I am interested in playgrounds.



Fig. 32



Fig. 33

02.3.2 _ programme

indoor spaces

entrance hall (exhibition + waiting room for parents)
 garderobe
 cafeteria, small kitchen
 staffroom
 storage
 restrooms

classes of different sizes
 auditorium
 playroom
 music room
 atelier
 small cinema
 painting workshop
 wood workshop
 experiment room

outdoor spaces

small pavilions
 greenhouse
 outdoor theatre
 sport facilities
 play spaces with various activities for several ages

02.4 Design principles

02.4.1 _ problems and questions to address

My journey to the playground design world started from curiosity. Why many playgrounds are so boring and what makes a good one? Even though no ready-made prescriptions exist, I found important some particular issues, that I would like to emphasise in the design project.

risk is important

mind *different abilities*, not different ages

wide *range of play experiences*

there must be *natural elements*

more *loose parts*, less fixed play

children love to experiment with *real things* (earth, timber, fire, etc.)

participation develops responsibility and helps reduce vandalism

02.4.2 _ vision

A playground with unlimited potential for creative and physical activities.

A playground, where children are trusted and have freedom to set their own rules.

A playground, that would attract children of different abilities and personalities, as well as their parents.

A playground, that goes beyond the conventional notion and may be rather defined as a place for play.

A place for play.

03. Design

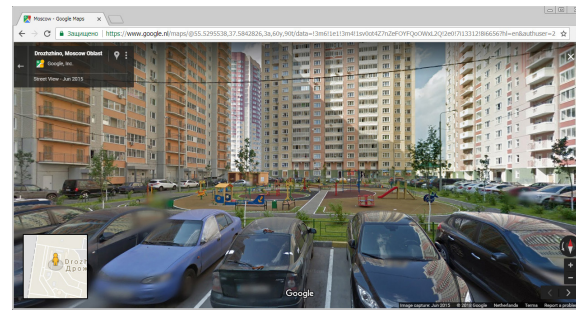
03.1 No context – bigger context

siteless site _

From the beginning there was a site – one of the countless mass housing blocks courtyards with very limited opportunities for play. Such courtyard can be found at every corner of my huge country. The reason why I picked that particular one was because a friend of mine lives in the area with her two small children, so I could get more information about the place and make some observations of their everyday life there.

Already at the early design stages the site started to seem so faceless, that I decided to look for a universal solution capable to fit in and adjust to any similar place. In a way, the need for exact context was eliminated and eventually the project got a broader context.

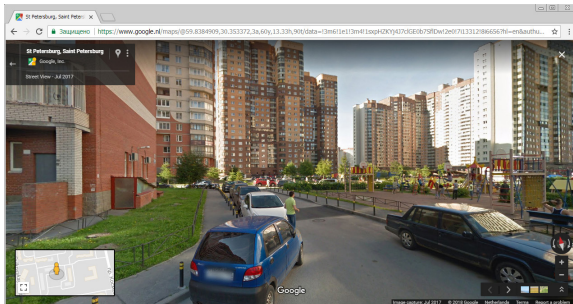
Below is a small Google Maps journey through the biggest Russian cities from the west to the east in search for identical situations for my project.



Moscow



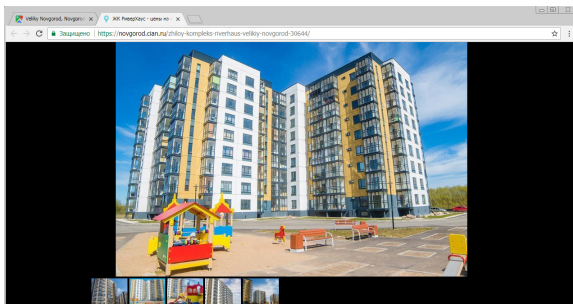
Vladimir



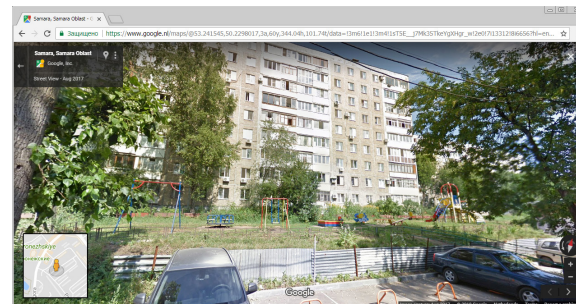
Saint Petersburg



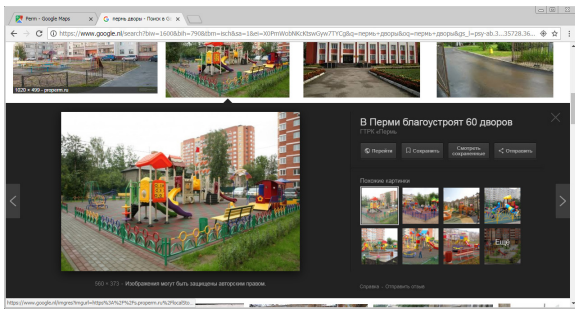
Sochi



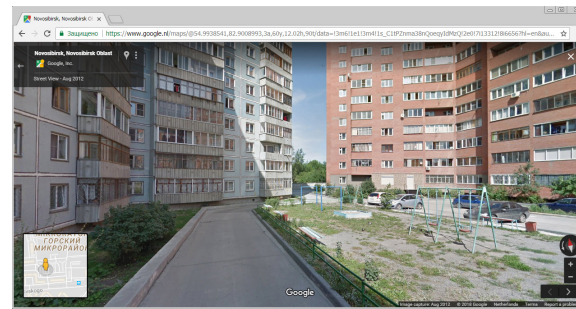
Veliky Novgorod



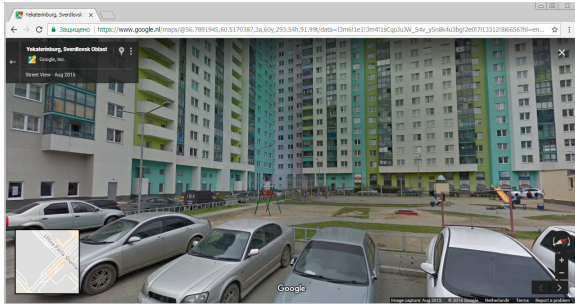
Samara



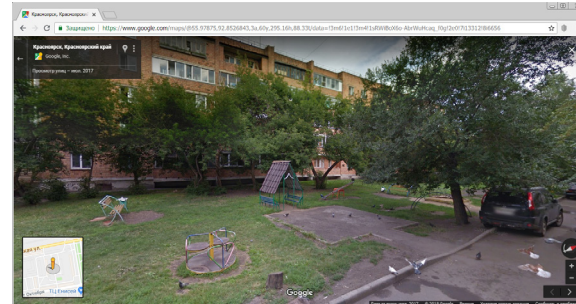
Perm



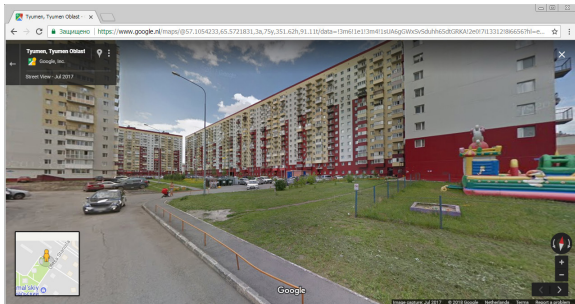
Novosibirsk



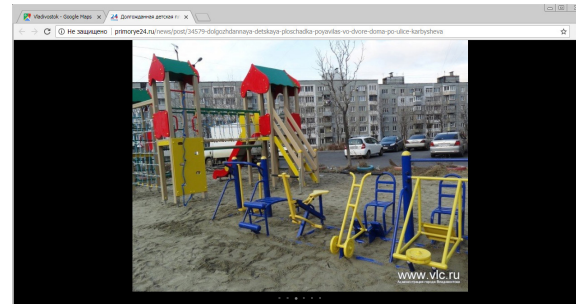
Yekaterinburg



Krasnoyarsk



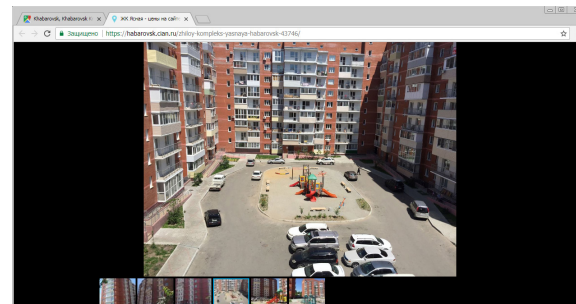
Tyumen



Vladivostok



Omsk



Khabarovsk

03.2 Strategy

How to design from a scratch?

1. Invite people to participate

Whereas I was struggling to find the answer in the site-specific approach, my attention turned directly to the prospective users. I was especially interested in listening and responding to children's views. What if each one contributes to the design with his or her personality?

2. Give them a tool

At the same time, I am convinced in the importance of the architect's professional knowledge about volumes and space. Even a small architectural intervention can be enough to bring in new qualities and compliment the built environment. This is how I came up with the idea of empowering children and young people by giving them a tool, so they themselves become a bit architects. Not just make-believe, but for real.

3. Never stop the play!

Another important goal for me was the possibility of an instant change within the given framework, meaning that the tool has to allow for flexibility in time and space.

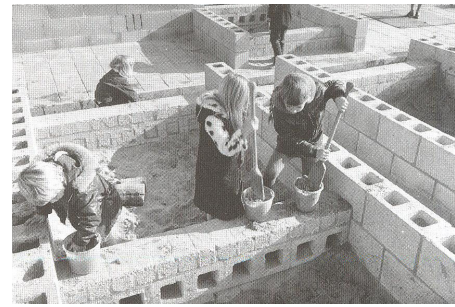


Fig. 35

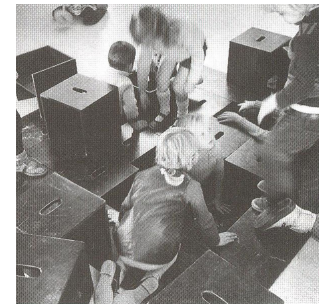


Fig. 36

Herman Hertzberger Montessori primary school
Delft, the Netherlands, 1960-1966



Fig. 37

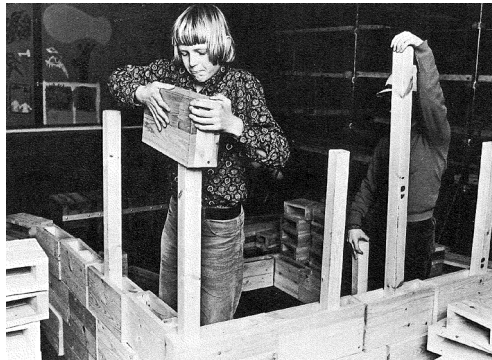


Fig. 34

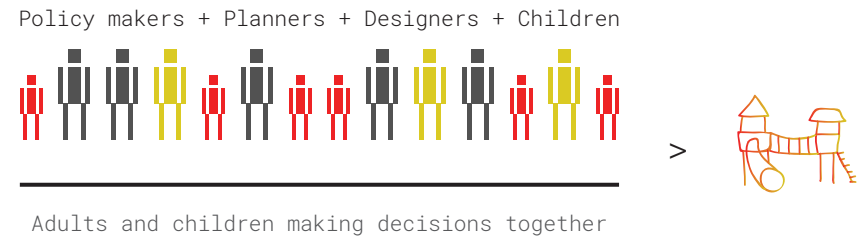
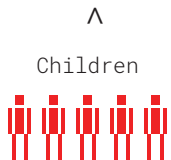
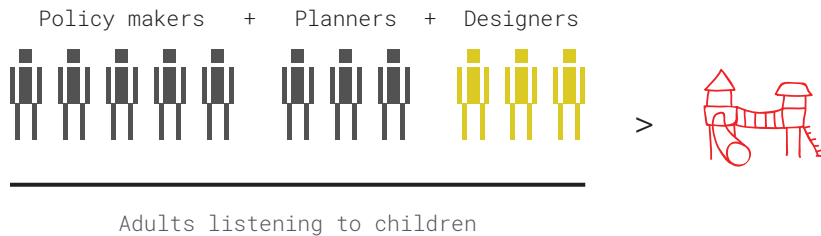
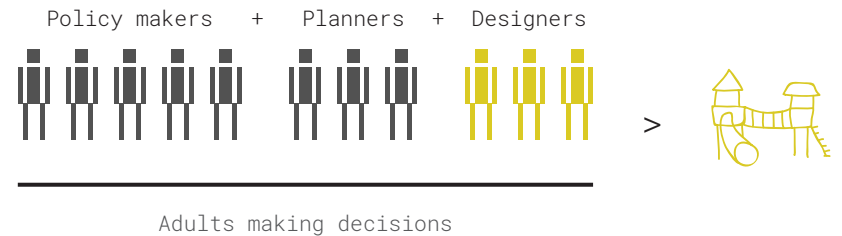
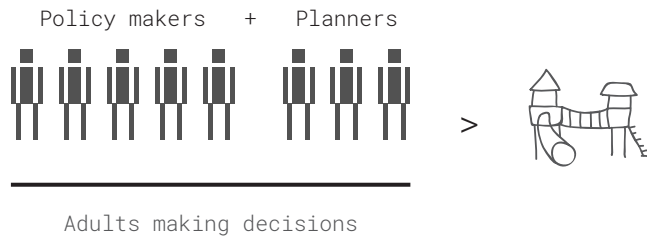
Playground in a former Bus Depot
Copenhagen, 1970



