# CHILD-FRIENDLY URBAN LANDSCAPES THE MEANING OF CHILD-FRIENDLY URBAN OPEN SPACES AND THE OPPORTUNITIES FOR IMPLEMENTING INITIATIVES IN HUNGARY

# GYERMEKBARÁT VÁROSI SZABADTEREK A GYERMEKBARÁT SZABADTÉR JELENTÉSE ÉS SZEMPONTJAINAK ÉRVÉNYESÍTÉSI LEHETŐSÉGE MAGYARORSZÁGON

SZERZŐ/BY: PÉTER ISTVÁN BALOGH, ILDIKÓ RÉKA BÁTHORYNÉ NAGY, ANITA REITH, VERA TAKÁCSNÉ ZAJACZ, VIKTÓRIA TEREMY

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### ABSTRACT

There is an increasing emphasis on children's perspectives in the urban open space design around the world. Despite the fact that children's development is greatly influenced by the environment in which they grow up, children hardly have an opportunity to determine or contribute to the shaping of their environment. The next generation's personal attachment to the landscape is fundamental to build a responsible and sustainable future.

In this paper, a brief overview is provided to show the evolution of how children were playing in the city in different historical periods around the world. Focusing on the outdoor play activity, it can be said that we

can distinguish free play and structured play in the urban open spaces. It is also clear that with the phenomena of motorization and urbanization in the 20th century, the urban landscape for children has dramatically changed. Children's opportunities to play outdoors in cities are diminishing and constrained in most cases. The idea of child-friendly cities is becoming more and more prominent nowadays and designers are looking for alternatives to compensate the negative phenomena.

There are many researches and initiatives around the world addressing the topic of child-friendliness. Our study presents and interprets the two main directives currently in force. One of them aims at increasing the quantity and improving the quality of urban

open spaces dedicated to children, with standardization and regulation in the focus. This approach aims to create new rules and professional guidelines that can be followed. On the other hand, the other directive focuses more on the coordination of processes and seeks ways to improve playability of the overall urban open space in the city. This approach emphasizes the importance of social engagement and the involvement of young people and children in the processes.

After the theories, the research introduces the Hungarian context, and through the example of Budapest evaluates and interprets various practical strategies for a child-friendly city. Examining the principles that shape child-friendly cities it correlates the general theories with the Hungarian context. Based on the survey of the density and distribution of existing child-friendly elements, the research identifies the most important development opportunities for Budapest. The paper reviews the relevant regulations and legal instruments that determine urban development in Hungary, and points out the most important opportunities where child-friendliness could be supported. In doing so, the research draws attention to the importance of the duality of the systems approach and participation, as these methods can be used to achieve both qualitative and quantitative improvement.

Urban landscapes that put children's perspectives first are safer, more exciting and active. The presence of children in urban open spaces also facilitates the socialization of parents, increases community interactions, and therefore it can be seen as a social catalyst in the urban environment. What is good for children is also good for adults. When it comes to design, child-friendly urban open spaces need creativity and for the designers to think out of the box.

WHY IS IT IMPORTANT TO CREATE CHILD-FRIENDLY URBAN LANDSCAPES?

In this paper, we define urban landscape as an organically developing, complex system of man-made and natural elements within the city containing buildings and urban open spaces. Therefore the quality of the urban open spaces in a city contributes a lot to the urban landscape in general. As more and more people are living in cities all around the world, landscape architecture has the pressure to focus more on the urban landscape. It is a trend that children grow up in big cities with limited experience of rural or natural areas. American studies have shown that beyond their time at home, children have 42% of their free time activities outdoors, however only 9% of this happens in the schoolyards (Dúll, 2009). This means that the rest of the outdoor activities happen in public open spaces.

It is proven that the environment where children grow up is essential in their cognitive development. A Swiss research project called The landscape and your health (Paysage á votre santé) outlined the areas where the surroundings have a critical role on the person's development: physical, psychological, and social health of children and young people. Nature, that can stimulate cognitive, motor, social and emotional skills for children and foster a positive effect on their health in the long term, may be scarce or missing in the urban environment. (Gyimóthy, 2015)

Kevin Lynch, in his book Growing up in Cities from 1977, already emphasized that children have less and less time for free activities in urban public open spaces. He made studies of the spatial environment of adolescence in four nations in six cities, and compiled The Child Friendly Cities Initiative. This early work is still relevant if we want to understand how the quality





of the spatial environment affects youth in urban landscapes. The work attempted to change municipal policies by encouraging the involvement of children's perspectives in the planning process, and to build a base for shared action amongst community and government-based groups supporting children's rights. (Lynch, 1977)

In the past century, the city has been changed a lot: spatial limitations - due to urbanization and the automobile culture - and the online world distracts kids and shifts their attention, leaving aside and completely ignoring the importance of the outside world. In the last decades, the global trend started in the 1970s got even worse: children are less and less welcome in urban open spaces - it is more common to invite them to indoor areas that are adult-centered and are integrated into adult-driven activities (like restaurants, shopping malls etc.). Children nowadays are doing most of their social interactions through screens. Even in the public urban open spaces we like to bring our kids into controlled, designated areas like playgrounds. Due to the change in mobility, cities have completely changed – the traffic is more and much faster that creates high risk and loss of space for children. (Krasniqi, 2019).

The Child Friendly Cities Initiative (CFCI) launched in 1996 by UNICEF and UN-Habitat aims to make cities liveable for all. It declares that the wellbeing of children is the ultimate indicator of a healthy habitat, a democratic society and of good governance. This UNICEF-led initiative supports municipal governments in realizing the rights of children at the local level using the UN Convention on the Rights of the Child as its foundation (UNICEF, 2020).

