ANA MARQUÉS IBÁÑEZ[1]

Development models for playgrounds in the contemporary urban fabric

The primary focus of this project is the playground as a generator of spaces for recreation, integration, identity expression of people in a group, active creativity and play. This project analyses children's playgrounds from the following perspective: the playground in different urban development models, the presentation of possible development lines for playscapes, and the relationship that can be established between children's recreation areas, art and gardens. These spaces are conceived as places for future intergenerational communication, creativity and the creation of identity within the contemporary urban fabric. Their purpose is also to instil children with educational values such as care and respect for the natural environment. Advocates of recreation spaces traditionally visualised playgrounds not only as places of refuge from the risks and perils of urban life, but also as areas that fostered social integration. Play has an educational value that is universally recognised.

Introduction

Playgrounds are designed to provide children with a carefree environment where they can have fun. Their infrastructure features a variety of elements, such as swings, slides, tracks, play towers, sand pits, sound and visual games, and building games. In addition to being open-air recreation areas where children can interact and enjoy themselves, playgrounds also foster basic elements of child physical development, such as strength, flexibility and coordination.

In terms of spatial structure and play activity equipment, Senda (1992) proposes seven ideas for the design of such play spaces:

"*My research suggests that satisfactory play space and equipment have the following seven requirements.*

1. *There must be a circulation of play. That is to say, there must be a clear flow of movement which comprises one big activity.*
2. *The process must be safe but rich in variety.*
3. *The process must not be singularly patterned and must have shortcuts and bypasses.*
4. *The process must entail symbolic high places.*

[1]Didactics of Artistic Expression, Department of Fine Art, University of La Laguna (Tenerife), *amarquez@ull.edu.es*

5. *The process must contain parts where children can experience "dizziness".*

6. *The process must offer large and small gathering places.*

7. *The process as a whole must not be closed. It must be open and have a number of access routes"* (Senda, 1992, p. 8).

This research project comprises two main lines of investigation:

a) **The history of children's playgrounds.** Investigation and analysis of playground designs throughout history and the incorporation of elements that facilitate game and play options. A main focus of this research is to study the creation of structures, and interesting and unique games, that foster a high degree of active participation and inclusion of cultural diversity. In this respect, the incorporation of identifiable elements from the local culture strengthens the identity of the space and aids its inclusion in the context. Furthermore, the sculptures, self-built objects and active games created by the children themselves can generate a suitable environment for communication between cultures.

b) **The future of children's playgrounds.** This project presents artistic creations which connect play with art, as well as ideological lines for the design of recreation areas in line with modern urban criteria. This is supported by increasing initiative to make use of smaller spaces within urban areas to enrich the activity and lives of children; places for children to share with people of all ages. This idea is based on intergenerational relationships and creating an accessible and interactive environment. Another element is the provision of a recreation space where children are stimulated not only through symbolic play derived from their imagination, but also through the senses, such as colours, sounds, balance, etc.

Another point of interest is the creation of an environment that facilitates creativity and different types of play: active, passive, thematic, musical, social, nature-based, by means of individual components. During an observation conducted at a playground in a park in Granada (Spain), we saw that one of the most frequently used play elements was an active wooden keyboard that emitted rudimentary piano sounds when played with the feet.
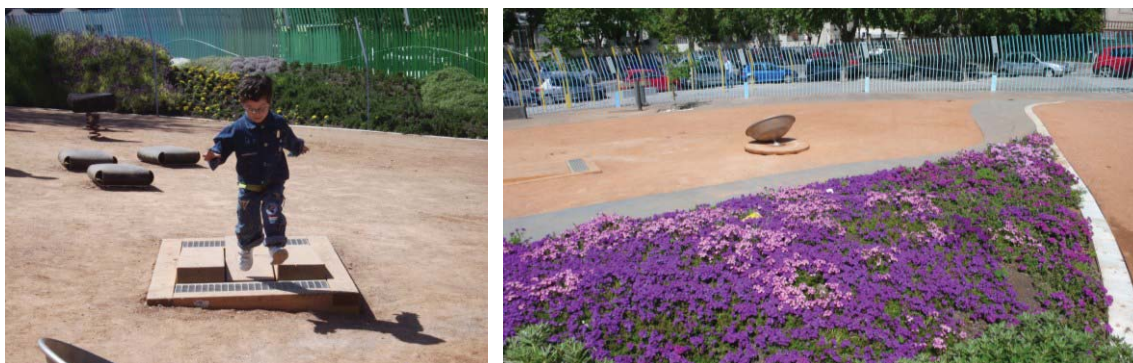
Figure 1 and 2.
Parque Infantil (Granada), Año.2006
Arquitectos: Woolf & del Corral Paisajistas: Ana Ibáñez. Jorge Asencio

Successful designs depend largely on understanding the conditions of the area in question, and how these will interact with the facilities of the future recreation area. The design and development of the recreation area must result from the study and analysis of the local environment, with a focus on physical features, social context, and particularly, the involvement of future users. In this sense, involving the community is a good first step towards success. In the case of the abovementioned playground, the neighbourhood association participated in the design, and was sensitive to the positive psychological effects associated with colours on the elderly people that use it frequently due to its central location and accessibility.

