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# URBAN OUTDOOR RECREATION: CHILDREN'S PLAYGROUNDS IN WARSAW

**Key words:** active recreation, children's playgrounds, space for all.

#### **ABSTRACT**

Over the last century a visible change has taken place in the relationship between children and their living environment in Warsaw. In many Polish cities increased road traffic, pollution and crime, fragmentation of urban fabric, and reduction of public green areas have resulted in the creation of a 'children-unfriendly' environment. The present paper is based on a research project carried out in the Institute of Tourism and Recreation of the Józef Piłsudski University of Physical Education in Warsaw between 2008 and 2010 regarding children's playgrounds in Warsaw. The project consisted of case studies on specific themes such as playground facilities, safety, pressures for change, popularity of play sites, and proposed renewal strategies. The authors studied diverse preferences of children and their caregivers as well as their expectations of outdoor recreation infrastructure and management improvements. The emphasis was also placed on disabled children and constraints on the use of playgrounds by these groups. A good playground means safety, fun, delight and excitement. However, there are still many problems connected with small, local playgrounds with poor facilities, situated mostly on communal or co-operative housing estates. Built from cheap and flimsy materials, many playgrounds are not safe for children as they often do not meet the most fundamental safety requirements. Moreover, in any playground design it is important to realize that children's needs are likely to change over time, but due to rather tough budgets of communal or co-operative housing, refurbishments may be too expensive. There is no doubt that the openness of outdoor recreation areas, following the 'space for all' principle, with unlimited public use in mind (for the disabled and the able bodied alike), is a crucial condition of an integrated healthy environment

# **INTRODUCTION**

And the broad places of the city shall be full of boys and girls playing in the broad places thereof

(Zechariah 8:5)

In modern times education and play has been regarded as one. We know that children learn through play. Through play they improve their social skills, make friends, acquire rules of team games and develop their physical skills. The sphere of outdoor recreation for children and adults includes physical education (walking, sports), hobbies (gardening), cultural occupations (going to concerts), social events (spontaneous and planned) and entertainment (park visits). With this understanding come concerns for the quality of play and playgrounds [4, 12, 13]. Children, unlike adults, could play anywhere; however, what really enhances their physical and mental development are open green areas [1]. Furthermore, outdoor recreation provides opportunities of improvement

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of children's physical and mental condition and ultimately, a significant increase of their living standards. These objectives cannot be realized without parklands, implanted areas, pocket gardens, allotments and suburban green belts. In this scope, the natural environment protection and development of urban green areas should be considered in the context of sustainable spatial planning. However, not only children but also other age groups (the elderly, adults, adolescents, school students, toddlers, babies and their caregivers) and occupational groups would demand outdoor leisure and proper facilities [4, 5, 7, 12].

At present, as many as 190,000 children (under age of 14) live in Warsaw (the average number of children per family is 1.5). More than 5,500 children in Warsaw are formally recognized as disabled (Table 1). There is no doubt that children's playgrounds as well as other outdoor recreation areas should be designed, managed and developed with the young users in mind. As in any design, it is important to recognize that children's needs are likely to change over time, and that the development of outdoor recreation necessitates the knowledge of the actual profile of playground users. It also necessitates the ability to anticipate future trends. All in all, the attempts to meet recreation needs should lead to an integrated, opensystem that must adhere to the principle of 'public space for all'. This includes facilities and improvements for disabled children in the form of 'special' playground amenities such as the 'Scent Gardens' and raised flower beds – all these requiring an open-minded and inspiring approach in their design [2, 8, 12]. Moreover, from the planners' point of view the role of children's playground, seen as an integral part of urban greens, is much more complicated as these areas are important components of the entire town, fulfilling a variety of functions: serving leisure needs, improving environmental and climatic factors and enhancing aesthetic townscape values [1, 2, 4, 9, 10, 12, 13].

There has been a visible change in the relationship between children and their living environment in Warsaw over the last century. In cities in Poland (like in all other industrialized countries) increased road traffic, pollution and crime, fragmentation of urban fabric and reduction of green public areas resulted in the development of a 'children-unfriendly' environment [1, 2, 11, 12]. Due to security reasons, children are not able to explore freely their hometown anymore. Instead, since the beginning of the 20<sup>th</sup> century, they have been offered specially constructed playgrounds, designed and equipped in a rather 'internationally stereotyped' style. Do these playgrounds meet their users' expectations today? Can children now develop their physical and mental skills while playing in urban playgrounds? Are these sites safe?