The 2030 Agenda for Sustainable Development published by the United Nations (UN) in 2015 sets out goals for "ensuring healthy lives and promoting well-being for all at all ages" (SDG 3) as well as "making cities and human settlements inclusive, safe, resilient and







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garden" in Boston's

North End, the first

playground in the

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Courtesy of The

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Boston Globe

FRONT.

Pict. 4: A "sand

sustainable" (SDG 11) (UN, 2015). In the spirit of the New Urban Agenda and the commitment to "leave no one behind", local governments should invest in their public spaces, using an integrated and trans-disciplinary approach in partnership with a range of stakeholders to ensure inclusive, safe and accessible public spaces for all (Andersen, 2016).

Due to the above mentioned reasons, the importance of children and their perspective being taken into consideration in the urban landscapes - especially in urban open spaces - is crucial and a current topic for landscape architects. A UN Report shows that by 2030 approximately 60% of all urban dwellers will be under the age of 18 (UN, 2013). Children usually don't have any right or say in shaping the environment they live in, learn and play. Children need great places to play, learn, and socialize - however children are one of the most vulnerable groups in the city and there is a need for specific solutions and strategies introduced

for them. Now it is a new challenge to create cities that emphasize children's perspective through their interest, needs and rights in the urban environment.

EVOLUTION OF PLAY IN THE URBAN LANDSCAPE AROUND THE WORLD

Free play in the city Play itself is an ancient phenomenon, every child plays - regardless of gender, age, culture and social background. We can see that in all early cultures, children's toys are naturally borrowed from adult life. Children made up games and stories and acted out daily events. They were reflecting their parents' lifestyle in their play. In production communities productionrelated processes, in hunting communities hunting-related activities were imitated by children. Racing and competition were always part of the games as it is also something that adults did in sports or other free time activities.

Bars, Madrid, 1908 (SOURCE: GEORGE EASTMAN HOUSE COLLECTION HTTPS://FLICKR. COM/PHOTOS/ GEORGE EASTMAN HOUSE/2677559569/ IN/ALBUM-72157 606224254056/) Pict. 2: Children being creative in Manchester, 1946 (SOURCE OF PICTURE: HTTPS://MULT-KOR. HU/BOLDOG-KEPEK-ABBOL-AZ-IDOSZAKBOL-AMIKOR-A-GYEREKEKNEK-MEG-NEM-VOLT-OKOSTELEFONIUK-20170320? OPENIMAGE=11355)

Since there were cities, children were always taking advantage of playing on the streets, hanging out with friends together. In the Middle Ages, children were playing in any open spaces in the city and it was quite natural for the community. "After school and chores, children were sent outside to play, unsupervised or in the company of older children. Their main activities were running, jumping, skipping, singing, dancing, hunting, fishing, catching birds, casting stones, climbing trees, wall-walking and other balancing games. Children also played group games like hide-and-seek, blind man's bluff, leapfrog, horses, piggy-back riding, vaulting, acrobatics, and wrestling. They played with toys like hoops, windmills, balls, throwing sticks, hobbyhorses, skip-ropes, jacks, marbles, tops, stilts, tree swings, seesaws, shuttlecock, quoits, skittles, closh, football, and tennis." (Stirler, 2013)

After the end of the 18th century, cities changed a lot – although medieval cities were surrounded by walls, nearby forests and fields were still accessible for kids. The relationship between human and nature was much stronger and the traffic of the streets was less and safer. (Jancsó - Osvát - Sárdy, 1974). Although with the urbanization and motorization it was a need to create safer, controlled outdoor spaces for children in cities, the need for free play on the streets never really disappeared.

# Structured play spaces in the city

Play is ancient – but playgrounds are the consequences of the 19th-century urbanization. Open spaces of educational institutions were always important places for structured play. School gardens were the first open-air facilities where children were under constant supervision, in an organized manner, and games appeared

in parts of the schoolyard. The first designated public open space for children was created in Vienna in 1863. The Kinder Park was the first urban public park for children. There were no play equipment in the park yet, but it was an important change in attitude, because rough-and-tumble play or uncontrolled running around was not allowed for children in the public open spaces (Csepely-Knorr, 2011).

With the disadvantages of intensified urbanization, there was a need to keep children together and to provide supervised and organized play for them even after the school time. The first playground in the World was built in 1859 in Manchester, England although the original idea of formal playgrounds was developed in Germany in the middle of the 19th century (Heap, 2012). The main goal was to create a controlled environment where children can learn how to play safely and fairly with one another. With more and more cars on the roads, it became a constant danger for urban kids to play on the streets. Playgrounds were always meant to be controlled, supervised areas where kids can play, exercise and socialize. (Hart, 2006)

The playground movement in America started in the 1880s in Boston with the introduction of "sand gardens" (Pic. 4.). They were simple fenced sand boxes placed in public spaces with some simple play equipment. Early playgrounds were supervised and segregated by gender (Creative Play, 2020).

At the beginning of the 20th century playground associations were formed to promote the idea and help to establish playgrounds, including their layout and design. People were trained as instructors to teach children necessary lessons like equipment lessons, parades, theater productions etc. (O' Shea, 2013). Playgrounds were properly introduced to the United States in 1907 when President Theodore Roosevelt in a speech

weighed the importance of the playgrounds (Heap, 2012; Erickson, 2012). The first city to make playgrounds a priority by creating regulations was New York in 1912. The city decided to ban climbing structures as it seemed too dangerous (Erickson, 2012).

However the benefits of these designated, safe areas for children were obvious, kids still enjoyed being outside on the calmer so-called "play streets". During the First World War, in America playing on the street was a crime as people believed that could lead to truant behavior (Hart, 2006).

In the beginning of the 1930s a new wave of playground design emerged. Danish architect, C. Th. Sørensen introduced the idea of "adventure or junk playgrounds" that let children create and shape the playground environment (Erickson, 2012). This initiative became more and more popular around the world because children could experience the space on their own without adult instructions and gender splitting.