Fig. 38

David Rockwell, Imagination Playground
U.S., 2010

The scheme illustrates different approaches to designing playgrounds. The first one is the most common – with only policy makers and planners making decisions. The next two are more complicated, because they include designers and children as advisers. As a result, the proposal becomes more attractive. Finally, the last approach makes children full participants of the design process. Even though such model is more time consuming and requires a lot of energy and enthusiasm, it should meet the needs of children in a best way possible.

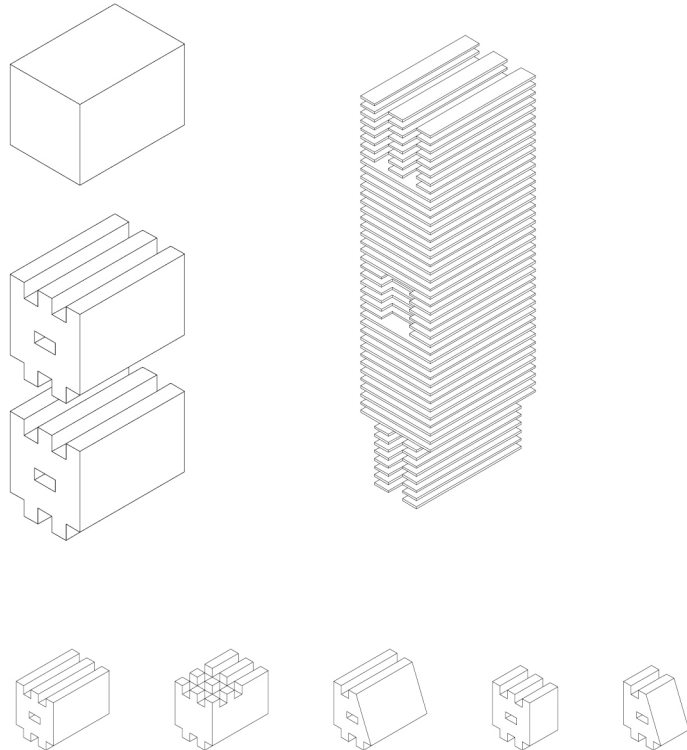


03.3 Toolbox

03.3.1 _ the play block

The tool, introduced in the strategy above, may be a simple block, similar to Lego. The difference is, children can build in one to one scale, i.e. real things which then become the physical environment for play (climbing and balancing structures, jumping hills, walls, etc.), as well as normal attributes of a public space (street furniture). Another step to be taken towards children's impact in the actual design and construction of a playground is building pavilions and small houses of the same block.

- easy to deal with
- sustainable material: laminated timber layers
- flexible: few modifications allowing for multiple schemes
- comfortable in use
- lightweight (hollow)



03.3.2 _ the platform

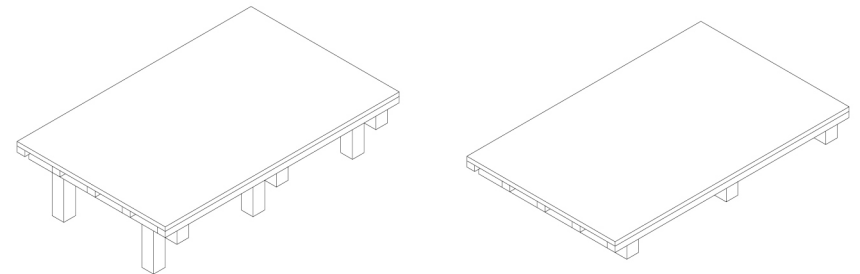
While play blocks open up possibilities for experimental construction of play structures and more practical things, children would do well to have a ready-for-use facility functioning as a base or literally as a "playground" for their creative explorations. The idea can be physically translated into a platform. Apart from the framing function and immediate provision with play material, such platform meets the practical need for electricity and water supply in case of building a shelter.

_ purpose

- base / framework
- provision to start play before construction of blocks is initiated
- technical solution for electricity and water supply

activities to perform on the platform

play games
 build
 store the play blocks
 climb, slide, run, jump, etc.
 hide-and-see
 take a rest
 experiment
 mess around
 do nothing
 ?



03.4 Decision making process and its actors

According to the described strategy and suggested tools, the following is an example of a discussion among the actors of decision making process.

Children

Community (people living in the area)

Developer and the Managing company (policy makers, in other words)

Play Block specialist mentioned (a designer: at this stage he or she operates the ready-for-use solution and helps with implementing it on site)

Community: We need a family centre to go out with our children!

Children: Coloured asphalt is boring, we need a nice proper playground!

Developer, Managing company: Well, some improvements of the infrastructure can make this area more attractive. To begin with, we shall invest <the amount of money>.

All together (after consultation with the Play Block specialist): With <the amount of money> we can purchase X Play Blocks and Y Platform Units.

Developer, Managing company: What are your preferences regarding the indoor and outdoor programme?

Community, Children: First of all, we would like to have a Play House to organise workshops and classes. Then we need several outdoor structures for climbing, jumping, sliding and

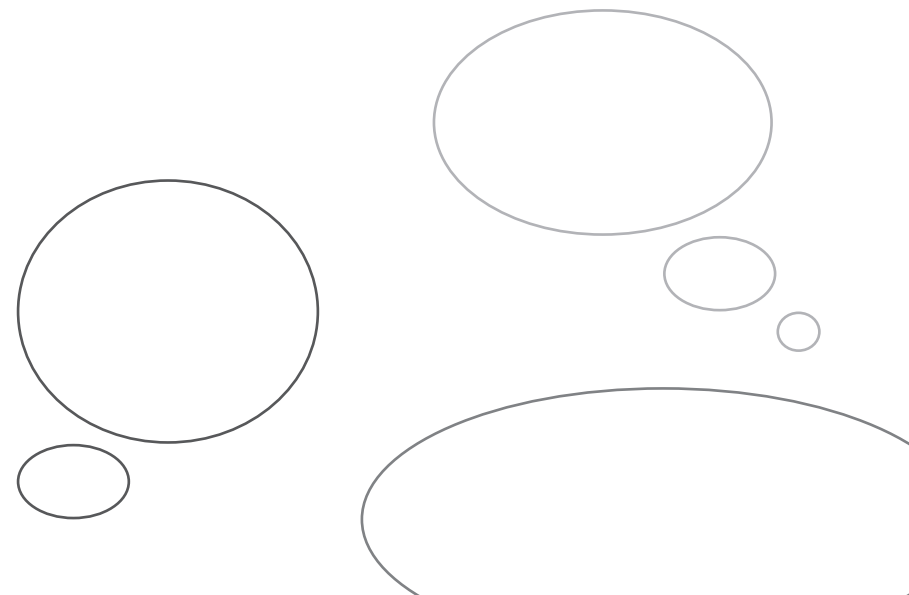
other kinds of physical activity. Also, several pieces of street furniture to arrange recreational zones. Finally, it would be great to have some spare Play Blocks to experiment with building.

Developer, Managing company: OK, we can show the programme to the Play Blocks specialist and ask for a tentative design. After that we shall get back to you to discuss it and make changes according to your remarks. Hopefully, we keep within the budget...

Managing company: By the way, we are looking for volunteers to help with the construction. This will give us the opportunity to spend more on the play equipment and landscaping. Not to mention, it is important for community building. Does anyone want to join?

Community: Yes, of course! X adults and Y teenagers are available 8–10 hours a week.

Altogether: Great!



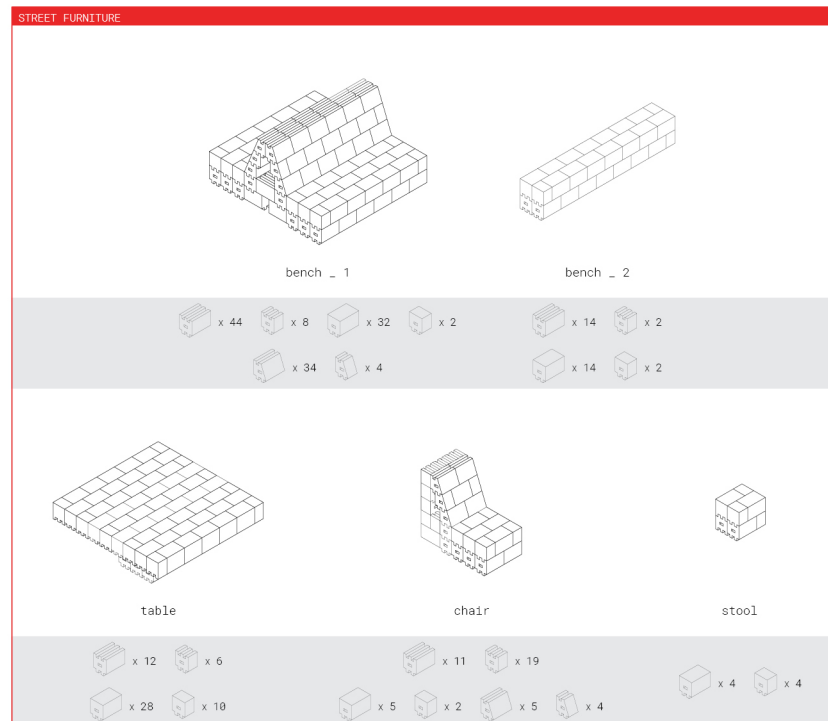
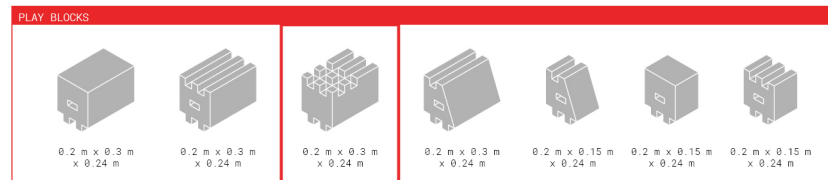
03.5 Building manual

Building manual explains the principles of the whole concept by showing possible examples of what can be done within a certain amount of resources available. Each level complements the previous one, but the project also can be confined to something less extensive at any stage, still remaining coherent due to the endless variety of combinations.

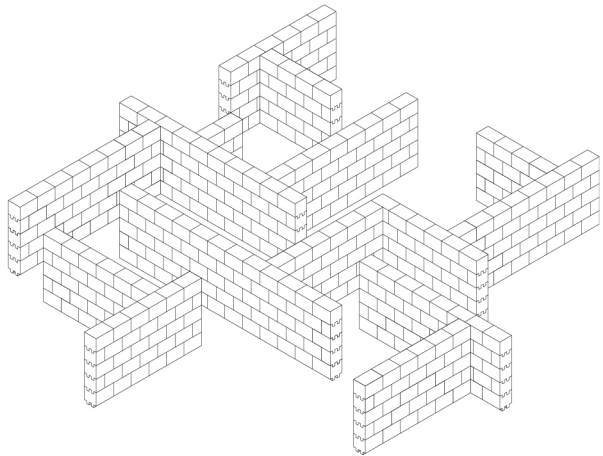
Level 1 operates with Basic elements – Play Blocks and Platform Units. Level 2 creates Components of Basic elements, that already start setting up the play environment. Level 3 combines the results of previous levels within a general framework – Assembly. The playground is settled, at the same time there is plenty of opportunities for adaptation for the changing nature of play.