### **METHODS**

This paper is based on a 12-month research project, carried out in the Institute of Tourism and Recreation of the Józef Piłsudski University of Physical Education in Warsaw (2008-2009), which involved a comprehensive survey of Warsaw children's playgrounds. In addition, five case studies of individual playgrounds were undertaken in the Żoliborz Borough, in three public parks (Citadel Park, Dr Jordan Park, Żeromski Park) and on two housing estates (a communal housing estate founded in 1930-33; and a co-operative housing estate founded in 1960-65). We were interested in specific themes such as playground facilities, safety, pressures for change, popularity of sites and proposed renewal strategies (on the basis of interviews of playground users). The Warsaw borough of Żoliborz is dominated by multi-families housing estates and only 5% of borough dwellers have access to private gardens. The majority of Zoliborz residents rely on public recreational space and public children's playgrounds. We were interested both in the children's and their

**Table 1.** Warsaw children population projection by age group (2005-2030)

Age group	2005	2010	2015	2020	2025	2030
0 - 4 years	67.600	60.535	58.937	53.993	46.543	40.628
5 - 9 years	62.400	63.002	61.228	59.796	54.717	47.030
10 - 14 years	69.600	63.753	63.536	61.719	60.243	55.023

Source: Central Statistical Office, Statistical Yearbook of Warsaw, Warsaw 2008.

caregivers' diverse preferences, and in their expectations of outdoor recreation infrastructure and management improvements. The emphasis was placed on disabled children (and their caregivers) and constraints on the use of playgrounds by these groups. The applied methods were related to the research objectives, which meant that several different approaches were required. They included a literature review, collection and analysis of survey data, field notes and interviews.

### **RESULTS**

# Tradition of urban playgrounds in Poland

In Poland, the tradition of organised children's playgrounds dates back to the 19<sup>th</sup> century. The first such playgrounds were play gardens founded by Dr Henryk Jordan, based on Dr. Moritz Schreber's 'Kindergarten' in Leipzig (also known as "Schrebergarten"). Before World War Two there were about two hundred of the socalled ogródki jordanowkie (Dr. Jordan's Parks) in the cities of Kraków, Lwów, Poznań and Warsaw, which offered children not only possibilities to swing, climb and slide in a wholesome green outdoor recreation area, but also sport, cultural and education activities, scout camps and medical treatment (albeit on a limited scale) (Fig. 1). In present-day Polish towns there are still several "Dr Jordan's Parks", along some 13,000 smaller, local playgrounds, provided and maintained by housing estates managements (private, company, communal and co-operative) [7, 9].



**Figure 1.** Dr Jordan Park 'Bagatela'; classic combination of most popular facilities, enjoyed for generations: a slide, a ladder, a sand pool or a sand pit (est. 1930)

### Modern urban playgrounds

Today, in most European countries, urban planners' guidelines insist on providing outdoor recreation areas of the size of about 2 hectares for every thousand people (in Warsaw, a decade ago it used to be 2.5 hectares / per 1,000 dwellers) with a 0.5 hectare area intended for children's recreation [9, 13, 14]. As our research results show, there has been a constant pressure from the residents of housing estates in Warsaw (not only parents) on the estate management to provide playgrounds. In consequence, all estate managers provide and maintain playgrounds. They occupy areas no larger than 60-100 m² and, sadly, contain little more than a swing or two, a slide, a climbing frame and a sand pit.

Our surveys and observation revealed that not all playgrounds in the Żoliborz Borough functioned well. Unfortunately, some of studied sites dilapidated a long time ago (with sand pits often converted into flower beds). These days, instead of providing inspiring play space, they are often deserted gloomy places (Fig. 5). Those play areas that have remained in the housing estates offer very poor facilities or facilities in bad condition (e.g. dirty sand in uncovered sand pitches). Interviewed mothers mentioned witnessing children's accidents resulting from falls (the Antonina Sokolicz playground, for example, has a concrete surface). Fortunately, in all surveyed sites the surface directly beneath the climbing frames and swings has no rough edges. The climbing frames were built of wood and metal. The wooden frames, however, may contain splinters and their fixing bolts are not always safely sunk below the woodwork surface. The survey shows that children of all ages love swinging: from toddlers (with their caregivers' assistance) to teenagers. The surveyed playgrounds featured different types of swings: single seat, double seat and even triple seat types. Swings are the most frequent causes of accidents; however, all the swings in the playgrounds under study appeared safe and solid (with the exception of two-seat swings placed close to one another in a single bay, posing a risk of collision in the Antonina Sokolicz playground). Swing seats were wooden, metal or plastic and without sharp edges. However, swings for toddlers came often without any protective barrier in the front. The playgrounds also featured a great number of wooden and plastic see-saws (Tab. 2, 3) and slides combined with sand-pools.