From the 1960s mass production reached the playgrounds as well, due to some serious lawsuits industry regulations for health and safety standards. With urbanization and industrialization, equipment and playgrounds became uniform, leeding to standardized playgrounds.

From the 1980s new forms, bright colours and new materials were introduced like plastic, rubber or concrete in order to create safer surfaces and reduce maintenance costs. In the 1990s thematic playgrounds became fashionable and they still continue to exist. The aesthetics of the playgrounds have developed a lot in the last decades. However, excessive safety regulations to reduce risk at playgrounds often result in equipment boring for the older (Stipo, 2018). Today creative stimulation is a key element for playgrounds and designers are eager to find new ideas for kids to have fun.

### THEORIES AND PRACTICES

# What makes a great urban landscape for children?

Children's way of perception is different from adults – they perceive the environment through movements and activities (Kylin, 2013). Visual appearance and aesthetics are not so important to them as their vivid imagination complement reality. That is why the good question for them is not "What do you want to see here?" but rather "What do you want to do here?".

It is obvious that **safety** comes first when we talk about kids. Although we usually put more emphasis on the limitations - we should rather focus more on the opportunities and the capacities of the place. It is important to note that the most strict requirements for play environments are formulated by the parents (Dúll, 2009). Kids' perception is different even if we look at security. Finding the right balance between risk and safety is a crucial element of childfriendliness. Letting children learn from their mistakes contributes to the ultimate goal: to raise self-confident, responsible, and resilient individuals who feel they have some control over their destinies and are alive to the consequences of their actions (Gill, 2007).

Designers should be aware of slow traffic, clear zone separations with puffer zones, clean green areas and interactive, creative, sense-oriented places. In order to make our living environment child-friendly, we have to follow four basic principles: safe, healthy, lively and sustainable.

It is important to note that children not only have a different eye-level but their methodology of perception is also very different from that of an average adult. If we design child-friendly spaces we need to focus on the kids' perspective including but not limited to colours, forms, scales, textures, balance, interactivity and creativity. (Krasniqi, 2019)

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Pict. 5: Reality vs. kid's fantasy - detail of the child-friendly public space competition (Designers: Andrea Sipos-Keresztes, Anita Reith, Anita Szöbölödi)

**Table 1:** Main differences between playgrounds and playscapes





Free play is very important for the healthy cognitive development of a child. It is not necessary to put all the pieces together for them as their fantasy is lively and creative and they are happy to use it in every step they take in the city. Stimulating their fantasy and creativity helps them to develop cognitive skills like spatial awareness or decision making that are essential to raise healthy, open and independent adults. If the world is not perfect, they can compensate with their fantasy to create one (Pic. 5; Dattner, 1969).

There are a lot of initiatives and organizations around the globe who are eager to answer this complex question. Although the issue seems contemporary, it has actually been present in public space design since the late 1960s (Báthoryné Nagy - Gecséné Tar 2019). In the past decades most of the developed cities and even countries have developed initiatives for childfriendliness. Hundreds of funds are supporting the children's engagement in shaping their environment. This topic has spread not only across the architectural and urbanist world, but also among teachers, sociologists, psychologists, and other related professions. Owing to technology and the

internet, it is easy to access good practices and research in the different fields. UNICEF has a collection from 45 countries worldwide where CFCI has been already introduced.<sup>1</sup>

Unfortunately, the regulations and design strategies do not take enough attention to children's needs. It is crucial to provide equal opportunities for all including children. We must fight ignorance in order to democratize our open spaces (Fotel, 2009). Participation of kids is essential in order to include children's perspective into design as a way to democratize the landscape and provide equal opportunities for all. There are many good examples and initiatives to engage children with different ages and adolescents in specific phases of design (Lynch, 1977; Stipo, 2018). Participation is also important at the individual level: personal effort helps to build a feeling of ownership which will lead to more sustainable environments (Dúll, 2009). Studies show that children's engagement is useful not only in the design process, but also in the implementation or maintenance of a playground (Dúll,2009). Engagement is an equally powerful tool to create childfriendly urban landscapes and to foster a higher level of consciousness from

1 The website of UNICEF is a great resource for child-friendly city initiatives. Not only guiding principles can be found there butpractice examples listed in thematic areas (participation, education, play, migration, innovation etc.) are also available: https://childfriendlycities.org/initiatives/

Formal child-friendly urban open spaces (playgrounds and institutional gardens)	Informal child-friendly urban open spaces (playscapes)
Designed specially for kids	Designed for all
Has boundaries	No boundaries
Separated from other functions	Integrated into other functions
las play equipments	Does not necessarily have play equipments
Planned and limited activities	Spontaneous, unlimited activities
Structured play with equipment mainly	Play activity is free
Organized/supported supervision	Supervision is not organized / necessary
Safety is first (special regulations)	General safety requirements

an early age. "The child-friendliness of a city should be measured by the network of placemaking initiatives and citywide strategies for public spaces that together shape and integrate kids' perspective in decision-making." (Stipo, 2018)

A recent publication on The city at eye level for kids by Stipo has a collection of successful projects and good practices from all around the world. It summarizes 36 lessons for a better city at eye level for kids, and creates a criteria list for design at the micro scale (neighbourhoods, squares, and parks), at the meso scale (main streets, waterfronts etc.) and finally at the city scale. (Stipo, 2018)

Stipo's booklet emphasizes the importance of the different age groups, making differentiation between young children and teenegers, paying special attention to girls, reaching out to caregivers, being sensitive to social, economic, cultural and climatic context. It stresses and gives support on how to build city wide strategies. Since the living conditions and physical context can vary widely, bringing play beyond playgrounds by integrating play into daily routines and reimagining everyday spaces as mini play destinations is crucial. Stipo also provides Seven Key Steps to Engage Kids and a brief description of 12 Proven Methods.