03.5.1 _ Level 1. Basic elements

The first level of the playground model is the initial step towards real construction. It is when the actors get their first glimpse of the main tools and the play begins. With the range of Play Blocks of different configurations it is possible to build simple shapes, that would serve as climbing structures and imaginary objects. The Platform Unit can be introduced already at early stages to provide the site. However, more complicated combinations of several Platform Units will start playing more important role on the next level.

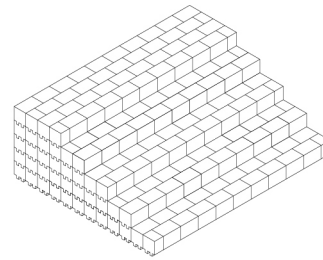


PLAY STRUCTURES







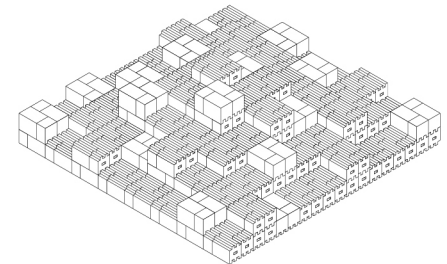
labyrinth

 x 310  x 60  x 100







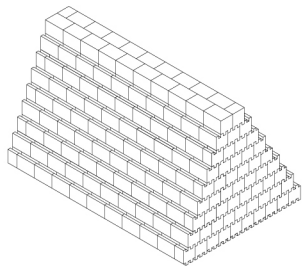
staircase

 x 266  x 28  x 114  x 12







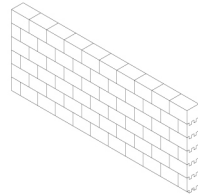
jumping hill

 x 290  x 290  x 16  x 16



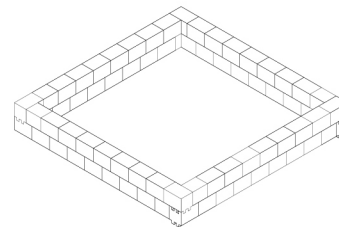
climbing structure

 x 484  x 52  x 10  x 2





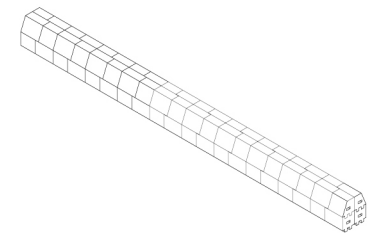
wall

 x 43  x 6  x 10





sandbox

 x 36  x 36

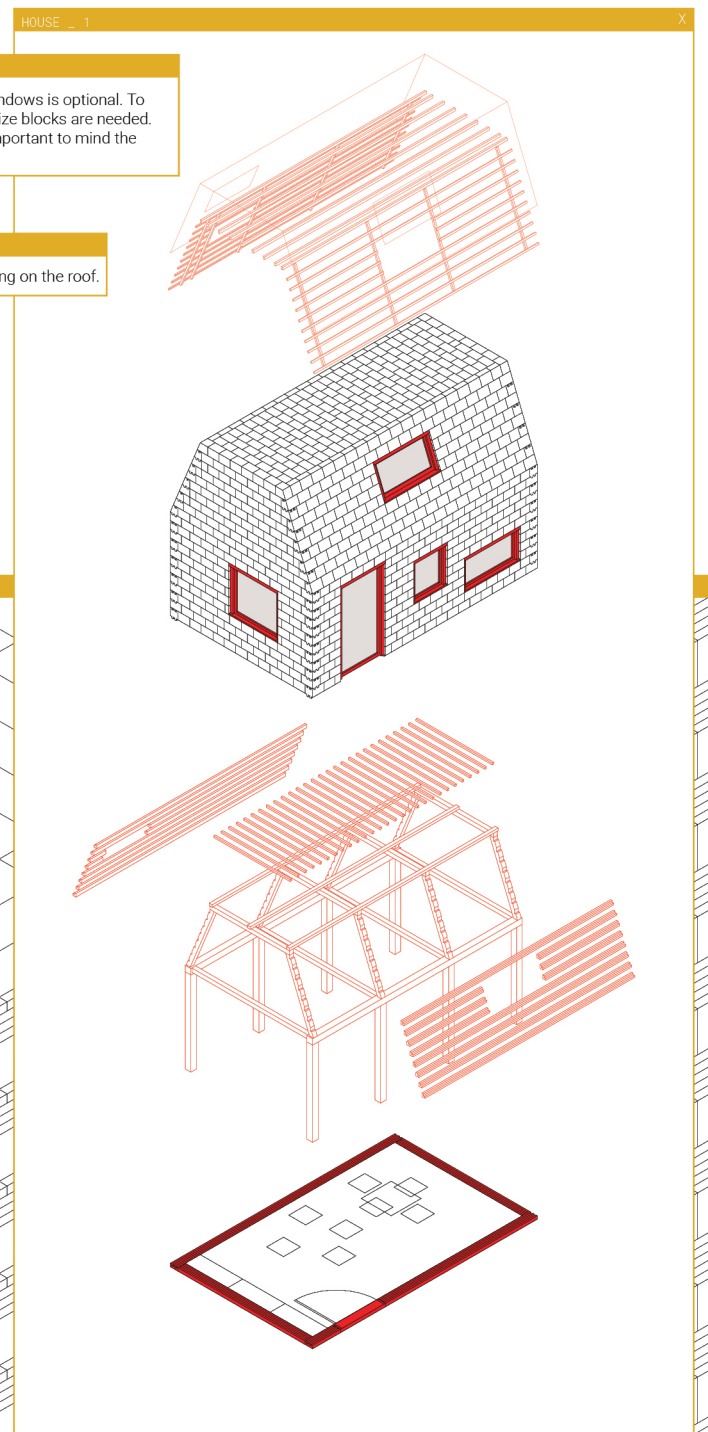
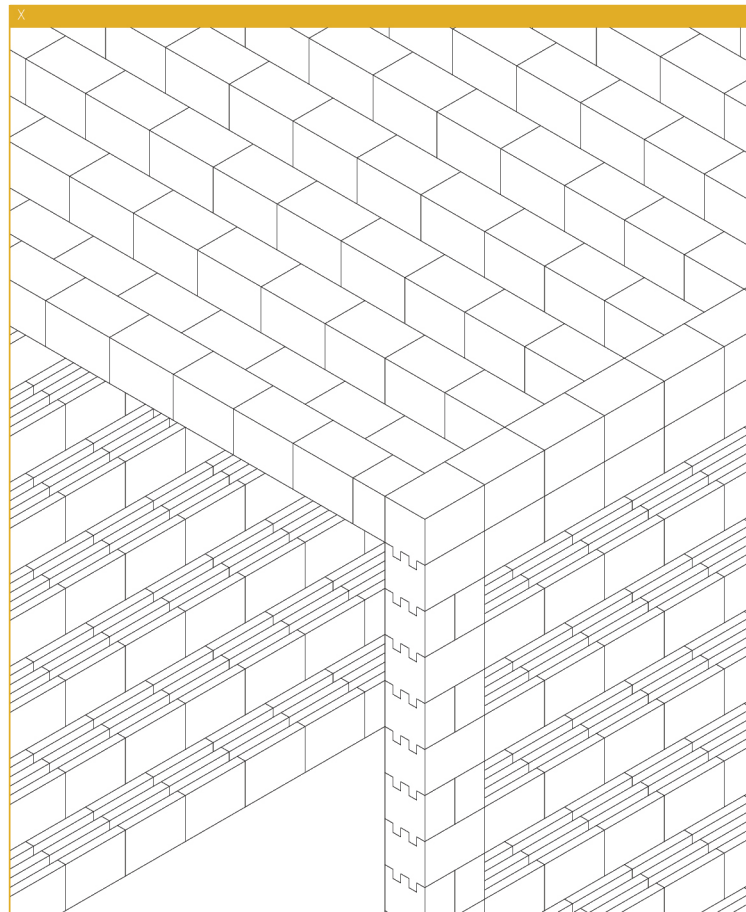


balancing beam

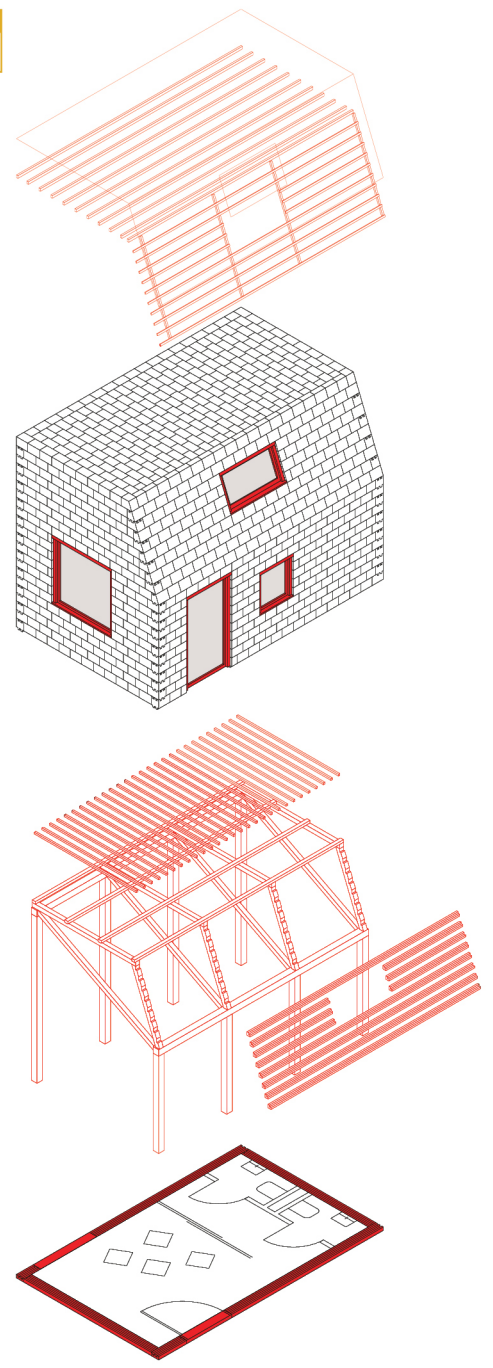
 x 40  x 40

The second level of the playground model is a transition from the Basic elements of simple shapes to a solid landscape. The new Components are to be assembled on the next level or alternatively can be installed as they are for partial improvements on existing sites. With the proposed set it is also possible to confine the playground project to a tiny installation, adjustable for the future transformations (scale up if needed or remove easily).