Playgrounds are the result of justifying the use of spaces in modern society. The allocation of play areas forms part of broader urban land use management, which traditionally sought to organise land into specific areas with certain functional identities. However, these actions have proved both successful and unsuccessful.

The aim of this project is to analyse the course of action to design and create spaces which are sustainable, safe, self-built, dynamic, and in tune with the identity of playing in small urban spaces.

1. The history of playgrounds

Most children born from the 20th century onwards have enjoyed playing in certain play spaces, however, this was not always the case. Prior to the 19th century, specific children's play areas simply did not exist.

In the early years, so-called *Sand Gardens* were created in Germany, in 1885, and the first children's playgrounds appeared in Boston, USA, in 1886. However, it was not until the 20th century that *recreation spaces* started to become a common sight in public areas.

> *"The child-saving movement of the 1800s helped advance the play and playground movements searching for better community opportunities for healthy play and recreation for children. What began in 1821 with an outdoor gymnasium was expanded upon much later in 1887 with the sand gardens of Boston"* (Frost, 2010, p. 108).

Along with industrialisation came an increased interest in the well-being of people. As a result, children's playgrounds were designed with the purpose of improving quality of life in areas suffering from overcrowding, poor living conditions and social segregation. In this way, children were kept away from the dangerous streets and could improved their physical health and social skills, while also experiencing the joy of playing.

In 1906, the *Playground Association of America* was founded in order to promote the creation of children's play spaces. It established guidelines for the design, construction, maintenance, use and activities to be carried out in these areas. A number of rules and regulations were drafted for the construction of children's playgrounds in the USA. As Butler (1965) explains, these principles were fundamental for design and development:

> *"PAA's guiding principles were to assist cities in customizing a play and recreation plan for their local needs, develop the local leadership for sustained improvements, and to first improve existing playgrounds before establishing new play spaces. They were first concerned with quality programs and leadership more than with widespread quantity of playgrounds"* (Butler, 1965, p. 57).

Early playgrounds were built with galvanised steel tubes, vertical and horizontal elements, ladders and chains; designs that by modern standards would be deemed unsafe by the Consumer Product Safety Commission. Therefore, as these initial structures gradually fell into disrepair, they were replaced with new designs and materials.

The new play spaces incorporated natural materials, concrete, wood and plastic, and nowadays, a wide range of natural and artificial materials are used. Senda (1992) states that the layout, design and use of materials in playscapes are structured in a certain way:

> *"The relationship between play structures and open space in amusement grounds and playgrounds will greatly affect the patterns and development of children's play in*

them. [...] The play structures in such cases tend to be single-function structures such as slides, swings, and jungle gyms. In terms of the circular play system, there should also be trees and vegetation around the open space for children to hide in. The play structures in such places should also include something in the nature of a play wall. In the case of a amusement ground with a play structure in the middle, the nature of that play structure is of importance" (Senda, 1992, p. 93).

It is considered that an ideal play area should contain sections for boys and girls, spaces for physical activity, areas of garden, etc. There is also a more experimental current trend with a focus on integrating interactive sound and light elements into playgrounds.

In *The Evolution of American Playgrounds*, Joe Frost (2012) from the University of Texas presents his research into the historical evolution of public play spaces in the USA. The study provides a wealth of documentation and research on the subject, and serves as a guide to conduct a more detailed analysis of American playgrounds.

Below, we present a chronological summary of the history of children's playgrounds together with explanations of the physical features of each time period:

- 1880–1890: Development of *Sand Gardens*, designed as boxes of sand in specific play areas situated near buildings. The first *Sand Garden* was built in Boston in 1887.
- 1900–1920: Typified by *Model Playgrounds*, featuring large-scale structures made with steel tubing, roundabouts and other spinning contraptions.
- During the Great Depression in the USA and the post-war period in Europe, the development of children's games and play areas was suspended due to other more pressing matters of urgency.
- Subsequent years saw the design and introduction of *Adventure* or *Junk Playgrounds*. These spaces were designed for adventure games, exploring caves, landscapes, urban elements, and often made use of recycled building materials.
- 1950–1970: Development of *Novelty Playgrounds*, taking the form of spaceships, rockets, slides, animals, elaborate tunnels and metal shapes.
- 1970–1980: Arrival of *Standardised Playgrounds*, featuring hard plastic elements with rounded edges in response to health and safety concerns.
- 1980–present day: Emergence of imaginative, accessible and interactive *Modern Playgrounds*. These play spaces boast rubber chip safety flooring and a wide range of other materials and elements.

The earliest play areas were not equipped with the today's modern elements, namely, rounded edges, moulded plastic, soft ground covering. These modern features are all designed to prevent injury, but also to inspire children to use their imagination and creativity.