Designing for and with children
Based on the theory of Sven De Visscher, the Belgian social work lecturer
and urbanist there are two paradigms,
having a different approach to what
a child-friendly city means. The first
paradigm is rooted in developmental
psychology, and seeks for an objectification of the child-friendly city with
universal guidelines for protecting

children against the malicious influences of the modern world. Child-friendliness appears, in this paradigm, as an outcome of professional interventions in the best interest of children, which can be translated into common approaches, and thus it is possible to create guidelines and checklist for child-friendly spaces. In contrast, the other paradigm does not lead to more standardisation but instead looks for more contextualisation in understanding child-friendliness.

The second paradigm is rooted in sociology and critical pedagogy and aims for a subjectification of the child-friendly city, focusing more on kids' participation. It aims to strengthen the position of children in the city in general, and assumes that sustainability, liveability and democratic future for our cities depend on how we involve our children in planning for tomorrow. In this sense, this paradigm promotes the quality of the process through which the city is shaped and reshaped and underlines the contextual uniqueness of the community and the local culture. (De Visscher, 2016 & Schepel, 2006)

Indisputable that both models are equally important and have relevance to the topic. Objectification and guidelines are important in order to support city regulations and create norms that are accepted by professional groups. Putting an emphasis on the quality of the processes of how we shape our environment is also crucial as it has an important message for everyone in general. "If you plan cities for cars and traffic, you get cars and traffic. If you plan for people and places, you get people and places" – as Fred Kent says (PPS, 2005). It is important to see the relevance and threats of both the approaches. While





regulations and guidelines are useful for municipalities and the bureaucratic world, they can lead to boring and homogeneous designs. The institutional approach is important but not enough. Situational approach, on the other hand, needs some guidelines and facilitations in order to create long-term, sustainable solutions and successful designs.

### Overview of formal and informal play spaces in urban landscapes

In the urban landscape, we can talk about formal and informal child-friendly open spaces. Formal child-friendly urban open spaces are playgrounds and institutional gardens (gardens of educational, social or health-care institutions). These spaces are designed for specific target groups, are of mostly limited access, and allow only certain behavior or activities. Formal childfriendly urban landscapes always have boundaries and specific equipment that encourage kids to play, learn, or socialize. Informal child-friendly urban landscapes are called playscapes and they are not limited in use or activities. There is a difference between a ground to play at and a playground. Playscapes are grounds to play at and - in contrast with playgrounds - are part of the urban landscape without excluding any user groups or having formal boundaries. These open spaces stimulate children's creativity and imagination and allow free, spontaneous play. They are

*invisible playgrounds* that attract kids while serving the rest of the community.

Of course, it is never a matter of black and white, there might be some places in the city, which have no boundaries but do have some play equipment (Pic. 6-7.), or we can find playgrounds that do not have prefabricated play equipment. (Pic. 8-10.).

## ANALYSIS IN BUDAPEST AND THE HUNGARIAN CONTEXT

Overview of the Hungarian context In 1777, Ratio Educationis was the first law that affected children and their play in Hungary. This law was pioneering in Europe as it initiated the provision of outdoor spaces for physical exercise and play for all educational institutions. In this period, the school environment belonged to the topic of public health in Hungary. In the end of the 1880s, the first reports were published that put an emphasis on the quality of the school environment and the open spaces around schools. (Klagyivik, 2018)

The evolution of playgrounds in Hungary was similar to the European trends. In the socialist era, landscape architecture and urbanism were also very sensitive to social issues, which was also relevant to playground design. With the construction of social housing estates, play spaces for children were also created as parts of the development.





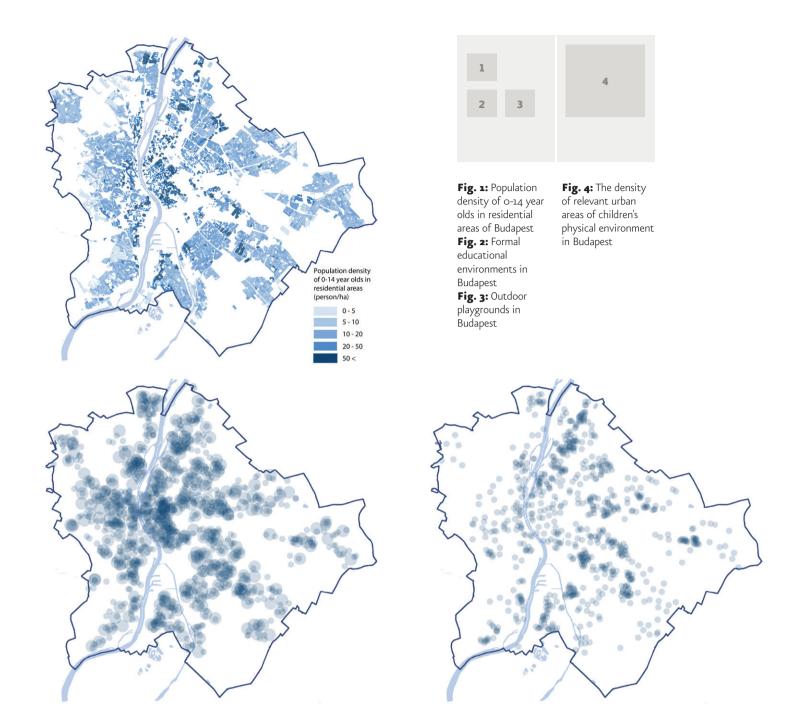


# Pict. 6-7: Temporary seesaws in New York City (source of PICTURES: HTTPS:// WWW.THISISCOLOSSAL.COM/2020/01/ IMPULSE-SEESAWSNEW-YORK-CITY/)