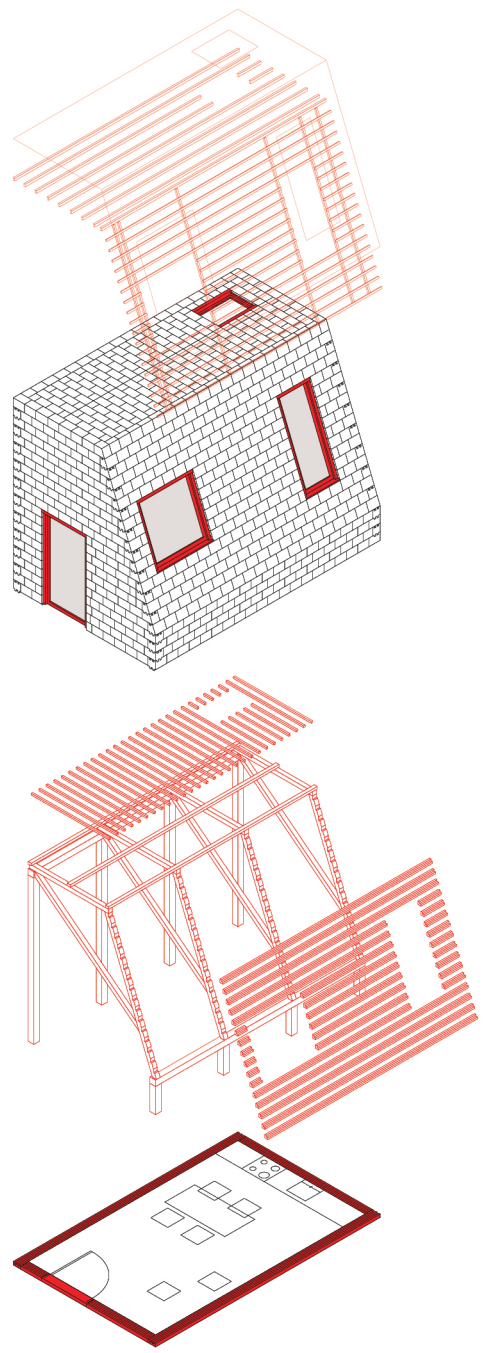
Following this logic, the houses and pavilions proposed are shown as an example of what they can be and how the blocks are fixed to the structural elements of the framework. Otherwise, the shape, size and interior organisation may differ, as well as the wall pattern and windows and doors placement. Children are free to decide themselves which purpose this or that structure serves. Such non-prescriptive design approach is a way to achieve more flexibility.



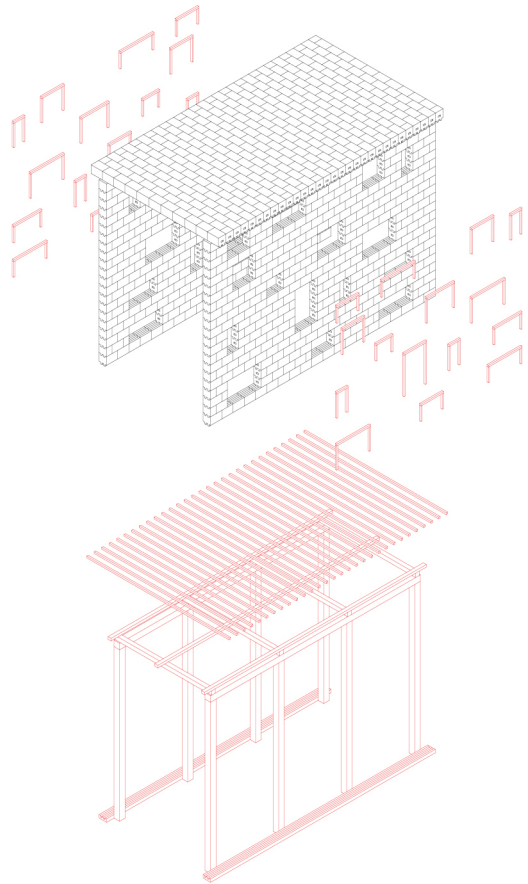
X
The base _ 3,8 x 6 m.



level
2



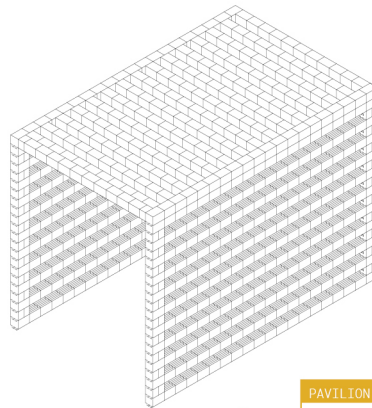
PAVILION _ 1 X



X

The pavilions serve as gathering points and protect from bad weather. It is nice to change the location or activity type during the day by shifting the game inside.

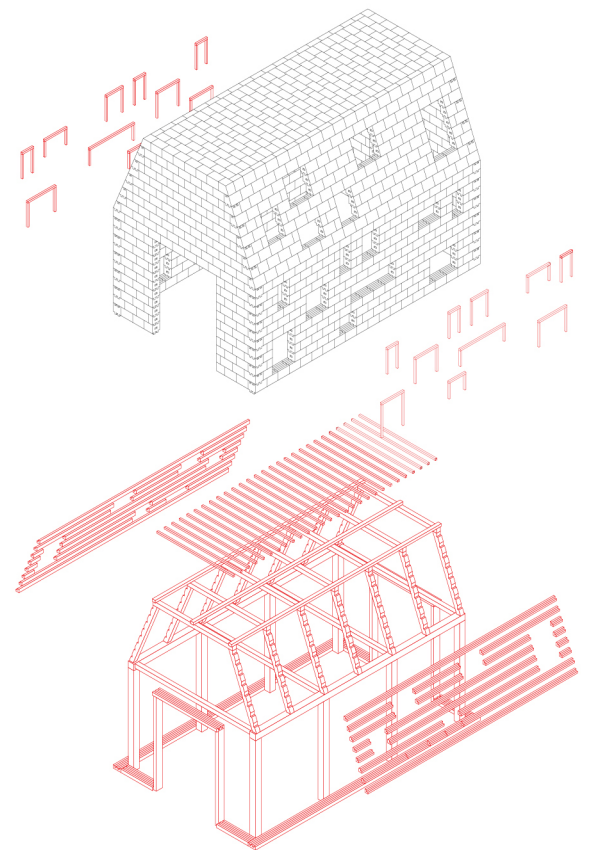
PAVILION _ 2 X



X

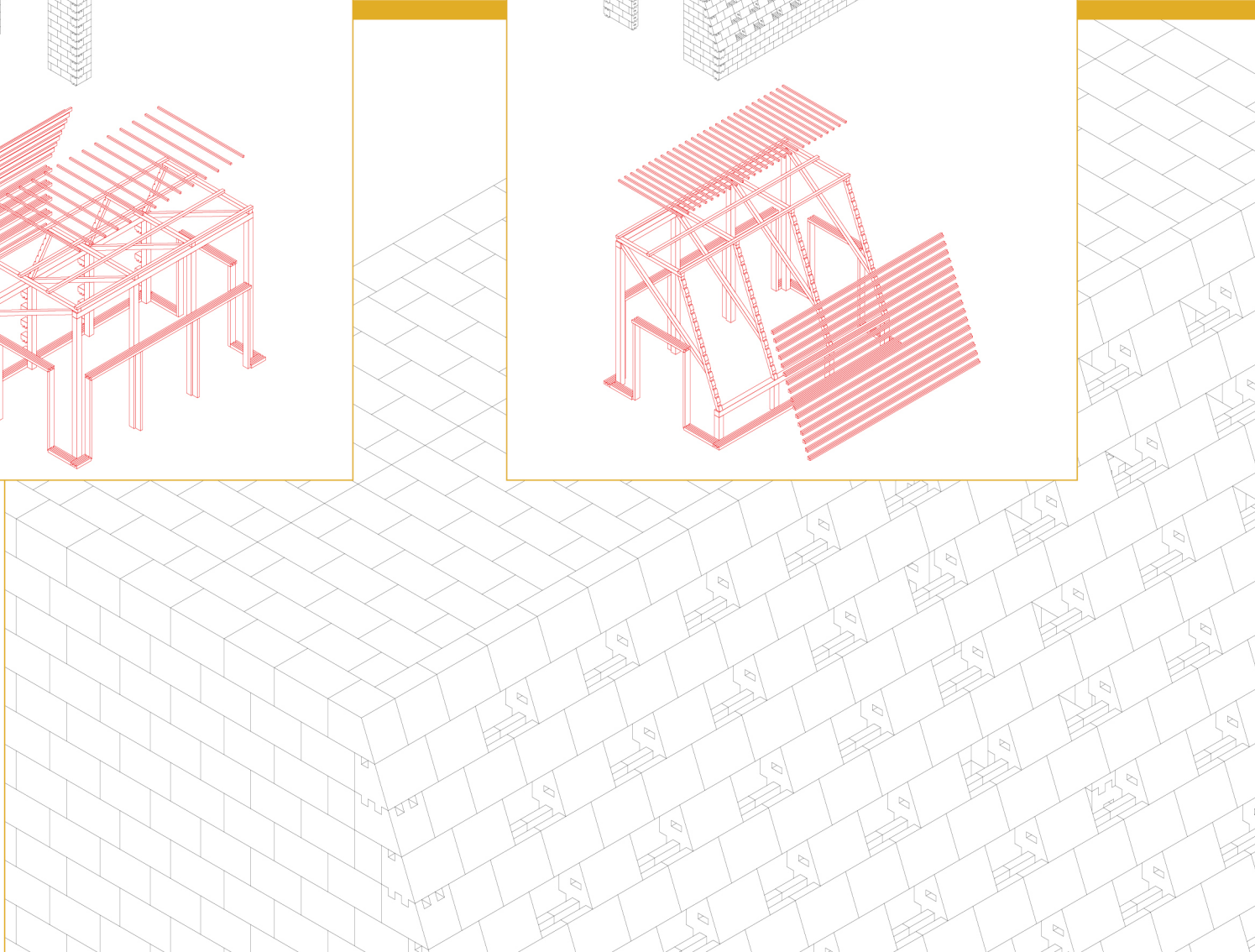
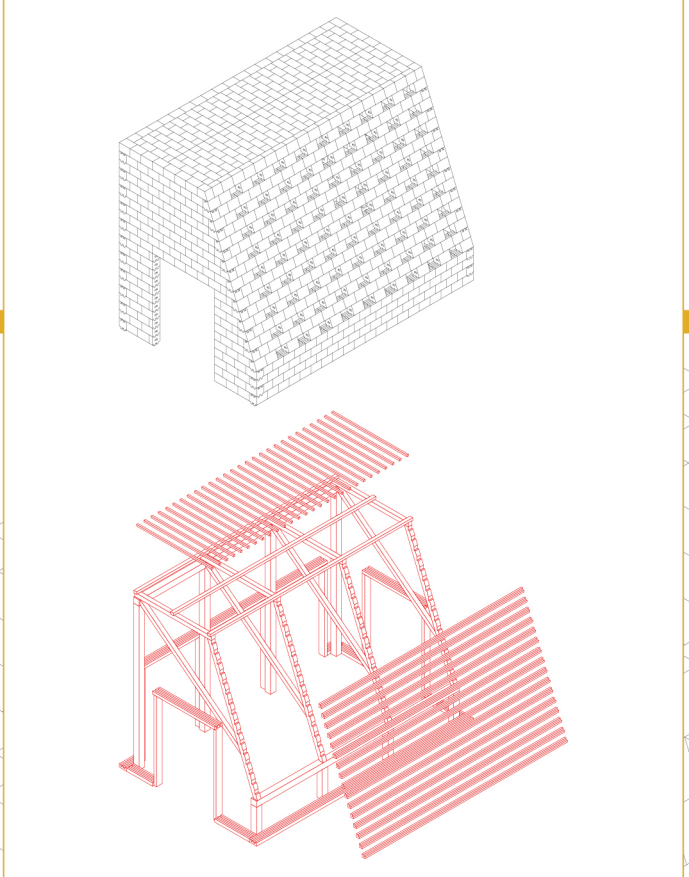
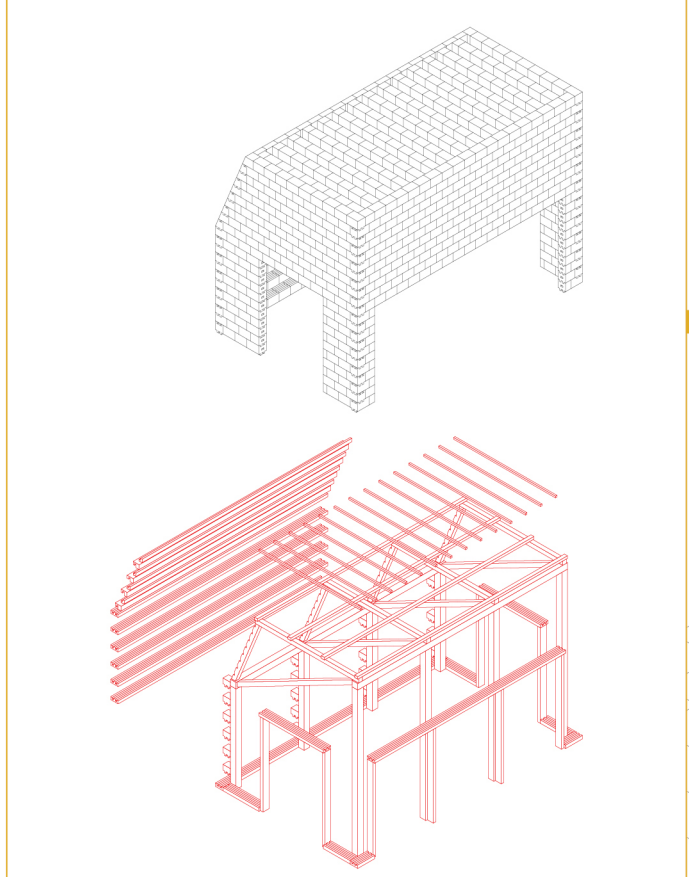
Various block patterns allow for changing light effects when the sun is shining.