Due to modern-day health and safety regulations, playgrounds from the past are no longer suitable for use. Hence, they are virtually impossible to update, restore or preserve, and generally enjoy relatively short life spans.

However, although urban playground equipment has largely been replaced over the years, the essence of these old relics can still be perceived. This suggests that playgrounds are more than just mere collections of equipment. In fact, their positioning and design demonstrate the original objectives that led to their creation: humanitarian reasons, school activities, community development, planning; all of which help us to understand the cultural context.

The value of recreation areas is determined by their physical setting. They were healthy spaces for inhabitants of cities and metropolitan areas; safe meeting places for children and adults alike. From their inception, children's playgrounds have been meeting places fostering intergenerational communication. One argument for the preservation of such spaces is that they hold an important emotional importance for communities, in the form of memories and experiences, which make up the cultural history of a neighbourhood.

Among the numerous intrinsic values of playing, authors Ruiz and Abad (2011) claim that the possibilities that symbolic play offers children are already part of the child's nature:

"Normally, we turn to the 'as-if' to describe the situation that is triggered in symbolic play, although the latter is often accompanied by the 'just because', namely, playing for the pleasure of playing. In this situation, the child takes on the role of 'the other', putting him/herself in 'the place of', and creates situations that do not distinguish between different types of play, while enjoying making invisible connections between his/her own body and the aforementioned elements, such as objects and space as mediators" (Ruiz & Abad, 2011, p. 20).

2. The aims and objectives of the research

Our research aim is based on an analysis of recreation spaces designed after the 19th century as new play area models within the urban fabric, as well as other contemporary projects linked with playgrounds. Therefore, it is essential to establish a series of guidelines for the design elements that we consider fundamental for the ideal playground:

- The quality of an *Adventure Playground* is demonstrated by its continuous development and unfinished design; a *"terrain vague"* that facilitates different ideas and concepts of recreation and play for children.

- The natural pace and rhythm of children must be respected, and adults should adapt accordingly, in order to positively encourage the development of their skills. It is essential for children to experiment with their immediate environment through play activities. Therefore, they require a space where they can spend time and play without the restrictions of an adult.

- The play space should incite curiosity, ingenuity and experimentation, helping children to become motivated, alert and critical individuals.

- Children should acquire basic principles of architecture so that they can become well-informed users, with a critical judgement about their immediate environment.

- Children should be encouraged to study, interpret and comprehend their surrounding urban environment. It is important for society to have an understanding of the environment and setting of the playground, as well as its architecture, and also how the city can integrate with public spaces.

- Multidisciplinary and group activities should be created with the purpose of sharing experiences and ideas from the perspective of architecture, city planning, design, art installations and temporary art interventions.

- We must strive to educate through the medium of art and the concept of architecture forming a part of a whole, in order to foster ingenuity, creativity, and artistic expression. Architecture demonstrates an understanding of space and draws our attention to specific forms and shapes.

- We must develop new urban strategies and elements such as playgrounds, school trips, etc., which help to develop a child's personal autonomy, growth and integration in society.

- It is crucial to offer a vision of urban design while respecting the ideas of each child, by taking into account their opinions, needs and requirements, and paying close attention to accessibility and integration.

3. Justification

Play has an important role in childhood development as it has the potential to foster creativity, communication, creation of identity and integration in multicultural groups, not to mention the benefits of playing for the pleasure of playing.

In this respect, Huizinga (1972) explains that the action of playing transmits the cultural concepts that are established through the meanings that make up our presence and identity in the world:

> *"Play, understood as a common homeland, reveals itself to us as the Pangaea of all culture and the origin of all of humankind's doing, which is nothing more than playing"* (Huizinga, 1972, p. 7).

As previously mentioned, due to municipal management and health and safety requirements, current play spaces are usually very uniform in terms of structure and materials.

The principle idea is to raise awareness and generate interest in incorporating creative elements, the essence of the setting, and the participation of children, in the design and development of the playground. One concern is that currently there is clear design trend that favours safe play spaces that isolate children, and which are either unconsciously accepted or rejected by the users. These spaces offer no opportunity for shared experiences with adults, as the latter are usually relegated to the position of spectators while the children play.

In this analysis, it is important to remember the origins of playgrounds both in the USA and Europe. A differentiation must be made between the recreation spaces designed to prevent crime by providing youths and marginalised groups with a setting for social interaction, many of which are located in the USA, and the spaces created by citizens in Europe to occupy war-torn parts of cities with the hope of improving their environment, offering their children a better childhood, and producing aesthetically beautiful neighbourhoods.

4. Innovative proposals for playgrounds

Playgrounds have experienced great change in recent decades. The concept of recreation spaces is relatively modern, and even after the Second World War, the only places available for children to have fun and play were plots of open flat land. These spaces were not designed

to be safe environments, and children would improvise games with any objects they could find. Essentially, these sites were usually waste ground, which were highly unsuitable for children.