 $\begin{tabular}{ll} \textbf{Table 2.} & Comparison of equipment in selected Warsaw playgrounds: $A-Park Cytadela, $B-Dr Jordan Park, $C-Park Zeromskiego, $D-Antonina Sokolicz Housing Estate, $E-Zajączka / Śmiała Housing Estate $A-Park Cytadela, $B-Dr Jordan Park, $B-Dr Jordan Park,$ 

Equipment items	A	В	С	D	Е
Climbing frames	+	+	+	+	+
Swings	+	+	+	+	+
Slides	+	+	+	+	_
See-saws	+	+	+	+	+
Climbing net	_	_	+	_	_
Climbing rock	_	_	+	_	_
Dens, shelters	+	+	+	_	_
Sand pitch	+	+	+	+	+
Monkey bridge	+	_	+	_	_
Railway carriages/engines	_	_	+	_	_
Spring mobile	_	+	+	_	_
Facilities for the disabled	_	_	_	_	_
Fence and gates	+	+	+	_	_
Restrooms	+	+	+	_	_
Security guards/ Playground Watch	+	+	+	_	_
Information Boards/ Operator's details	+	+	+	_	_

Source: author's field survey, 2009.

Table 3. Children and their caregivers' comments on Warsaw playgrounds

Playground location (operator)	Children's views	Caregivers' views		
Park Cytadela (run by Local Authority)	Like see-saws and play platform, complain about getting confused on the 'climbing-wall'	Like play frames, complain about uncomfortable (and unsafe) swing seats, limited area, lack of toilets, lack of 'mother and child' shelters		
Dr Jordan Park (run by Local Authority)	The favourite playground, great fun, lots of space to run around	The best one in comparison with other playgrounds nearby; feel safe, like the design and careful maintenance; admit the Park Żeromski playground is more luxurious, but terribly crowded and lacking 'special atmosphere'		
Park Żeromskiego (run by Local Authority)	The favourite playground in northern Warsaw (many children come to play there from distant city districts); great fun, wonderful facilities, visiting this site is a real treat, big dream to be allowed to climb the climbing-net and use the main, steel chute	Absolutely astonished by the facilities, maintenance, perfect safety and order; complain about the crowd (especially on weekends); compliment on design, variety and originality of facilities; most facilities 'suitable for all'; afraid of the very high climbing net (Is it really safe?)		
'Antonina Sokolicz' (run by housing estate co-operative management)	Like the slide (fast and 'wicked'), complain about 'not enough activities possible', poor facilities offer; their favourite playground is located in Park Żeromskiego (about 1 km away)	Complain about dirty sand, too small budget for playground improvements, poor management, rough design, bad location (close to estate's waste bins), noise (busy street nearby); surface made of concrete/tarmac often causing serious injuries		
'Zajączka/Śmiała' (run by communal housing estate management office)	Like the playground, it is fun, new facilities are nice, colourful (swing, slide), wishing more facilities (their favourite playground is in Park Zeromskiego about 700 m away)	Admit new facilities are solid (swing, slide); complain some younger ones have trouble getting into the swings and cannot manage the slide-ladder; complain about dirty sand and rusty parts of metal climbing frames		

Source: author's field survey, 2009.

Playground operators (Housing Estate Managers) responsible for safety and maintenance of playground equipment take care of the technical state of the facilities under their supervision. Clearly, this has been a positive result of recent changes in municipal legal regulations. In 2009, the Health and Environment Department of the Warsaw Municipality was made responsible for supervision of all types of playground facilities run by private persons, companies, schools and local authorities.