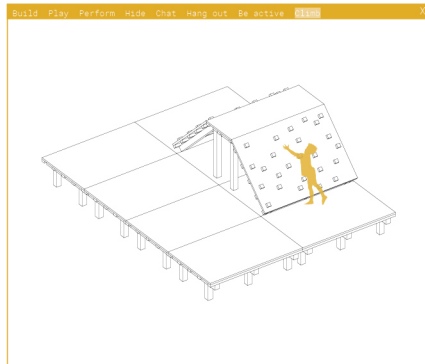
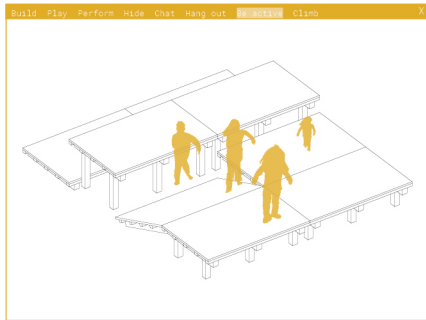
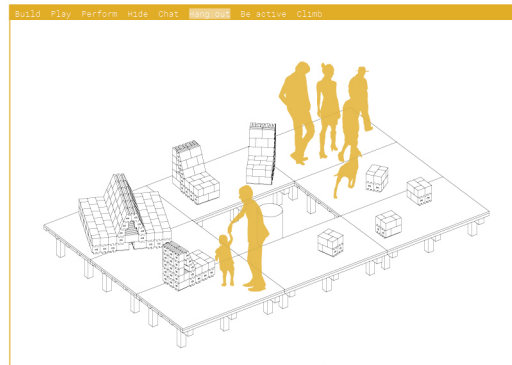
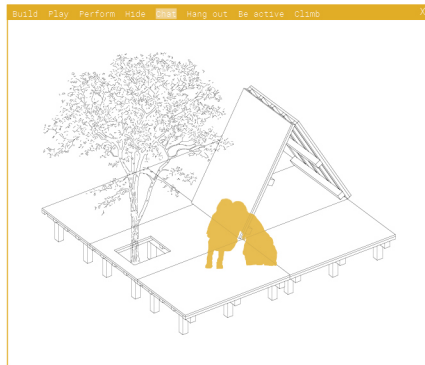
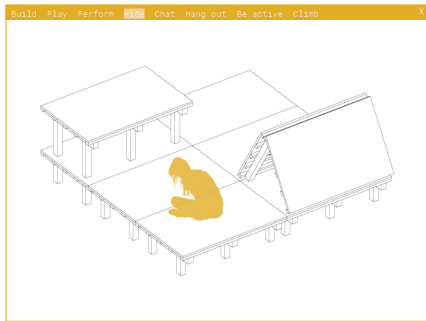
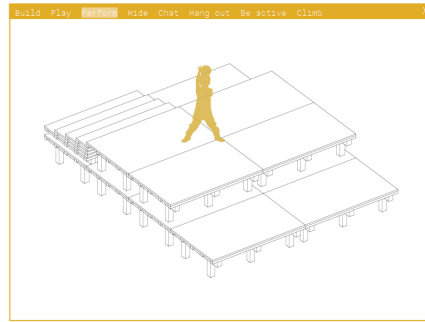
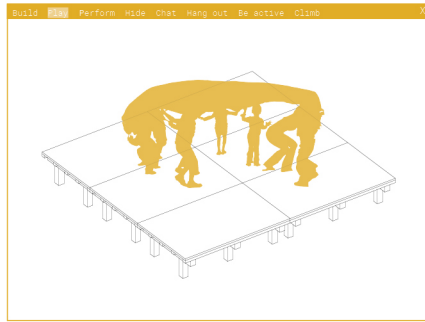
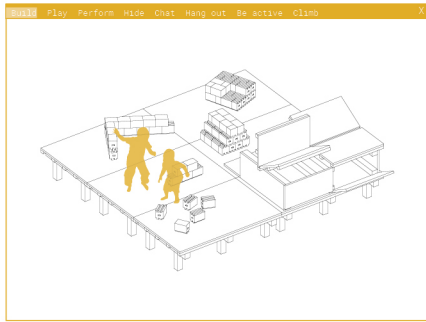
PAVILION _ 3 X



level

2



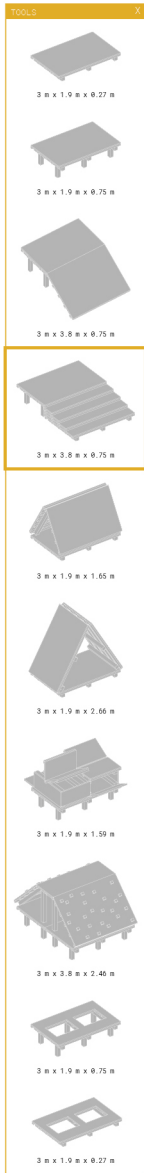


Platform units provide the site and at the same time they can be used as play equipment once combined with one another in different ways.

1	2	3
4	5	6
7	8	9
10	11	12

Use the toolbar to assign the platform component to a selected spot of the playground.

Sloping units and units of diverse heights substitute the often missing landscape of typical Russian courtyards. Instead of boring plain surfaces children deserve play environment with challenge and adventure.



The third level of the playground model demonstrates how the Components made of Basic elements work together as a multifunctional space with various facilities for play and leisure.

First of all, the platform is established to provide a base for the immediate start of using the place and to frame the further construction site. Once the platform is ready, the core elements are the play houses and pavilions. The more simple play structures are being installed simultaneously, all intended for the active outdoor experiences, of which building from Play Blocks is more emphasised by providing special «construction site» areas.

As an example, below are the three assembly options of different sizes. Depending on the site characteristics, budget and community needs it is possible to balance the functions and affordances, thus finding the most suitable solution (table 3.1). The construction process is demonstrated in table 3.2 step by step.

	large	medium	small
play area	● ● ●	● ● ○	● ● ○
«construction site» area	● ● ●	● ● ○	● ● ○
houses	● ● ●	● ● ○	● ○ ○
pavilions	● ● ○	● ○ ○	○ ○ ○
units of climbing / balancing equipment	● ● ○	● ● ○	● ○ ○
play sheds	● ● ●	● ● ○	● ● ○
greenery	● ● ●	● ● ○	● ○ ○

Tab. 3.1

X
Programme options can be selected for each size of the playground assembly.

	stage 1	stage 2	stage 3	stage 4	stage 5	stage 6
main works	earth works, platform installation	frameworks construction	walls 0.000 - 1.200 m erection	walls finishing, roof construction	interior works	maintenance, repair
small works	trees and shrubs planting	play structures assembling	street furniture, small objects assembling	street furniture, small objects assembling	fixings, refinement	cleaning, technical inspections

X
Construction stages include works of various complexity.

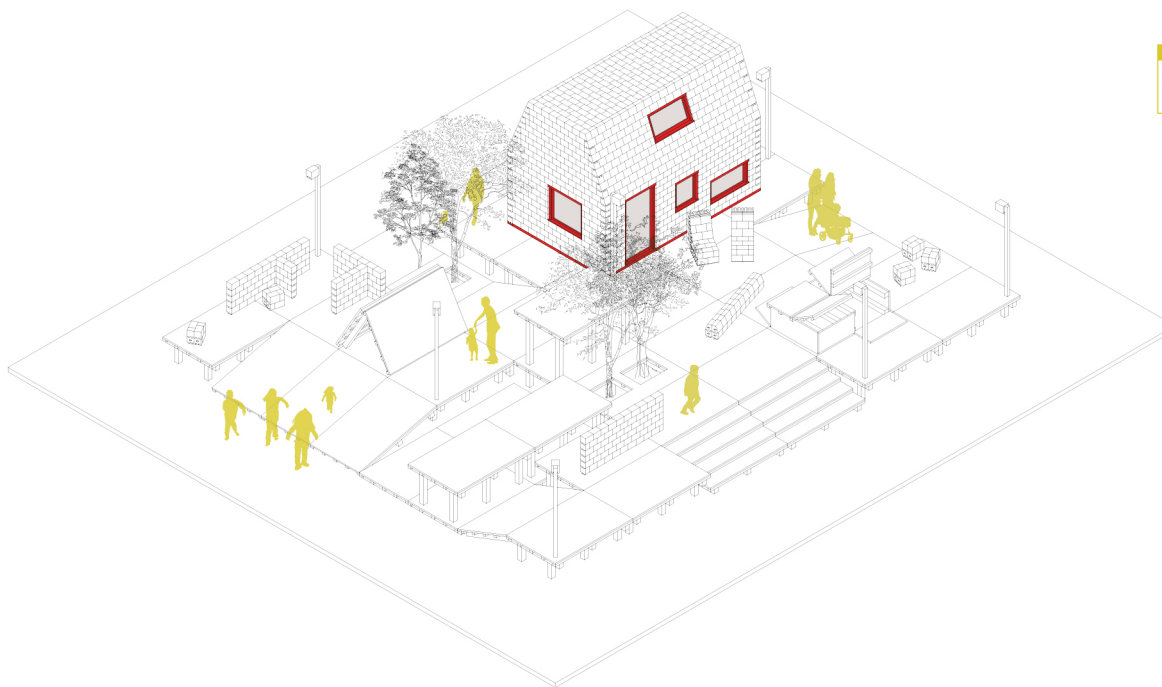
Tab. 3.2

programme		size - SMALL	
total area	268 m2	outdoor (-), indoor (+) and semi-outdoor (+/-) spaces	
play area	167 m2		
<construction site> area	49 m2		
houses	1		
pavilions	0		
units of play equipment	4		
units of street furniture	8		
play sheds	4		
trees and shrubs	4		

84 % of the playground is the outdoor play space.

workforce by stages	
1	2
2	2
3	2
4	2
5	2
6	2

Professional work service can be complemented with the aid of volunteers - adults, young people and children, depending on the complexity of tasks.