For this reason, we have chosen playgrounds from the post-Second World War period until present day to study their evolution in terms of equipment and the new ludic discourse that they propose. Prior to this period, play spaces were uncommon, yet a small number did exist in *squares* and *streets*. However, the growth of cities and the introduction of cars soon took over these areas; places that Tonucci (Fratto) encourages us to take back.

As Sosoaga (2004) states, the way of playing has changed considerably due to the changes and crisis experienced by traditional games:

> *"The changes and transformations that take place in the adult world with the transition of a traditional society to an industrial one are reflected in the world of children. Of course, these transformations also affect the universe of beliefs, convictions and rituals that underlie many traditional games; many of these will become void of meaning, some will fall into disuse, others will remain and adapt to the new circumstances"* (Sosoaga, 2004, p. 137).

Parques de Aldo Van Eyck

Despite their reduced size, Aldo van Eyck's playgrounds were his most important architectural contribution. He discovered a humanist alternative to functional modernism which was seen as the new trend in architecture. He designed and developed an innovative post-war urban design model, which in the 1960s received the name of *incremental strategy*. This design model met the needs of citizens, improving and transforming the possibilities offered by different sites. He tried to breathe new life into parts the city that had been abandoned after the war, turning them into spaces for everyday use and play.

Aldo van Eyck revolutionised the concept of urban regeneration in terms of large-scale town planning and design, which, until this point in time, had largely ignored the numerous plots of land that existed between buildings. The positioning of these dedicated recreation spaces was not established by means of a specially designed city plan, but rather responded to the concerns and needs of the local inhabitants, who were involved in the regeneration and improvement of their immediate environment.

Furthermore, Aldo van Eyck was the first person to propose an alternative vision to the earlier children's play area movement. During the post-war reconstruction process in

Amsterdam, the Dutch architect conceived a new way to reconsider the city and make use of vacant plots of land that had appeared due to bombing. Rather than erecting new buildings, these sites would become the first modern children's playgrounds as we know them today, featuring swings, metal bars and bridges. The architect focused on the people who would actually use the playground, namely, the children; something that had not been considered up until this point.

Figure 3 and 4.
Laurierstraat: Centre of Amsterdam. Playground, 1956.
Dijkstraat: Centre of Amsterdam. Playground, 1954.
Aldo Van Eyck[2]

According to McCarter (2015), the recovery process of the city of Amsterdam following the war was fundamental because it brought about a sense of motivation among the inhabitants. This idea was documented by the architect Aldo Van Eyck through the photographs that he took of his city:

> *"Perhaps the most challenging playground designs were those for the residual spaces between buildings, and here the "before" and "after" photographs of Van Eycks's designs are simply astonishing. The playground at Dijkstraat, built in 1954, was located in the 25 – meter – long, 10 – meter wide site of a house that had been demolished during the war, between three and four story buildings in the center of Amsterdam. [...] Despite their only existing on the ground plane, the modest, minimal elements of Van Eyck's design charged this enclosed space with remarkable dynamic energy"* (McCarter, 2015, pp. 45–47).

---

[2] http://www.architekturfuerkinder.ch/index.php?/pioniere/aldo-van-eyck/

Recreation parks were built in many city centres, located in avenues, squares, gardens and other specific places. Modern children's playgrounds feature safe, padded structures, however, decades after their introduction, most still contain the same structural elements proposed by Aldo van Eyck's designs, namely, bridges, slides and swings. It is important that children are not only provided with suitable and safe equipment, but also that their creativity is stimulated through symbolic play, as this is an inherent part of children's nature. In this respect, Vigotsky (1995) explains the associations that children make with conventional objects:

> *"It is the movements and gestures of the child that assign a purpose to the corresponding object; giving it meaning. All symbolic representational activity is full of gesture indicators. For children, a stick can be turned into a horse when placed between their legs, and they can use a gesture to identify it as a horse at any given moment"* (Vigotsky, 1995, pp. 187–188).

Many designers have incorporated the idea of scale and proportion to create amazingly beautiful playgrounds to transmit to children the perception of space. Worthy of mention are the fun and somewhat bizarre works by the Danish group *Monstrum*, and the life-size versions of figures from children's literature, such as, *Parque Gulliver* (Valencia).

Figure 5.
Brumleby, 1997. Monstrum. Ole Barslund Nielsen and Christian Jensen. Denmark.[3]

---

[3] http://www.monstrum.dk/en/projects/brumlebyen#map

Kids Castle. Doylestown. Pensilvania

The aesthetic of this castle creates the feeling of being inside a story, in which children can pretend to be princes, princesses and dragons. The *Kids Castle*, located in Doylestown Central Park, is a wooden structure with eight different levels, designed by children from the neighbourhood through a competition in 1996.