As we have observed, any sophisticated playground equipment, for example, a complex high climbing apparatus, does not often hold a child's attention for long. Children prefer to interact with different facilities, and this is probably why old simple swings have been popular with all age groups for decades, regardless of the fashion of the moment. Moreover, our observations show that in the studied housing estates school age children tend to play even less in playgrounds than in the streets and informal play areas they find for themselves (e.g. car parks) [1].

Unquestionably, playgrounds in Warsaw public parks (Park Cytadela, Park Jordana at Felińskiego Street and Park Żeromskiego) run by the Warsaw Local Authority are much better furnished and maintained (Figs. 2, 3, 4, 6, 7). The park playground areas range from 700 to 1,000 m<sup>2</sup>, and access to them is free of charge. The playground facilities are properly maintained and the sites are constantly monitored. A major presentday playground attraction – a high climbing net – can only be found in the Żeromski Park playground. It is more challenging than a regular climbing frame, requiring from children a higher level of skills and daring. As a rare type of playground facility the climbing net is very popular, especially among teenagers (Tab. 3). This climbing net is combined with a challenging spiral slide (aluminum tube), which also attracts a great interest of children and adolescents. The slides in the Żeromski Park and Dr Jordan's Park are parts of larger structures (monkey bridges, climbing frames, dens, shelters, platforms). They all come with guard rails and are erected over a safety surface (sand, grass, and PVC in the Żeromski Park) (Fig. 2). Only one old metal slide is still used on the Zajączka/Śmiała Housing Estate, others are made plastic (high density polythene) or steel (in the Żeromski Park). All children's playgrounds in public parks are fenced and gated (dog free zones).

However, the main disadvantage is their long distance from Warsaw residential areas. Playgrounds located on the housing estates are only a few minutes away from children's residences, while a city park might be even 20-25 minutes away and require children to cross many busy streets on the way. The question of playground location often requires searching for compromise.



**Figure 2.** Żeromski Park playground developed in 2006 according to EU standards, very popular and commonly considered one of the best in Warsaw



**Figure 3.** Playground run by Housing Estate Cooperative (Antonina Sokolicz Street in Warsaw), design from 1950-1970

We have some doubts whether children in Warsaw could find challenge and stimuli they need at their local playgrounds (run by the housing estates). But certainly that does not mean they need equipment available only in fancy catalogues. Some playgrounds in Warsaw (Dewajtis Street, Parish Church) contain real life objects (cars, railway carriages, engines), which make these sites interesting as children find in them a great number of fascinating uses: climbing, crawling, sliding,

hiding, running, jumping and playing games (not necessarily related to the object itself).



**Figure 4.** Dr Jordan Park (Felińskiego Street, Warsaw), although less popular than the Żeromski Park playground, has its regulars enjoying nature and unique, peaceful atmosphere of the place



**Figure 5.** Dr Jordan Park (Felińskiego Street, Warsaw), popular combination of wooden facilities: slides, climbing frame, ladder, monkey bridge and sheltered platforms – playground equipment design 1970-1990

**Table 4.** Regulations regarding children's playgrounds in Warsaw (communal and co-operative run housing estates)

Features	Comments
Access	Children's playgrounds within easy walking distance from home (ideal up to 500 m), free of barriers, clearly defined pedestrian/cycle route, no crossing of busy streets
Location	Site should be big enough to accommodate a range of activities (children of different age groups): 300-500 m <sup>2</sup> ; site should be well drained with interesting topography and varying levels (bank slides for winter sledges)
Footpaths	Wide enough, with hard, firm surface comfortable for walking, allowing easy movement of prams, wheeled toys and wheelchairs
Natural resources	Natural resources (trees, bushes), accessible for children, some parts 'wild' and intentionally unkempt
Play Facilities	Safe, especially designed for children, solid, well maintained, opportunities for water play, sandpit, equipment for physical activities: climbing structures, swings, slides; equipment for pre-school children: seesaws
Seating	Provision of seating enabling overview of play areas, sheltered from the sun and wind; shelters, picnic tables
Toilets	Provision of facilities for the disabled, unisex restroom for parents with babies (including a baby changing table)
Surface	Solid, safe, shock-absorbing, slip-proof (to be replaced when shows signs of wear)