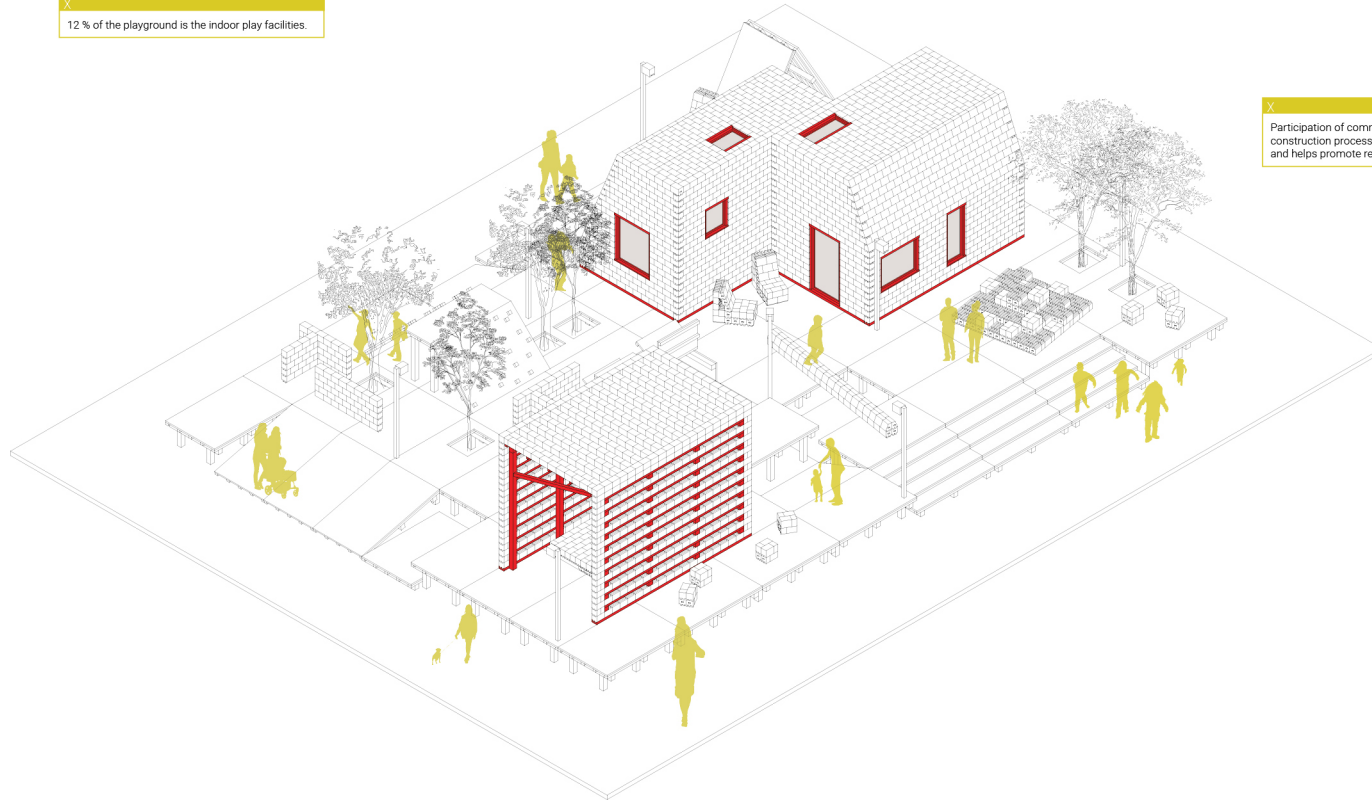
x 21	x 7	x 3	x 2	x 2	x 1	x 8
platform unit _ 0	platform unit _ 1	platform unit _ 2	stairs unit	double tree unit	storage unit	lamp
x 619	x 48	x 42	x 56	x 14	x 381	x 14
block _ 1	block _ 1,1	block _ 1,2	block _ 0,5	block _ 0,5,2	block _ 1,3	block _ 0,5,3

programme		size _ MEDIUM	
total area	389 m ²	outdoor (-), indoor (+) and semi-outdoor (+/-) spaces	
play area	238 m ²		
<construction site> area	49 m ²		
houses	2		
pavilions	1		
units of play equipment	5		
units of street furniture	12		
play sheds	2		
trees and shrubs	6		

12 % of the playground is the indoor play facilities.

workforce by stages	
1	4 icons
2	4 icons
3	4 icons
4	4 icons
5	4 icons
6	4 icons

Participation of community members in the construction process develops the sense of place and helps promote responsible use.



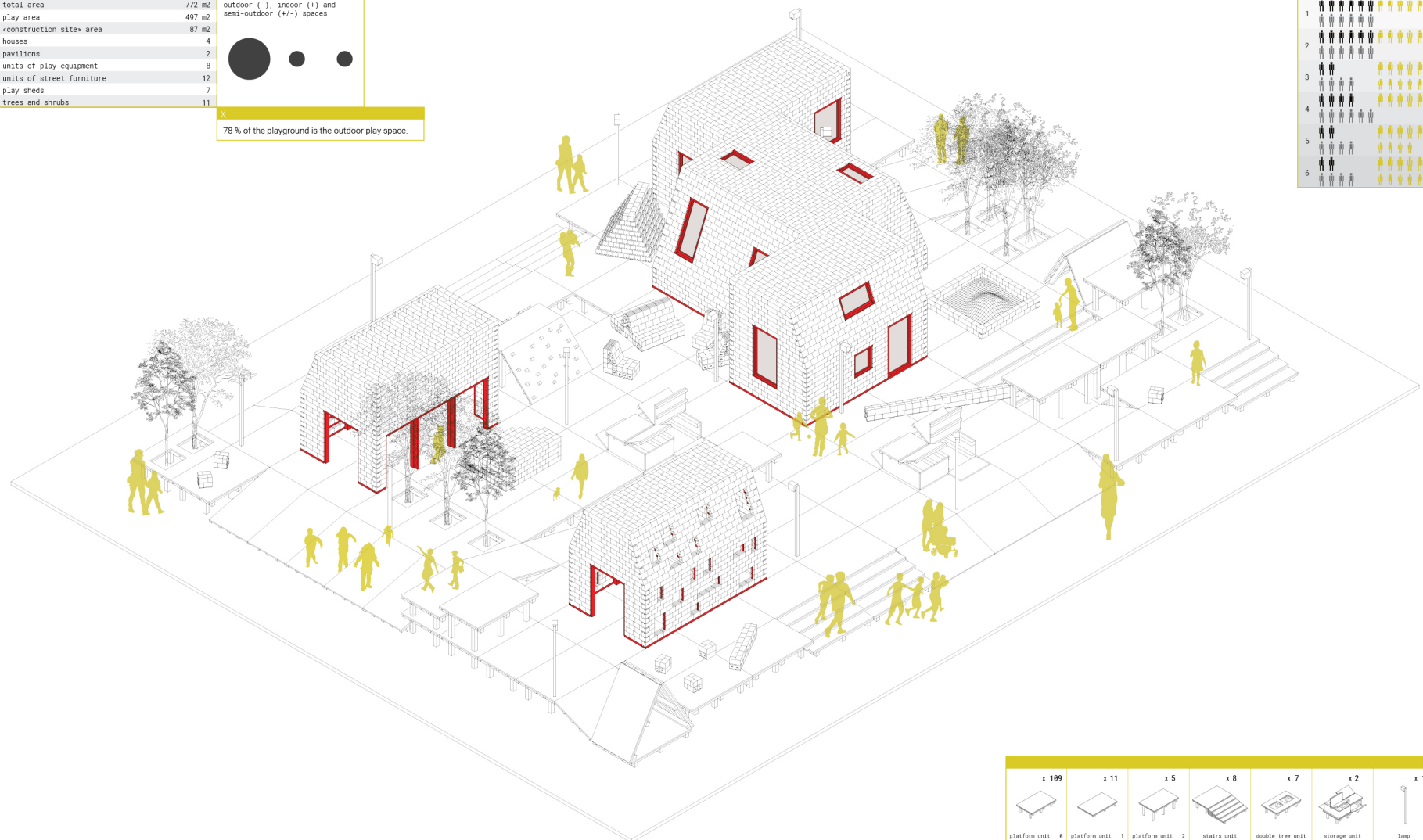
level
3

x 47	x 9	x 1	x 5	x 5	x 1	x 9
platform unit _ 8	platform unit _ 1	platform unit _ 2	stairs unit	double tree unit	storage unit	lamp
x 1880	x 116	x 318	x 263	x 71	x 427	x 28
block _ 1	block _ 1,1	block _ 1,2	block _ 0,5	block _ 0,5,2	block _ 1,3	block _ 0,5,3

programme	size - LARGE
total area	772 m ²
play area	497 m ²
<construction site> area	87 m ²
houses	4
pavilions	2
units of play equipment	8
units of street furniture	12
play sheds	7
trees and shrubs	11

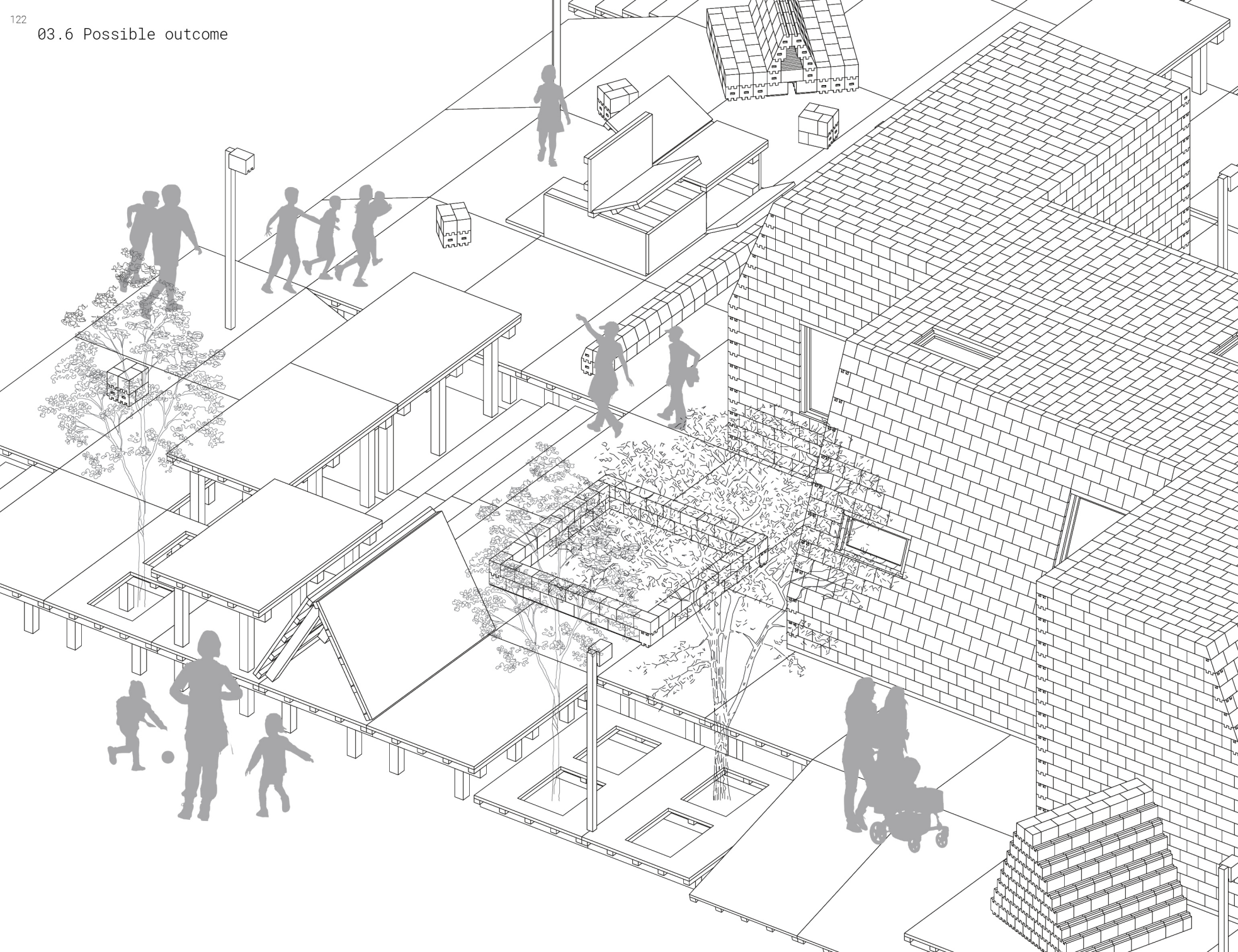
78 % of the playground is the outdoor play space.

workforce by stages	
1	10 icons
2	10 icons
3	10 icons
4	10 icons
5	10 icons
6	10 icons