Pict. 8-10:
Assiniboine Park
Nature Playground in
Winnipeg, Canada
(SOURCE OF
PICTURES:
ANITA REITH)
Table 2: Green
infrastructure
hierarchy for
Budapest (Source:
Almási, 2007)



Green Infrastructure Category	Area (ha)	Accessibility (m)	Limited accessibility (m)	Land Use Category
regional park	above 150	6000		Forests, green spaces, agricultural lands, fields, water-management areas
city park	30-150	2500		
neighbourhood park	10-30	1000		
public park	3-10	500	350	
local gardens	1-3	400	280	
public gardens	0,03-1	300	200	green spaces

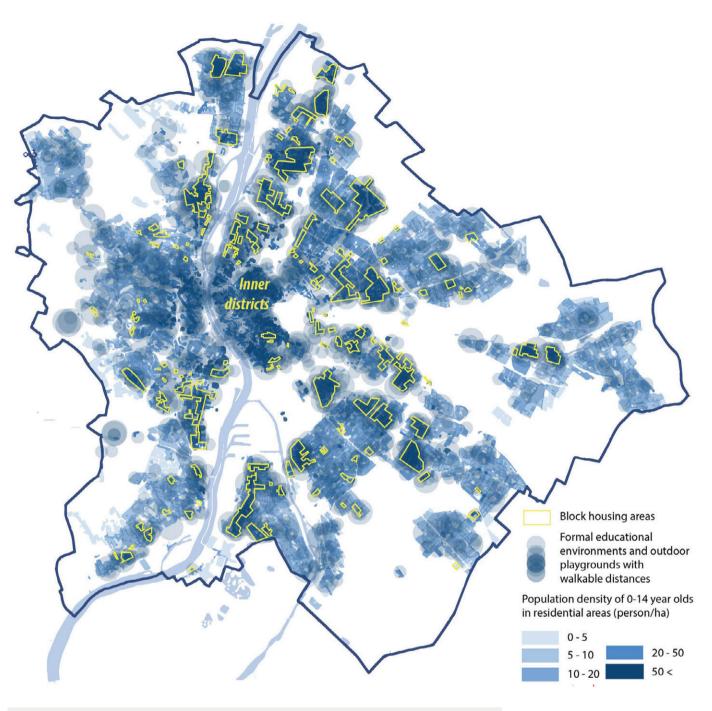


Free play in the city was part of children's life in the last century. The legendary *The Paul Street Boys* written by Ferenc Molnár is one of the greatest examples of how kids spent their free time in urban open spaces in the 1880s in Hungary.

In order to understand and identify what are the most important urban areas for children, studies in developmental environmental psychology has to be taken into account. According to today's environmental psychological research, under the age of six, children's existence and orientation in the physical environment is primarily based on their home environment and only indirectly influenced by the characteristics of the neighborhood. The potential activities, impacts and dangers learned in

this environment will become part of the child's social, emotional and cognitive experiences. Touching and grasping objects and surfaces plays an extremely important role in human development and in establishing identity (Dúll, 2009).

One of the most important research areas of environmental psychology are the institutional places of education, the so-called educational environments, as these spaces are primarily designed for the education and socialization of children. There are basically two types: formal and informal educational environments. Formal educational environments like kindergartens, schools, nurseries etc. are controlled and limited in use, while informal educational environments like zoos, museums etc. are special recreational and leisure



spaces. Besides playgrounds and playscapes, these are very important open spaces in the city, which can be part of child-friendly urban open spaces.

Before analysing, it is also important to introduce the Hungarian classification of green spaces (public gardens, public parks, city parks etc.). Based on Balázs Almási's work, six different types of green spaces can be defined in urban landscapes, according to their size and accessibility (Almási, 2007; Table 2). Playgrounds can be found in all six types of green spaces, but when we talk about local needs, public gardens and local public parks matter the most. Accessible within a distance of 200-400 meters, public gardens and local parks are supposed to primarily serve the needs of the local residents - in the case of children, the need for daily play.

### Spatial distribution of child-friendly urban open spaces in Budapest

Based on the available data from the Budapest City Development Concept, Situational Analysis (2011) this paper attempts to define children's spatial use in Budapest. The purpose of the analysis is to identify urban open spaces where the so-called child-friendly design considerations are of primary importance. In this research, the study area is Budapest- but the method can be adapted to any other cities.

In the study, only formal educational environments (nurseries, daycares, and elementary schools) are presented. Nevertheless, it can also be extended to informal educational environments. Because of the different size





and accessibility, nurseries, daycares, and playgrounds as formal child-friendly urban open spaces are represented with a radius of 250 meters, while elementary schools are shown with a radius of 500 meters showing the walkable distance around the facility.

In Figure 1, the population density of o-14 years old children can be seen in Budapest. Based on this figure, it is clear that there are some areas which have higher need for child-friendly initiatives. These areas are mostly social housing estates or dense urban neighbourhoods in the inner part of the city.

In Figure 2, we can see the distribution of formal educational environments in Budapest. In Figure 3, the distribution of outdoor playgrounds is shown. It is clearly visible that the two figures do not correlate - although the needs are the same. Making a comparison with Figure 1, it can be said that the distribution of formal educational spaces more or less reflects the population density, while that of outdoor playgrounds in the city does not correspond to the population density. While the high-density residential areas with blocks of flats (for example: Káposztásmegyer, József Attila lakótelep, Havannatelep) are mostly served well with playgrounds, the downtown area of Budapest (districts 5, 6, 7 and 8) is short of playgrounds. This fact highlights the need for creation of playscapes in the inner parts of the city.

Finally, Figure 4 was created by overlaying the population density and the accessible childoriented urban environments.

Analyzing Figure 4 closely, we can point out some interesting correlations. It is visible that the density of the needs is not in line with the facilities provided. As it was also seen in Figure 1, the inner districts and the high density residential areas should have a priority in child-friendly initiatives as their population of children is higher than that in other areas.