Source: author's field survey, 2009

Another question is whether children do need sophisticated playing equipment or simply enough playing space, healthy environment, abundance of greens and freedom to play spontaneously? May be a poorly equipped playground, but located in the close vicinity of children's home, with many trees and bushes, is a better solution? One of the advantages of such

a playground is the possibility of tree climbing, adventure games, or playing hide and seek on the grass and among fallen tree trunks (usually forbidden in urban parks). All in all, providing an environment which stimulates children's imagination also enhances their enjoyment. A public city park offers sophisticated facilities, vast spaces and tidy playgrounds, but – due to safety reasons –

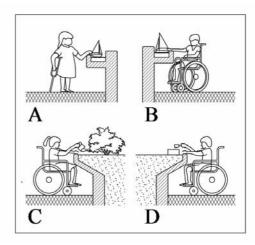
fairly limited freedom. On the other hand, an unrestricted choice of playing possibilities is usually highly appreciated by children, but not by their caregivers [2, 10]. Unfortunately, it is often too difficult for adults, responsible for the development of children's playgrounds, to reflect on their own childhood and ask themselves a simple question: What interested me when I was at that age? What did I find to be great fun?



**Figure 6.** Parish Church Playground (Dewajtis Street in Warsaw), real life objects, e.g. an old car, make the site very interesting to children as they adapt it for a variety of uses: climbing, crawling, sliding, hiding and playing games



**Figure 7.** A raised sand-pit designed suitable for disabled children, is widely used by able bodied children – Park Skaryszewski in Warsaw



**Figure 8.** "Space for all" concept implemented in a children's playground: raised sand-pitches (D), ponds and flower beds (A, B and C) enable and encourage disabled children to participate in various activities



**Figure 9.** A good playground means safety and fun, physical challenge and social interactions, delight and excitement – a healthy and satisfying childhood

# Disabled children and their play space

At present, as many as 5,528 disabled children live in Warsaw, who need the same playground facilities as their able-bodied counterparts, although the environment in which they play must respond to their special needs [1, 7]. Regretfully, none of the surveyed playgrounds has made any improvements for disabled children (and their caregivers). It is a great disadvantage, considering the great role of playgrounds in the process of successful recuperation. For example, a child with a mobility problem might be encouraged to walk by using facilities which would help him move around. Naturally, such activities are subject to medical

consultation, as some of them also have a therapeutic quality, and different kinds of disabilities require different therapeutic strategies. To reduce any possible risks, playground facilities should be well designed and clearly marked. Furthermore, we believe that disabled children need the precise and accurate information about what opportunities are available in a given playground. Site map boards with categories of facilities marked in colour codes replicated on the facilities themselves as well as touch maps with information in Braille and verbal information should be provided. A good alternative can be listening posts with pre-recorded messages. Such information might help children and caregivers enjoy playground facilities safely and responsibly. Raised sand-pitches, ponds and flower beds might enable and encourage disabled children to participate in various activities, e.g. the 'Open-Air Therapy' based on gardening activities is recognised as very successful [2, 8]. All these must be inexpensive, highly vandal-resistant and weatherproof, but even small improvements might be of great help to disabled children or disabled caregivers of able bodied children. Interestingly, what is strongly underlined by the interviewed caregivers of disabled children, is that they do not want separate facilities for the disabled and able bodied children. They all have commonly found a 'Special Playground' (established for special needs children in Wyspiańskiego Street in Warsaw) as based on a misconception of what disabled children really need. Although well intended, safe and supervised by professional nurses, this playground is rather unpopular and little appreciated by disabled children, who simply want to play in public playgrounds 'as all other children do'. One has to agree that their wishes should be respected.

### **DISCUSSION**

What makes a good playground design? There is no simple answer. It is necessary to understand how children play, how they want to play what their needs are. Playground designs change in time (recently – very quickly) and vary in space (there may be many different designs within a single urban administrative area). The best solution is to offer wide opportunities as some children's activities never change: jumping, sliding, playing ball, swinging. What children need is the

opportunity of safe, individual or team play, sometimes with the use of highly appreciated materials like sand or water; they need a safe, green and wholesome space, even including some 'wilderness' areas. What is essential is that children should be given a chance to interact with the 'real' environment, for example, by climbing trees or damming streams. They should be allowed to play using their imagination [7, 10, 11]. Too sophisticated and too poor playground equipment is not a good solution either. Also too restrictive supervision or the lack thereof might kill the joy of play. Furthermore, some facilities should be considered to be used by caregivers so as to encourage them to accompany their children.