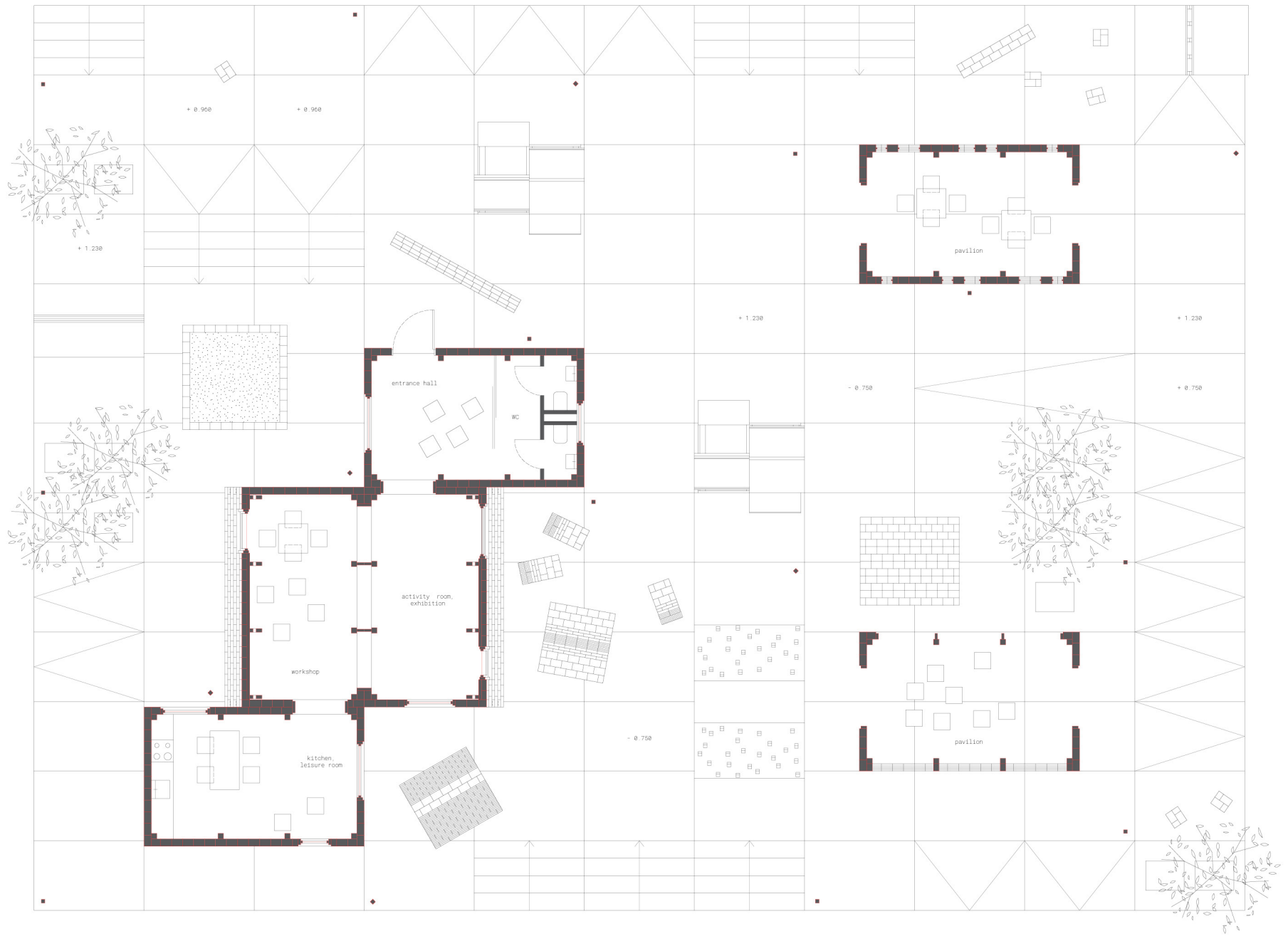


x 109	x 11	x 5	x 8	x 7	x 2	x 15
platform unit - 8	platform unit - 1	platform unit - 2	stairs unit	double tree unit	storage unit	lamp
x 3370	x 368	x 663	x 283	x 173	x 1113	x 82
block - 1	block - 1,1	block - 1,2	block - 0,5	block - 0,5,2	block - 1,3	block - 0,5,3

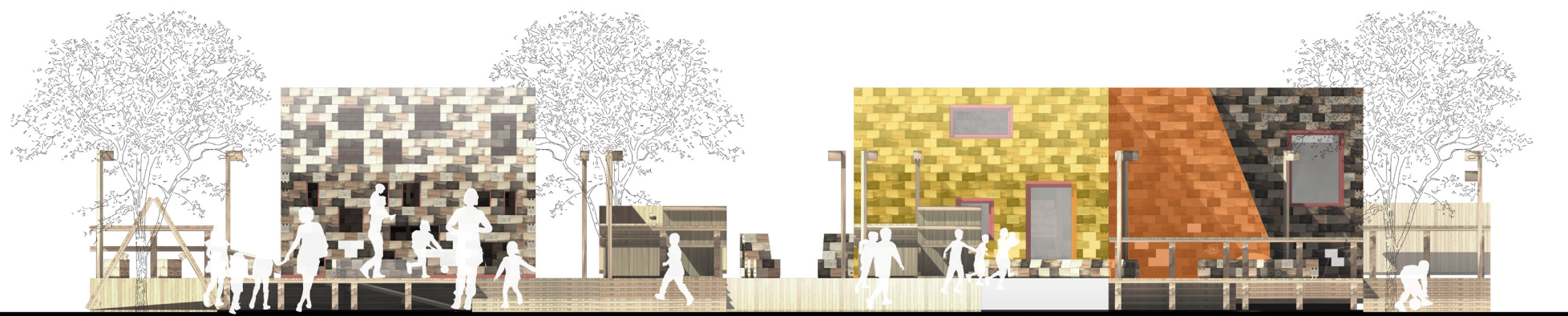
03.6 Possible outcome



1:150

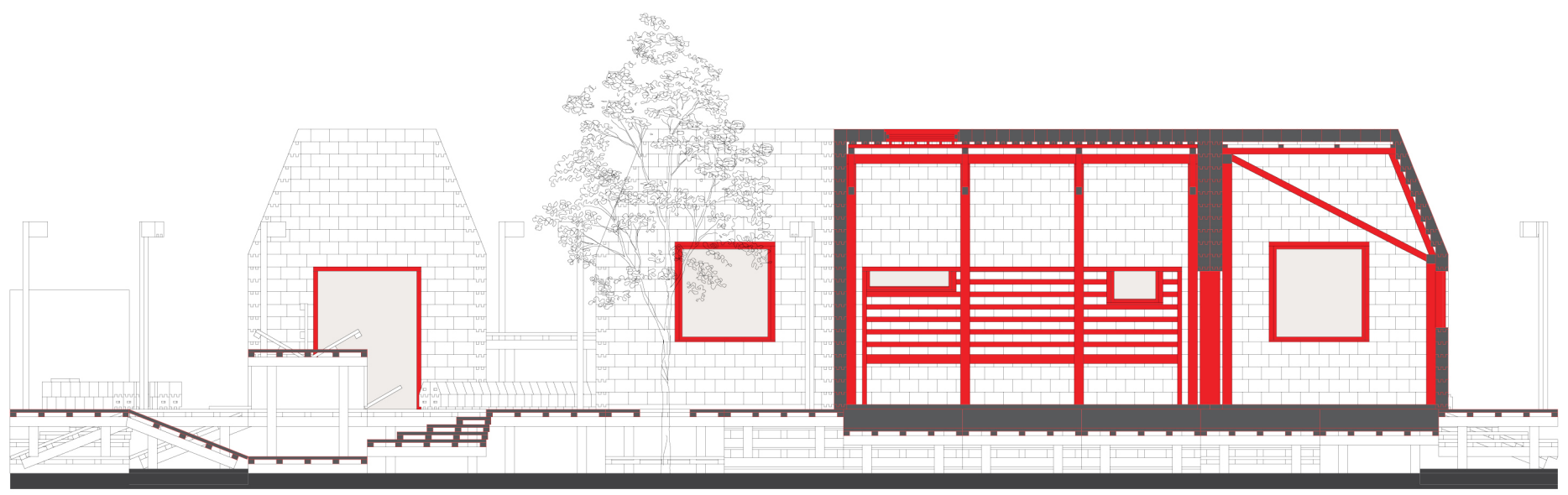


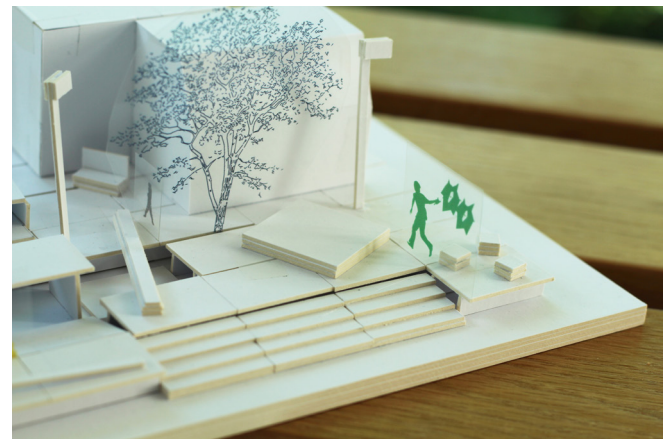
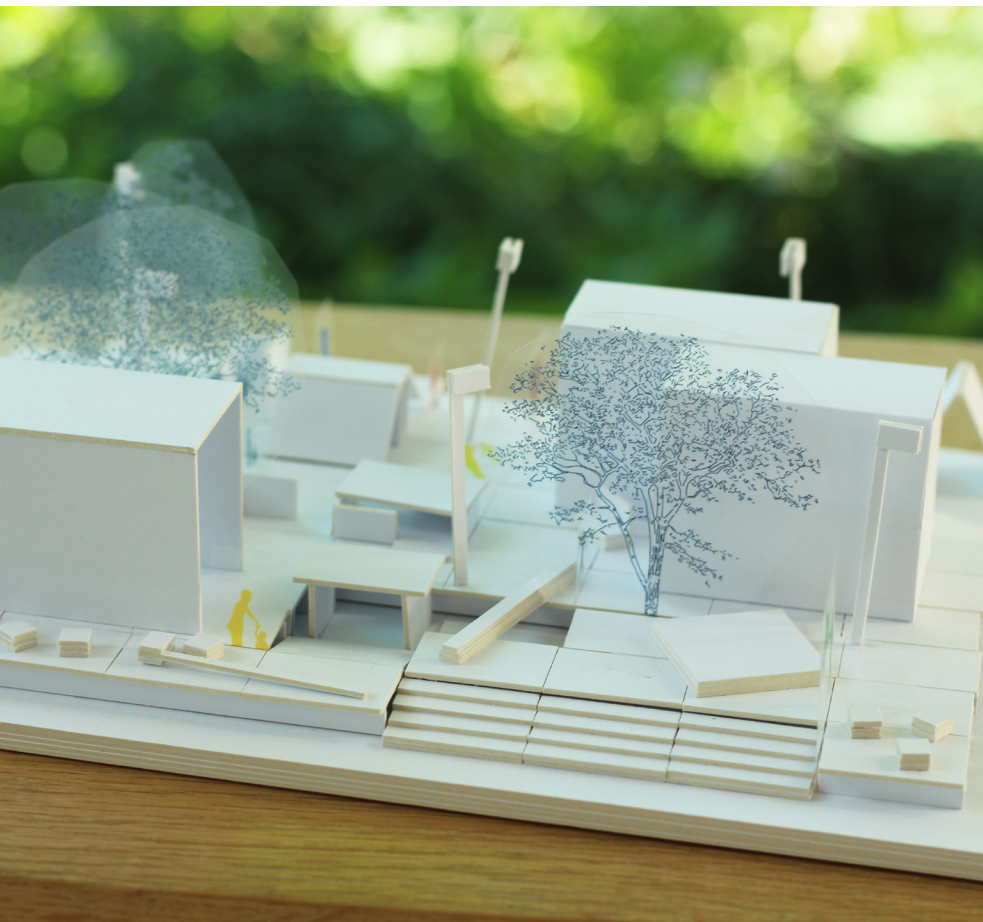
1 : 150





1 : 100





03.7 Discussion

Playful flexibility. Why having everything in black and white?

Playing with the Play Blocks prototypes was actually similar to looking with fresh eyes. Since the play house and pavilion typology require more or less fixed frame, it would make sense to introduce Play Blocks of smaller size and weight not associated with the construction of two solid typologies. By this, more opportunities for various ages / abilities may become possible. At the same time it would be useful to consider even more and lightweight easy solutions of constructing play houses and pavilions, so that the Assembly does not look too heavy and the playful mood remains.