In 1997, a municipal park committee was formed, comprising residents and children of the local community. The committee met with the architect, Bob Leathers, from Ithaca (New York), to work on the design for the children's playground. Several volunteers and sponsors joined forces to turn the concept of the *Kids Castle* into a reality. The committee raised money and obtained tools, building materials, tents, trailers, food and a team of people to look after the children. The park was built in just twelve days. Young and old volunteers alike joined forces, working collaboratively with experts to bring life to the children's dream.

> *"When play invades one's life, it brings about change: it offers discontinuity and accelerates time. Play charges history from an exterior position which is not utopian nor spatial, but rather temporary; a future or a regenerative past"* (Agamben, 2007, p. 76).

Clemyjontri Park. Fairfax Country. Virginia

Clemyjontri Park boasts an innovative, large-scale and bright-coloured design. This structure was specifically designed for children with physical, sensory and developmental disabilities. This is a space where children can play together, no matter their differences. In this playground, children who use wheelchairs, walking frames, and other orthopaedic aids, or who have developmental disabilities, can have fun exploring and playing.

Figures 6 and 7.
Clemyjontri Park. **Fairfax (Virginia), 2006. Designer: Grace Fielder.[4]**

---

[4] http://landscapeonline.com/research/article/14030

Figures 8 and 9.
Clemyjontri Park, Fairfax (Virginia), 2006. Diseñadora: Grace Fielder[5]

In addition, it has disabled access: ramps, swings with high back supports, arm rests and other special safety features. The rubber flooring allows for wheelchair users to move around easily.

This barrier-free zone allows for easy access and is designed to develop children's senses. There is a roundabout, a picnic pavilion, and an easy-to-access car park just a short distance from the playground.

Imagination Playground

The *Imagination Playground* can be erected anywhere, since it comprises foam pieces that can be used in water or sand. Children are encouraged to stretch their imagination and explore infinite possibilities to create their own play spaces.

---

[5] http://www.fairfaxcounty.gov/parks/clemyjontri

Figures 10 and 11.
Imagination Playground.
Exhibition: *Play Work Build*. National Building *M*useum. Washington DC, USA.
Rockwell Group. Photography: Kevin Allen.[6]

According to Parellada (2005), there are two related concepts: the imagination and motor skill expression:

> *"The imagination is that which we construct unconsciously through the actions we make and the experiences that we have in our relational context from a very early age. In a manner of speaking, the imagination develops through the actions of the child, while also becoming one of the most meaningful driving forces of this action. The body is the depositary and also expression of this double interaction"* (Parellada, 2005, p. 19).

Traditional children's play elements are usually fixed structures, such as, slides, climbing frames and seesaws, which focus on motor skill development. The *Imaginary Playground* is composed of "*loose pieces*" that the children use to transform their environment into their own personal play space.

There is a wide variety of elements: cubes, bricks, curved objects and cylinders. Children can fit these individual parts together in different ways to create dynamic, modifiable structures.

Parque Gulliver. Jardín del Turia Valencia
Parque Gulliver is located in the old Turia riverbed, near to the *Ciudad de las Ciencias* (City of Arts and Science) designed by Santiago Calatrava. The park, opened in 1990, was conceived with a project commissioned by the city hall to the architect, Rafael Rivera, designer, Sento Llobel, and the expert in the traditional Valencian *Fallas* festival, Manuel

---

[6] http://www.huffingtonpost.com/jamie-davis-smith/national-building-museum_b_2199317.html

Martín. Today, this innovative space continues to inspire children with the slides that form the protagonist of *Gulliver's Travels* by Jonathan Swift. Children climb on top of this 70 metre giant by means of ramps and stairs, only to descend on slides, recreating the scene from Swift's story when Gulliver arrives in Lilliput and is captured by its inhabitants.

The life-size version of Gulliver puts the user in the shoes of the Lilliputians from the story when they clamber on top of the giant. In terms of play, climbing is a powerful activity for children, as it develops their depth and size perception.

Figure. 12.
Parque Gulliver. Jardín del Turia Valencia, 1990.
Artista fallero: Manuel Martín. Arquitecto: Rafael Rivera. Diseño: Sento Llobell.[7]

Figures 13 and 14.
Parque Gulliver. Jardín del Turia Valencia, 1990. Artista fallero: Manolo Martín.
Arquitecto: Rafael Rivera. Diseño: Sento Llobell.[8]

---

[7] http://www.turialife.com/gulliver-valencia/
[8] http://www.web-valencia.com/Valencia-Gulliver-fotos.htm

Toshiko Horiuchi Macadam Playgrounds

This Japanese-Canadian artist is known for her innovative and creative playground designs. Born in 1940, she specialises in textile art, using traditional techniques, such as crochet, knitting and knot making. She creates seemingly weightless spaces with brightly-coloured net-like structures where children and adults move around freely.

According to the artist, her first pieces were intended to be works of art. However, during an exhibition in Rome, upon witnessing a group of children climbing over work, she immediately visualised the structure's potential ludic application. In her playgrounds, children play and run around, dodging rubber balls and other shapes that are suspended in air from the coloured fabric. In addition to her textile playgrounds in Hakone Open Air Museum (Japan) and the Takino Suzuran National Park (Korea), her first European offering can be found in Zaragoza (Spain).