Playgrounds act as social gathering grounds for parents and grandparents, who are all too often isolated in the home, when taking care of babies and toddlers. Popular playgrounds might generate noise (shouting, raucous laughter, arguments and bad language), which certainly is not easy for adults to accept, and appropriate buffer zones are essential. On the other hand, play space should be within easy distance for the children (to be reached safely), i.e. within 150 meters of their homes, without crossing a busy street. Many disabled children and their caregivers experience serious problems with access to playgrounds. That is why one can rarely see a disabled child in an outdoor play area. It is of course a bigger problem than a simple redesign of the playground area and its facilities. In some cases, a child may be unable to get outdoor unassisted, and necessary improvements may involve adaptation of the building (putting in new doors or lifts) to provide more direct links to the outdoor space. It is a very serious issue, and those who work with disabled children emphasize the fact that children who learn to play successfully with other children are close to being able to have normal lives [2, 8, 9, 12, 13].

Play areas should be planted with trees, some parts even remaining 'wild' and unkempt (offering the opportunity for an escape from the more organized, indoor world) to give children a sense of enclosure, shelter and to shape a realm for imaginary play, unlimited fantasy, healthy environment and microclimate (Park Cytadela, Dr Jordan Park, Park Żeromskiego). Local feature-lessness could be overcome by artificial topography (Park Cytadela, Dr Jordan Park, Park Żeromskiego). A playground should be free from mud, stairs, potholes, and secure from hazards such as road or

railway traffic. There should be plenty of space around facilities to avoid collision. For safety reasons information should be provided about playground management, regulations and restrictions. Unfortunately, there is usually no such information in many poorly managed playgrounds. A playground should be furnished with benches, litter bins and restrooms. It should be fenced and gated. The proper playground layout and design can greatly reduce the risk of accidents.

Another matter is playground management. As safety is one of the priorities, proper maintenance is essential to avoid hazards. Playground equipment should be well maintained, with facilities without missing parts, splintered wood or rust; with safe swings and one-piece slide surfaces without joins or gaps. Faulty and broken equipment (worn out, corroded or vandalized) is evidence of the playground operator's failure to comply with health and safety regulations. In Poland, there is a legal requirement for local authorities, housing estate managers or commercial operators to ensure that their playgrounds and playground equipment are safe. A playground should be designed in compliance with the Building Act regulations and the architectural code of practice regarding its safety and functionality; playground equipment should be manufactured, installed and maintained in accordance with Polish safety recommendations and standards consistent with the European Playground Safety Standards (EN 1176 and EN 1177) issued in January 1999 [6].

In the past we considered children's play as an expression of energy and good spirits - as merely a pastime. Children's activities were not considered important (when I was a child I often heard that a child should be seen - not heard). However, play is a part of education, which prepares us to participate in the adult world. Children at play learn their possibilities and constraints. Outdoor playgrounds allow children to develop new skills, confidence, self-esteem, muscular strength and overall healthy growth. Through play children learn to interact with others. By engaging in role-playing games, they develop both communication and other social skills. By exploring the environment through play, they learn the values of nature and 'wild life'. A good playground means safety, fun, delight and excitement.

Green areas available for children's recreational use include much more than just

playgrounds: town parks, botanical gardens, historical gardens, country parks and allotments. Since the beginning of the 20<sup>th</sup> century green areas have become an integral part of European urban public space, serving not only children's and adults' leisure and recreation purposes, but also improving the urban climate, preventing atmospheric pollution and providing aesthetic values. A modern town without green belts of proper size, quality and arrangement is unimaginable today. Playgrounds, urban parks and gardens, recreation areas, pocket gardens, alleys and riverside promenades - all constitute a single integrated system. There is no doubt that the openness of outdoor recreation areas and provision of 'space for all' with unlimited public use in mind – is a condition for development an integrated healthy environment for the growing urban population. Hopefully, with better and more attractive outdoor recreation possibilities more children, teenagers (and adults) will spend their leisure time more actively than simply watching television or playing computer games.

**Acknowledgment:** "Space for all" concept implemented in a children's playground drawn by Maciej Piechotka (Fig. 8).

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