0-5



6-10

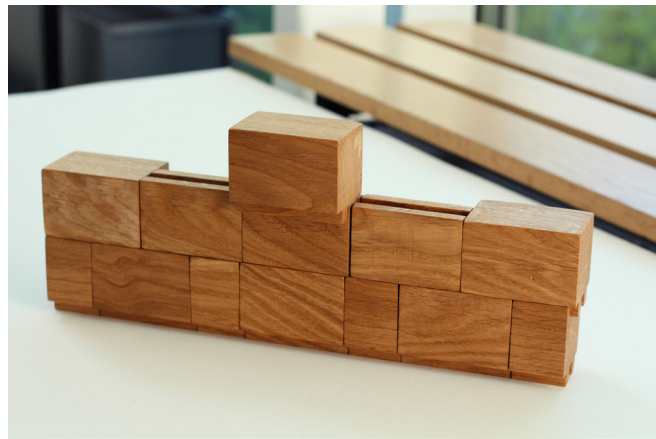


10-15

visualisation imagination

It was decided during a discussion to leave more space for imagination by not showing the visuals but instead encouraging everyone to create their own interpretation of the concept. This, in turn, complies better with the initial idea of users contributing to the design proposal. The wooden prototypes of Play Blocks may serve as a starting point of play / build experience. Personally, I enjoyed watching adults shuffling them and therefore provide here a few captures of the process.





Some reflections on the effect on the urban environment

Since the project has a very small scale, both in general and in relation to the mass housing context, the following question arise: how will it act in the real environment? On the one hand the proposal may become a thing in itself, a piece of wonderland lost among giant houses, but on the other hand it will still play the transitional role, mitigating the depressive effects on people. In this case, such playground can be referred as a small intervention, a piece of urban design, aiming to assist children, teenagers and adults in their interactions with the city. Another questionable aspect is the reaction of the local community. Will they accept the proposed way of organising children's outdoor activities if they are used to something completely different? The problem is, as I realised from conversations with young parents living in similar areas in Russia, they are quite satisfied with the existing concept of a playground (most importantly, safe one) without knowing any alternatives. I believe, this is a matter of time, until people become more informed about the international tendencies in contemporary playground design. The popularisation of knowledge seems to be of great importance in this regard. As for the issue of participation in community life, sharing and taking care of the common play equipment, developing the sense of belonging and awareness is the key to successful play space management.

Beyond Russia

Finally, I would love to enhance the generic character of the proposal and subsequently suggest that it does not necessarily have to be applied in the particular context, which I used as an example. It may be any city, any country. It may be next to a row house in the suburban area or even under a roof of a large building.

P. S. A very personal story

After five years of architectural education in Russia I was burnt out had no energy to continue in this field. However, for fear of regret in the future and because there was a chance to study abroad, I decided to finish my education and applied for master programme. Two years in Sweden brought me back to life, but only my thesis project gave me inspiration and strength. Despite some difficult moments, it was truly enjoying to work on playground design and I did it with all my heart.

Wherever I am going now, and I will continue with the same commitment and hopefully manage to implement some ideas from this project. I am open to meeting and engaging people to contribute in design for play.



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¹⁴² *The Safe and Rational Children's Playground: Strategies and Technologies Since the Nineteenth Century*. Carroll Pursell. *History Australia*, vol. 8, no. 3 (2011): 47–74. doi: 10.1080/14490854.2011.11668388

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Playground treasures

Children's play in London
<https://www.londonplay.org.uk/>

International Play Association
<http://ipaworld.org/>

International Play Equipment Manufacturers Association
<http://voiceofplay.org/>

Leave No Child Inside
<https://lncigc.org/>

Paige Johnson's blog
<http://www.play-scapes.com/>

Play England
<http://www.playengland.org.uk/>

Play and Playground Encyclopedia
<https://www.pgpedia.com/>

PlayGroundology
<https://playgroundology.wordpress.com/category/palle-nielsen/>

Research project and an online archive on the international history of playgrounds
<http://www.architektur fuer kinder.ch/>

Tim Gill's blog
<https://rethinkingchildhood.com/>

Watch this

London Play archives – This Is Our Playground, Circa late 1960s
<https://www.youtube.com/watch?v=9-fhzPS8teo>

London Play archives – Lady Allen Adventure Playground Chelsea, Circa 1970s
<https://www.youtube.com/watch?v=1pqMXplA19Y>

The Land, a short documentary about a modern adventure playground in Wales
<https://www.youtube.com/watch?v=4t9vq9bu3lI&feature=youtu.be>

Kids Gone Wild: Denmark's Forest Kindergartens
<https://www.youtube.com/watch?v=Jkij9dJfcw>

Playground guides

Copenhagen
https://kk.sites.itera.dk/apps/kk_legepladser_ny/index.asp

Malmö
<https://malmo.se/Kultur--fritid/Idrott--fritid/Barn-och-unga/Temalekplatser.html>

Moscow and other Russian cities
<https://www.the-village.ru/village/children/children-guide/279122-novye-detskie-prostranstva>

Illustrations

Title page. A drawing by Kolya Panov.

Fig. 1 MNY19356 43.131.9.89

Sid Grossman (1915–1955). Federal Art Project. Playground In Vacant Lots, Harlem. Date 1939. Museum of the City of New York

Fig. 2 MNY1989 43.131.11.413

Arnold Eagle. Federal Art Project. Playground – Supervised Game 2. Date 1935. Museum of the City of New York

Fig. 3 MNY3774 43.131.8.38

Andrew Herman. Federal Art Project. Basketball. Date 1940. Museum of the City of New York

Fig. 4 MNY198170 88.1.1.3354

Samuel H. (Samuel Herman) Gottscho (1875–1971). 277 Park Avenue [Building]. Playground, general view to west. Date 1934. Museum of the City of New York

Fig. 5 Playground at Aivasovsky street, Moscow. Photo by Vladimir Rubtsov. <https://pastvu.com/>

Fig. 6 Photo by Ivan Mikhaylov.

Fig. 7 Inga Aistrup, Jonals & Co, Jacob Maarbjerg.

Fig. 8 Don S. Gardner.

Fig. 9, 11, 34 Arvid Bengtsson.

Fig. 10 Ronald Chapman.

Fig. 12 <http://www.architektur fuer kinder.ch/index.php/pioniere/group-ludic/>

Fig. 13 Cas Oorthuys. Kinderen op klimkoepel, ontwerper: Aldo van Eyck, Osdorp, Amsterdam (ca. 1956). <http://collectie.nederlandsfotomuseum.nl/nl/zoeken-in-de-collectie/weergave/record?id=a39820ed-de2d-d812-efed-5467a11681aa>

Fig. 14 <http://www.architektur fuer kinder.ch/index.php/pioniere/david-aaron/>

Fig. 15 Photo by Wally Gobetz

<https://www.flickr.com/photos/wallyg/8988758839/in/pool-isamunoguchi/>

Fig. 16 <https://theartstack.com/artist/enzo-mari/playground-carrara-ita>

Fig. 17 <http://www.carve.nl/en/item/16>

Fig. 22 <https://www.pik.ru/141>

Fig. 23, 27, 28 <https://stroi.mos.ru/>

Fig. 24 <https://www.drive2.ru/b/1251075/>

Fig. 25 Photo by "Mosgorpark" <https://daily.afisha.ru/archive/gorod/changes/pochemu-parki-pokupayut-detskie-ploshchadki-fonari-i-cvety-za-granicey/>

Fig. 26 <https://www.pik.ru/luga>

Fig. 29, 30 <https://maps.google.com/>

Fig. 32, 33 Photo by Katsuhisa Kida

Fig. 35 Photo by Kroko <https://www.flickr.com/photos/krokorrr/5473858639/>

Fig. 36 Photo by Johan van der Keuken and Herman Hertzberger <https://www.ahh.nl/index.php/en/projects2/9-onderwijs/114-montessori-school-delft>

Fig. 37 <http://aplasticsound.blogspot.com/2009/06/noguchis-gardens-of-space.html>

Fig. 38 Photo by Imagination Playground <https://www.archdaily.com/70593/a-new-take-on-play-david-rockwell-imagination-playground>

Appendix

The interview questionnaire, field trips

1. introduction, general issues

- where does Svetlana come from?
- how did she end up in Moscow?
- where did she stay previously?
- buying an apartment in Butovo Park: the choice, why there? alternatives? the deal itself

2. family life

- family duties; spending time with children
- work before the maternity leave and the future career plans: is Svetlana planning to continue in the same area or change it once children start attending kindergarten? opportunities to develop professionally during the maternity leave? motivation? why families choose to have their second child soon after the first one?
- Fyodor: age, temper, personality, whether he loves to go out, how does he play indoors and outdoors?
- Tikhon: when was he born? how the family life changed?
- relationship between boys

3. daily routine

4. about the microdistrict in general

- what was the microdistrict like at the time Svetlana and her husband moved in? how did it change through time?
- of all the planned (promised) infrastructure objects, what was implemented? what are they still waiting for?
- comparing to the previous place where Svetlana lived, what is she missing most of all?
- positive and negative aspects of living in Butovo Park
- what are the family's expectations regarding the massive of housing blocks under construction across the road?

5. mother's life

- popular places to go out with children: more frequently visited, less frequently visited

- the situation with kindergarten
- possible occupations for children outside home: any classes? activities?
- social connections, acquaintances, mutual support
- infrastructure: what is available nearby? what is not?

6. outdoor play, walks

- where to go and what to do?
- at what time does Fyodor go out and how long does he stay outdoors? how does it change throughout the year?
- playgrounds equipment: there are quite a lot of features (swings, see-saws, slides, ladders, benches, etc.) in the courtyard, but are the experiences provided diverse enough? suitable enough for various abilities? is the play exciting? how soon does it become boring? what are the favourites among play apparatus?
- is there enough equipment? opportunities for play? space? any conflicts? who are the visitors, what is their background? starting from what age is it safe to let the child out on his own?
- how does Fyodor use the playground? what does he like most of all?
- Fyodor's friends
- nearby playgrounds: what is around?
- do they walk to the small grove with a pond not far away from their house?
- does the family travel anywhere on weekends? any special places?
- what is the adjacent area lacking? what is wrong with the outdoor environment, what, on the contrary, seems reasonable?

7. safety

- does it feel safe? can Svetlana relax or does she have to mind anything?
- what is potentially dangerous?
- does failures / fallings happen in Fyodor's everyday life? if so, how does he react? is he able to estimate and manage the risks?
- situation with the car traffic: whether drivers observe the speed limit? park their cars where they should? are children warned about car traffic related hazards?
- speaking about the urban environment, what would be the main difference of Svetlana's childhood from her boys' childhood (pastime, the outdoor play)? in which way did Svetlana used to play? was it a free play or any special equipment or structures were used? what are the differences in parental control, if any?

To look at / take a photo

actions: how they go down in the elevator, leave the front door, where they go, how they cross the road, how children play and move

adjacent area arrangement: where they are the cars? the passage (speed signs, bumps, curbs, zoning, surfaces, outbuildings, garbage collection)

playground's structure and functioning: maintenance (whether the play features are in proper condition, how children use the equipment, what kind of equipment they use actively / do not use, whether children find opportunities to play creatively or follow any scenario / play in a prescript way?)

protection from rain, wind, direct sun: are there places to hide in case of bad weather?

safety: surfaces, materials (measurements to avoid / mitigate injuries? risk benefit assessment, reasonable challenges for children to learn how to manage the risk themselves

access: fencing? what kind of fencing, what for? how to reach the playground?

greenery: grass, trees, flower beds (in what condition, how many?)

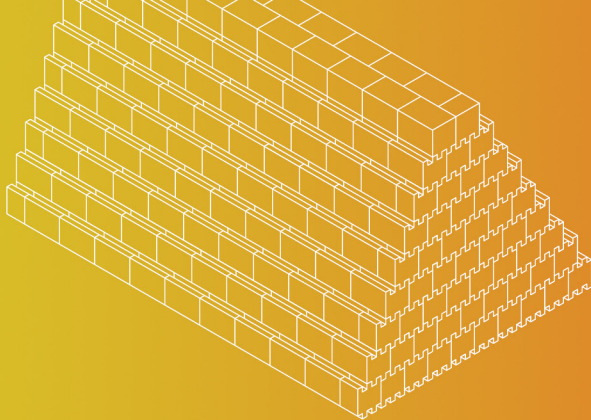
Materials not included











Lund, Sweden
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