As Solomon (2014) states, MacAdam was looking for a new way to create and develop her works of art. She therefore studied the way in which the children played in Tokyo and also the construction of recreation spaces in open spaces with the purpose of encouraging children's freedom to play:

"MacAdam, who had been searching for a way to create a human connection within her art, saw that designing for kids would unite a piece made by hand with actual physical activity. Intrigued by a new way to consider her own art, she set out with students to investigate how and where children play. Looking at Tokyo in the early 1970s, she saw that kids were cooped up in apartments, with few opportunities to be outside. It was a harsh reality that differed from the freedom she had growing up in Japan after World War II." (Solomon, 2014, p. 63)

Figures 15 and 16.
Hakone Open Air Museum, Hakone, Japan (2009). Toshiko Horiuchi MacAdam[9]

[9] http://netplayworks.com/NetPlayWorks/Projects/Pages/Hakone_Open_Air_Museum.html

Figures 17 and 18.
Hakone Open Air Museum, Hakone, Japan (2009). Toshiko Horiuchi MacAdam.
Photos: Masaki Koizumi.[10]

Toshiko Horiuchi weaves each piece by hand creating visually stimulating spaces which encourage active play. They are extremely successful with people of all ages as they generate dynamic, constantly changing environments. Her company, Interplay Design *&* Manufacturing, designs and produces these spaces, all of which are totally unique but feature her highly-identifiable trademark style.

In addition, several imitations of her designs have been produced, with multi-coloured net-like structures leaning on and hugging trees across the globe. These pieces serve more as pieces of art, rather than play spaces, thereby paying homage to the artist's original creations situated in the urban environment.

On the other hand, the quality of materials and health and safety standards have greatly improved. Yet, it could be argued that aesthetics has suffered as health and safety issues have become the centre of focus, while structural beauty has all but been forgotten.

Figures 19 and 20.
Takino Suzuran National Park, **Hokkaido, Japan (2000)**
Toshiko Horiuchi MacAdam
Photos: Masaki Koizumi[11]

---

[10] http://netplayworks.com/NetPlayWorks/Projects/Pages/Hakone_Open_Air_Museum.html

Play is a fashionable word in urban planning, toy design and architecture, and is increasingly integrated into different disciplines of contemporary art, such as, interventions, installations and temporary art. Likewise, Gadamer (1991) affirms that in the relationship between play and art, the two elements interact like concepts or ideas that are linked:

> *"The essence of art and play as the same force where symbolic thought is converted into aesthetic thought. In this way, the representations that accompany play come and go; they are like the internal machinery of the playful soul of the child: movements, gestures, actions, constructions, sounds and drawings. The symbolic flow appears in play in a clear exercise of cultural engagement and immersion"* (Gadamer, 1991).

Public spaces offer urban, cosmopolitan and rural inhabitants the possibility to create a space of reference. This resource demonstrates how cities consider playscapes to be important elements for city planning and as a source and creation of identity.

Children's playgrounds are a relatively recent phenomenon that first appeared in cities in the 19th century, with the purpose of providing clean and safe environments for adults who worked in the city and their children. Since then, theories about play have gradually changed, reflecting the conditions that children and their parents experienced and urban design in general. Part of the aforementioned archive has been published under the name of *An Architecture of Play: A Survey of London's Adventure Playgrounds* by Nils Norman. This catalogue offers an insight into the creative processes involved and the evolution of these spaces, their successes and failures, and encourages us to consider new alternatives for future designs.

6. Description and analysis of research results

The examples presented in this project deal with art in its most complex forms, such as sculpture, painting, photography and gardens. Each discipline enriches our understanding by providing a distinct perspective of recreation spaces. They also offer innovative proposals for current children's playgrounds.

Although each play space undergoes a complex development process, they are sometimes located in leftover areas of cities that need to be used.

---

[11] http://netplayworks.com/NetPlayWorks/Projects/Pages/Takino_Suzuran_National_Park.html#3

In many cases, these sites are located in city centres and their revitalisation can be successful due to a number of factors. For example, the involvement of citizens in the design and creation of the space is important as it reflects their community identity.

Another interesting aspect is that these spaces provide an opportunity for intergenerational interaction. Although sometimes certain resources must be generation-specific, it is equally important to have spaces that promote communication between generations and the active sharing of experiences.

Growing health and safety concerns regarding play areas have led to uniformity in the production of toys and play components by the large manufacturers. This trend means that the same equipment and play elements are found in different places; something that erroneously fails to properly consider the location and environment of the intended site.

One way to enrich the use of a playground is to use natural materials sourced from immediate environment, thereby reflecting the local identity in the design.

The concept of the modern children's playground should be interactive, purposeful, interdisciplinary and aesthetically beautiful, while offering a safe environment for the children that use it.