The other important conclusion we can take from the figures is that both the formal educational and the outdoor playgrounds are block elements and the spatial connection between them is not developed well in the city. Linear elements like streets, boulevards and greenways should be considered as important playscape options. In order to improve the quality of child-friendly urban open spaces in Budapest (or elsewhere) it is crucial to focus on the links between designated child-friendly destinations. A systematic approach is essential when we work towards developing the child-friendliness of Budapest.

## OPPORTUNITIES IN URBAN PLANNING REGULATION IN HUNGARY

As seen from the previous analysis, formal educational environments are well-distributed in Budapest, and serve



Pict. 11-12: Two emblematic playgrounds integrated well in the urban environment in Budapest. The first one is at Horváth Garden from 1965 with thetrams passing along boulevard in the background.

The second picture is from 1976 at Nehru Quay.
(SOURCE: FORTEPAN)

Pict. 13: Enjoying play without age limits. Óbuda Island in May, sometime in the 1980s.
(SOURCE: FORTEPAN)



2 Act CLXXXIX of 2011, Section 13. § (1)

the population well. The open spaces of the educational facilities are designated as institutional gardens, which means that these open spaces are open to the public only for limited time and use. Therefore formal educational environments cannot be taken into account for everyday recreation. However, the surroundings of the educational environments – like the entrance areas of schools and kindergartens – play a very important role in a child-friendly public open space network in the city.

Playgrounds can be considered as parts of the urban public open space network – however they operate with restricted use only. In contrast with the formal educational environments, playgrounds can be well integrated into the urban public open space network (Pic. 11-12.), and thus provide sufficient recreational green spaces for the whole population, especially but not limited to children (Pic. 13.).

Young children prefer to stay in their close environment, they use the same routes and tend to stay in close proximity to their home and school routes (Özgece, Edgü és Taluğ, 2015). Therefore building a network of playscapes and creating links between children-destinations is extremely important when improving child-friendliness in a city. Networking between block elements is important in order to achieve good functionality, so that we must consider the paths between them as important as the element itself. Better connections can be

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realized by constructing greenways and alternative routes (pedestrian, bicycle, roller) or by transforming existing infrastructure into connecting structures. It would be important to designate the pedestrian promenade as another structural element in the local plan for the sake of spatial security and functional connection, and to include it as a pedestrian zone into the planning policies.

According to the principles of human-centered urban planning (Gehl, 2014), short distances to reach events should be sought, and integration of function can achieve social sustainability and a general sense of security. Inspiring urban spaces for outdoor activities, walking and cycling need to be created, and it is especially important to provide gradual transition between buildings and outdoor spaces. In order to enhance urban life in cities, public open spaces should be designed in a way that people can use them most of the time of the day or the year. Authors of this paper propose to summarize the child-friendly interpretation of the general principles according to Table 3.

Within the framework of local public affairs, the task of the local government is to develop the settlements pursuant to the Act on Local Authorities in Hungary. Urban Development Plans (Településfejlesztési Tervek), Local Plans (Településrendezési Tervek) and Townscape Initiatives (Településképi Tervek) are regulatory tools that can be used to comply with the above mentioned

Urban Planning Principle	Child-friendly interpretation
Short distance to reach events	In areas that are most important to the development of children, efforts should be made to improve pedestrian accessibility, obstacle clearance, and a sense of security. The comfortable distance varies with age group and public space design.  Long-distance locations should seek to establish a secure cycle path network.
Integration of functions	The most important functions for the development of children should be integrated as much as possible in one place.
Urban space to inspire to stay outdoors	Efforts should be made to create urban spaces of human scale, where congestion and unpleasant sensory impressions (e.g. excessive noise, gustsdrafts, dust) should be avoided.
Gradual transition between buildings and outdoor spaces	Ground floor design and the design of entrance areas should give a preference to small details at eye-level of both adults and children. These areas play a critical role in the interaction between the inside and outside world.
Extending the possible usage of urban outdoor spaces	Urban outdoor spaces should be designed to allow 20-25 minutes of stay: seating areas, play areas and aesthetic qualities that respond to environmental conditions are needed at all times. For positive sensory impressions not only good design but also visibility (contrast in colors, illumination) is required.

Fig. 3: Outdoor
playgrounds in
Budapest
Fig. 4: The density
of relevant urban
areas of children's
physical environment

in Budapest



Act. Table 4 points out the opportunities for integrating child-friendly aspects into these planning documents.

Urban Development Plans define the directions of developments, the goals, and the programs and tools needed to achieve them. Child-friendliness can be added as a goal into these documents, and sub-goals and projects can be described in order to achieve that goal. Based on the survey, it is possible to identify the physical environments used most commonly by children, through a methodology of spatial analysis of use, where the principle should be intensified. Territorial projects in these areas should be selected.

Local Plans primarily define the physical frameworks for development to ensure the city is operational. These plans should provide the spatial locations for the development decisions specified in the municipal development plans. In order to reserve the areas, it is essential to designate the appropriate zoning and

define the child-friendly aspects of the prospective uses and building rights.

Townscape Initiatives serve to protect and shape the settlement, and to support development by social involvement and consensus. The Cityscape Identity Guidebook provides an opportunity to shape this approach, presenting good examples that have already been accomplished and providing qualitative aspects for both public and private spaces. The rules on the use, the shape and materials of buildings may be set as local policies; the way in which green spaces are designed and specific types of buildings are accommodated. The areas affected by the public land use plan can be delimited.4

The Act on the Development and Protection of the Built Environment<sup>5</sup> defines the long-term urban development concept (hosszú távú településfejlesztési koncepció) and the medium-term integrated urban development strategy (középtávú integrált településfejlesztési

3 According to Act LXXVIII of 1997. and Act LXXIV of 2016.

4 314/2012. (XI. 8.) Government Decree on the urban development concept, the integrated urban development strategy, the urban planning tools, and special legal institutions in urban planning 23 / E. §§ 23 / F. §

**5** Act LXXVIII of 1997. Act on the Development and Protection of the Built Environment: "The purpose of urban development and planning is to create an urban structure and a high quality environment for the sustainable future of the community and to improve the quality of life of the population, promoting public interest by ensuring the harmony of national, regional, municipal and legitimate private interests, the enhancement and protection of architectural values and the promotion of environmental-friendly utilization of resources.".

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stratégia) as mandatory documents of urban development, and defines the local plan and the local planning policies as mandatory urban planning tools. In addition to the mandatory development plans, if their capabilities allow, local governments may also prepare other sectoral plans for the implementation of complex environmental, social and economic objectives, on a voluntary basis. When preparing additional strategic plans that support mandatory urban development plans, it is worth being aware of international trends and good practices. Existing international child-friendly urban strategic plans (Copenhagen, Vienna, etc.) can be introduced as good examples. It is also suggested to review other related project genres and incorporate the child-friendly aspect into them. Sustainable Mobility Plans, Green Space Development and Maintenance Strategies and Action Plans, and Urban Renewal or Rehabilitation Plans can also promote childfriendly urban planning principles.

The municipalities have **special** legal institutions for the implementation of their urban development objectives (Act LXXVIII of 1997, § 17). Of these, we highlight some of the most relevant in terms of ensuring a child-friendly public space design.

The municipality concerned may enter into a so-called planning agreement with a person or legal entity wishing to invest in its territory in order to achieve certain municipal development objectives (Act LXXVIII of 1997, § 30 / A). With the introduction of the planning agreement, municipalities can have the opportunity to set out a policy prior to the beginning of the development, which cannot be defined in normative regulation and which, among other things, promotes childfriendly environments, for example shopping centres to create a childfriendly environment in the private entrance areas. (Locsmándi, 1999)

Another special legal institution is the possibility for municipalities to prepare a Plan for the Development of Public Spaces (Act LXXVIII of 1997, § 30 / E). The plan should include open space and landscape design, pedestrian and motorized traffic, utilities, surface drainage and telecommunication facilities in order to ensure a consistent public space design. The spatial definition, where it is obligatory to draw up this type of plan, shall be laid down in a municipal decree.7

In addition to enforcement tools, municipalities can ensure the involvement of children into the development projects through the use of available social engagement tools and, after the identification of the target group, by the use of age-specific tools. This involvement is also possible during the preparation of the Urban Development and Settlement Plan or the Townscape Initiatives - especially because the preparation of these plans requires wide-ranging public participation. The involvement of children in planning and the implementation of child-friendly aspects can be ensured by the municipality in the case of projects funded or co-financed by the municipality, whenever this is set as a condition for funding. The problem in Hungary is that municipalities are lacking the tools when it comes to design with children who are a special user group that need the proper tools and approaches to work with.

Generally speaking, public participation also needs to be improved in Hungary - especially the participation of children in urban development projects. Today's practice relies primarily on the use of online applications, media and infocommunication tools (online questionnaires, park user surveys, online community development planning<sup>8</sup> etc.), but it often does not reach children. Children need special tools and methods to participate and to be heard or formulate an opinion and

6 Section 12 (1) of Act CLXXXIX of 2011 **7** Special policies apply to playgrounds deriving from the European Standards (EN MSZ 1176-1:2018, EN MSZ 1177:2008). These standards show guidance for general safety, playground equipment, surfacing, and critical fall height. Based on the decree of the Ministry of Economy, it is applicable and mandatory also in Hungary from 2003.

8 Budapest Dialog is a community urban development site through which both the local residents and local governments can share their development ideas and projects. The interactive interface of the portal helps community development plans to be realized. Members can evaluate, share, and support ideas with not only leaving feedback but with community funding or other offerings (e.g., volunteer work. material donations).







wishes. In some aspects, children are also "disabled," as they can lack many of the physical and mental skills needed to use the space - just like people with disabilities (Szaszák, 2018). Children are not able to express their feelings and thoughts easily therefore structured games can help them a lot to engage them. The importance of play as a tool in architectural design and urban planning is spreading - games can not only contribute to design but also create discussion, support critical thinking and improve various skills in children. (Brković Dodig - Groat, 2019). Education on the built environment aims to develop and use methods that help children to explore, understand, and actively shape their environment. Applying methodologies for the education on the built environment can be useful in participation as it improves civic and participatory skills and this is especially important in the case of young people (Reicher - Edelhoff - Kataikko -Uttke, 2013; Sebestyén - Tóth, 2013).

There are some good examples in Hungary where children were engaged from the very early stage even to the implementation and maintenance of public space developments - however, these projects are usually related to institutional gardens (Pic. 14-19). Municipalities are realizing more and more the advantages of participation and engagement of the younger generation,9 but it is still a long way ahead to popularize these methods in the development of urban public open spaces, which can serve long-term sustainability of the urban landscape and the community who lives in it. Vandalization can be reduced, local identity and the sense of belonging can be encouraged by engagement. Community planting, painting and crafting or doing minor construction works with kids can develop a lot of social and cognitive skills and can raise awareness. These engagement processes are extremely valuable for the young generation while they can contribute to community building in general.

g Several Hungarian settlements or city districts (Tata, Jászboldogháza, Zalaszentgrót, Belváros-Lipótváros, Budaörs, Orosháza, Zalaegerszeg, Alsómocsolád, Bordány, Hajdúnánás, Cigánd, Hódmezővásárhely, Óbuda) have already gained the international recognition of being a Child-friendly Settlement. The award is given by UNICEF Hungary for good practices in supporting the rights of children.