7. Conclusions and suggestions for implementation

The design and development of public children's playgrounds must consider the following fundamental ideas:

- Playgrounds are spaces for the different generations to enjoy in the public domain, and as such, they should respect the values of peace and harmony, thereby fostering child development through independent experimentation and play.
- They should respond to cultural manifestations of urban and cosmopolitan life, as well as being an expression of the community.
- Playgrounds should feature facilities and good accessibility for all types of disabled users, by means of sensory games and adapted equipment, while also meeting established health and safety requirements.
- They should foster playing and interaction in children, through different types of play elements: traditional toys, educational toys, sound, construction, instruments, design, electronics and technology, water, as well as other visual and interactive elements that encourage active participation.

However, it is important to highlight that the child does not necessarily require toys, but rather there is a need to strengthen the role of the educator in the representations of symbolic play that the child naturally initiates. Ruiz de Velasco (2006) clarifies the function of the educator in relation to this idea:

> *"We think that the function of the educator in relation to any activity of the child should be to permit, assist, observe, record, document and subsequently reflect upon the actions in order to make conclusions and give them meaning"* (Ruiz de Velasco, 2006, p.10).

− Finally, the design should be sustainable and raise awareness about the natural environment among children though playing.

BIBLIOGRAPHY

AAVV. (2014). *Playgrounds: Reinventar la plaza*. Museo Nacional Centro de Arte Reina Sofía. Madrid: Siruela.

AAVV. (2012). *Urban playground spaces*. Barcelona: Instituto Monsa Ediciones.

AAVV. (2008). Aldo Van Eyck: the Playgrounds and the city. Rotterdam: Nai Publishers.

AAVV. (1907). *The Playground. To promote normal wholesome play and public recreation*. Vol. VI. Nº 6. September 2012. The Playground Association of America. The Playground and Recreation Association of America.

Agamben, G. (2007). *El país de los juguetes. Reflexiones sobre la historia del juego, En Agamben, Infancia e historia: destrucción de la experiencia y origen de la historia*, Buenos Aires: Ed Adriana Hidalgo.

Anderson, Linnea M. (2006). *The playground of today is the republic of tomorrow: Social reform and organized recreation in the USA, 1890-1930's. The encyclopaedia of informal education*. [online] http://infed.org/mobi/social-reform-and-organized-recreation-in-the-usa/ [Accessed: 27th March 2016].

Bejar, J. S. (2012). *Parques Infantiles: Integración paisajística del diseño*. En Paisajes Cartesianos, 29 de Mayo. [online] https://paisajescartesianos.wordpress.com/2012/05/29/parques-infantiles-integracion-paisajistica-del-diseno/ [Accessed: 29th March 2016]

Biondo, B. Solomon, S. and Hammond, D. (2014). *Once Upon a Playground: A Celebration of Classic American Playgrounds, 1920-1975*. Lebanon, NH: ForeEdge. University Press of New England (UPNE).

Broto, C. (2012). *Nuevos Parques Infantiles: Planificación y diseño*. Barcelona: Links (Leading International Key Services).

Butler, G. D. (1965). *Pioneers in Public Recreation*. Minneapolis, MN: Burgess Publishing Company.

Chudacoff, H. P. (2007). *Children At Play*. New York: New York University Press.

Diseño de la ciudad. Official Website. (2010). *Puntos de juego contemporáneos*. Vol. 72, 15 Febrero. [online] http://www.disenodelaciudad.es/puntos-juego-contem poraneos/ [Accessed: 29th March 2016]

Diseño de la ciudad. Official Website. (2010). *Proyectando parques infantiles para todos: las áreas de juegos inclusivas*. http://www.disenodelaciudad.es/areas-juegos-inclusivas/ [Accessed: 29th March 2016]

Elschenbroichel, D. (1979). *El juego de los niños. Estudios sobre la génesis de la infancia.* Bilbao: Zero zyx.

Exley, P. and Exley, S. (2007). *Design For Kids*. Mulgrave: Images Publishing Dist Ac.

Frost, J. (2012). *Evolution on American Playgrounds*. Journal: Scholarpedia. The peer-reviewed open-access encyclopedia. Volumen: 7. Issue: 12. [online] http://www. scholarpedia.org/article/Evolution_of_American_Playgrounds [Accessed: 27th March 2016]. doi: 10.4249/scholarpedia.30423

Frost, J. L. (2010). *A History of Children's Play and Play Environments*. Toward a Contemporary Child-Saving Movement. New York: Routledge. doi: 10.4324/ 9780203868652

Frost, J. L. Worthan, S. and Reifel, S. (2011). *Play and Child Development* (4th Edition). Londres: Pearson.

Gadamer, H. (1991). *La actualidad de lo bello*. Barcelona: Paidós.

Galindo, M. (2012). *Playground Design (Architecture in Focus)*. Salenstein: Braun.