Pict. 14-16: Students voting at the Aquincum School for schoolyard design ideas that were prepared by university students in collaboration with the school students (SOURCE OF PICTURES BALOGH PÉTER ISTVÁN) Pict. 17-19: Building together with students Budakalász - Szent István park (SOURCE OF PICTURES: TAKÁCSNÉ ZAJACZ VERA)

### CONCLUSIONS

To conclude the paper, if we would like to improve child-friendly urban land-scapes, a systematic approach is essential. Creating strong links between the child-friendly destinations, formal or informal educational environments, is crucial in order to achieve improvements that children can really benefit from. Playscapes are especially important for streets, boulevards, greenways or other linear urban open space elements.

Another important message is that we need to develop the tools for engaging children. Landscape architects should be more open to related professions (teachers, sociologists, psychologists etc.) in order to gain knowledge that is useful for understanding the needs and interests of this special user group. A democratic approach is essential to create successful child-friendly cities.

The way we deal with our environment gives a message to the future generations. Paying more attention to our kids is important not only for their healthy development but also serves the long-term goals of our communities. For example, playgrounds – in addition to serving the needs of children – are important places for socializing for the different generations (Beleznay, 2011). Placing children at the heart of urban planning and design will lead to more lovable, livable, sustainable, safe and inclusive cities for all. The fundamental principle is now more real than ever: "A city good for children, is a city good for all." (Stipo, 2018)

No doubts that designers, planners, and developers have responsibilities in creating more child-friendly urban land-scapes. The first step is to fight the ignorance towards children's rights and needs and to understand their different way of perception. Being open to this special user group will help us to build a better world that is more sensitive to minorities, and a more creative, playful, tolerant, healthier, greener, and safer environment. A better place to live in.

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# ÖSSZEFOGLALÓ

### GYERMEKBARÁT VÁROSI SZABADTEREK

- A GYERMEKBARÁT SZABADTÉR JELENTÉSE ÉS SZEMPONTJAINAK ÉRVÉNYESÍTÉSI LEHETŐSÉGE MAGYARORSZÁGON

A városi szabadterek tervezésében világszerte egyre nagyobb hangsúlyt kap a gyermekek nézőpontja. Habár a gyerekek fejlődésére igen nagy hatást gyakorol a szűkebb és tágabb környezet, amelyben felnőnek, mégis legtöbbször igen kevés lehetőségük van vagy egyáltalán nincs lehetőségük beleszólni vagy meghatározni annak alakítását. A felnövekvő generáció környezethez, városi tájhoz, szabadterekhez való kötődése alapvető fontosságú egy felelősségteljes és fenntartható jövő megalapozásához.

Jelen tanulmány röviden áttekinti a városi környezet szerepét a gyerekek életében, különös tekintettel a szabadtéren végzett játékos tevékenységekre. A városi környezet a gyerekek számára alapjaiban változott meg a motorizáció megjelenésével: a köztéri szabad játék egyre inkább az intézményi, kontrollált területekre szorult vissza. A gyermekek szabadtéri játéklehetőségei egyre csökkennek, "szabványosodnak". A napjainkban egyre hangsúlyosabban megjelenő gyermekbarát városok eszméje ezt a negatív folyamatot igyekszik kompenzálni.

Szerte a világban számos kutatás és kezdeményezés foglalkozik a témával. Tanulmányunk a jelenleg érvényben lévő két fő várostervezési irányelvet mutatja be, értelmezi. Egyik a gyermekek számára dedikált városi helyek mennyiségének növelése, minőségének javítása: itt fontos a standardizáció, olyan új szabályok, szakmai iránymutatások meghatározása, amelyeket be lehet tartatni. A másik irányvonal azoknak a folyamatoknak a koordinálása, amelyek a városi szabadterek általános minőségének javítását, gyermek-kompatibilisebbé tételét tűzte ki célul. Ez utóbbi a fiatalok bevonását szorgalmazza a tervezésbe és a városi szabadtérhálózat általános fejlesztésére, játszhatóbbá tételére teszi a hangsúlyt.

A kutatás a gyermekbarát város elméletének különböző gyakorlati stratégiáit is értékeli, értelmezi. Megvizsgálja, hogy milyen elvek alakítják a gyerekbarát városokat, majd a széleskörű áttekintés után magyarországi kontextusba helyezi az elméleteket. A hazai környezetpszichológiai publikációkból kiindulva azonosítja a városi términtázatban a gyerekek fejlődésének szempontjából legfontosabb helyszíneket, amelyeknek a sűrűsödésében kiemelten fontos figyelembe venni a tervezés során a gyerekbarát szempontokat. A metodika illusztrálásához a cikkben a mintaterület Budapest.

Azok a városi szabadterek, amelyek előtérbe helyezik a gyerekek szempontiait biztonságosabbak, izgalmasabbak és aktívabbak. A gyerekek jelenléte a városi szabad tereken a szülők szocializációját is segíti, növeli a közösségi interakciókat, ezért szociális katalizátornak tekinthetők a városi környezetben. Ami a gyermekek számára érdekes, az a felnőtteknek is az - gyermekbarát városi szabadterek tervezésénél fő szempont a kreativitás, a megszokott sémáktól való elszakadás. A gyerekek valódi mércéi az élhető és szerethető városoknak, ezért mindanynyiunk érdeke, hogy a gyerekek szempontjai hangsúlyosabban megjelenjenek a városi szabadterek tervezésében. Ennek érvényesítésére keresi a kutatás a lehetőségeket a magyar településfejlesztési környezetet meghatározó tervtípusok és jogi eszközkészlet elemzésével. Ennek során a rendszerszemlélet és a részvételi tervezés kettőségének fontosságára hívja föl a figyelmet, hiszen ezekkel a módszerekkel érhető el egyszerre minőségi és mennyiségi feilesztés.

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