Gutman, M. and De Coninck, N. (2008). *Designing Modern Childhoods. History, Space, and the Material Culture of Children.* Series in Childhood Studies. New Brunswick, NJ: Rutgers University Press.

Huizinga, J. (1972). *Homo Ludens.* Madrid: Emece Editores.

Keeler, R. (2008). *Natural Playscapes, Creating Outdoor Play Environments for the Soul*. Redmond, WA: Exchange Press.

Klanten, R. (2009). *Play All Day: Design for Children*. Berlin: Gestalten.

Lanza, M. (2012) *Playborhood Manifesto. Playborhood: Turn Your Neighborhood into a Place for Play*. By Lanza. Menlo Park, California: Free Play Press.

López de Sosoaga, A. (2004). *El juego: análisis y revisión bibliográfica*. Bizkaia: Servicio Editorial de la Universidad del País Vasco.

McCarter, R. (2015). *Aldo Van Eyck*. London: Yale University Press.

Norman, N. (2003). *An Architecture of Play: A Survey of London's Adventure Playgrounds*. Playscapes. London: Four Corners Books.

Ogata, F. (2013). *Designing the Creative Child: Playthings and Places in Midcentury America.* Architecture, Landscape, and American Culture Series. Minnesota: University of Minnesota Press. doi: 10.5749/minnesota/9780816679607.001.0001

O'Shea, K. (2013). *How We Came to Play: The History of Playgrounds*. National Trust for Historic Preservation. Washington, DC. [online]: https://savingplaces.org/stories/ how-we-came-to-play-the-history-of-playgrounds [Accessed: 27th March 2016].

Parellada, C. (2005). *Las constelaciones familiares: La psicoterapia sistémica de Bert Hellinger (hipótesis psicomotrices y educativas)*. Entre líneas, núm. 17. Febrero.

Rojals, M. (2004). *Nuevo Diseño en parques infantiles*. México D.F: Links/Structure.

Ruiz de Velasco, A. and Abad, J. (2011). *El juego simbólico*. Barcelona: Graó.

Ruiz de Velasco, A. (2006). *Del placer motórico al placer visual*. Aula de Infantil, Núm. 32 (julio-agosto).

Senda, M. (1992). *Design of Children's Play Enviroments*. New York: Mcgraw-Hill.

Sheail, J. (2010). *Nature's Spectacle. TheWorld's First National Parks and Protected Places.* Earthscan: London. doi: 10.4324/9780203495643

Smith, A. (2010). *Popular Mechanics on the Playground Beat*. Playgroundology. [online] < https://playgroundology.wordpress.com/2010/12/10/popular-mechanics-on-the-playground-beat/ > [Accessed: 25th March 2016].

Solomon, S. (2014). *The Science of Play: How to Build Playgrounds That Enhance Children's Development*. Lebanon, NH. University Press of New England.

Solomon, S. (2010). *American Playgrounds: Revitalizing Community Space*. Hanover, NH: University Press of New England. Vol. 26, No. 2. Design Issues. [online]: http://www.mitpressjournals.org/doi/abs/10.1162/DESI_r_00008?journalCode=desi#.VrX LyBjy09Im [Accessed: 4th February 2016].

Szőköl, I..: *Key competences in educating teachers*. In: Edukacia-Technika-Informa-tyka. Rzsesow : Wydawnictwo uniwersytetu Rzeszowskiego, 2015. évf. 1 (11) 2015, p. 249-253. o.

Szőköl, I.: *Quality management system in educational process*. In. Gómez Chova, L. – López Martínez, I. – Candel Torres, I. (eds.): 8th International Conference of Education, Research and Innovation. Seville (Spain) : IATED Academy, 2015. p. 7282-7285.

Szőköl, I.: *The Methods and the Ways of Pedagogical Evaluation*. In Hájková, E. – Hasilová, K. (eds.): XXXIII. International Coloquium on the Management of Educational Process. Brno : Univerzita obrany, Fakulta vojenského leadershipu, 2015, p. 22.

Tonucci, F. (2004). *La ciudad de los niños*. Barcelona: Fundación German Sánchez Ruiperez.

Trachana, A. (2012). *Urbe Ludens. Ciudad y Territorio*. Madrid: Ministerio de la Vivienda.

Urtasun, A. Moraza, J. L. and González del Campo, J. (2011). *Homo Ludens. El artista frente al juego*. Navarra: Fundación Museo Jorge Oteiza.

Vigotsky, L. (1995). *La prehistoria del desarrollo del lenguaje escrito*. En: Obras escogidas, vol. III. Madrid: Visor.

Woolley, H., Armitage, M., Bishop, J., Curtis, M. and Ginsborg, J. (2006). Going Outside Together: Good Practice with Respect to the Inclusion of Disabled Children in Primary School Playgrounds. *Children's Geographies*. Oxford: Routledge. doi: 10.1080/14733280601005666

Zeuler, R. M. (2013). *Lina do Bardi.* Londres: Yale University Press.