

TALE

tellers



Paths of experience



*Politecnico di Milano Design School
Course Design of Product for Innovation*

mentor / Prof. Francesco Zurlo

*student / Mina Todorovic
matricola 767328
academic year 2013 / 2014*

I would like to take this opportunity to thank my family for their continued support and dedication to my success.

I would also like to thank my professors and my colleagues.

You all have encouraged me to achieve more than I thought possible. I am a better person, designer, researcher, and writer because of all of you.

You have greatly helped to shape the professional I will become.

Index

<i>Abstract</i>	4
<i>Introduction</i>	6
1. Demographic Analysis	
1.1 Introduction	9
1.2 Elderly	11
1.2.1 Elderly, Quality of Life	17
1.3 Kids, Yesterday, Today and Tomorrow	22
1.3.1 Kids, Quality of Life	23
2. Grandparenthood	
2.1 Introduction	30
2.2 The study, Grandparents Role Performance	32
3. Play	
3.1 Introduction, What is play?	38
3.2 The Importance of Play and Playfulness	39
3.3 The Importance of Age	44
3.4 Toys throughout the History	46
4. Intergenerational Play	
4.1 Introduction	53
4.2 Emphasis on Design	55
5. Nature	
5.1 Intorduction	61
5.2 Children's Extinction of Experience	62
5.3 Outdoor Play	67
5.4 Citizen Child, Play as Welfare Parameter for Urban Life	71
6. Playground, Evolution and Design	
6.1 Introduction	77
6.2 Evolution Design	79
6.2.1 Traditional Playgrounds	81
6.2.2 Adventure Playgrounds	86

6.2.3 Imaginational Playgrounds	89
6.2.4 Contemporary Playgrounds	91
6.2.5 Nature Playgrounds	96
7. Case studies	
7.1 Case study overview	99
7.2 Case study mapping	119
8. The Project, TaleTellers	
8.1 TaleTellers Introduction	123
8.2 Identifying the elements	127
8.3 Context, Site Analysis	131
8.4 OcchioCollina, Sensuous Perception	141
8.5 Groviglio, Mysterious Grove Paths	151
8.6 Suonardino, The Sense of World by its Sound	159
<i>Conclusion</i>	171
<i>Bibliography</i>	173
<i>Webliography</i>	174



Contemporary society and modern lifestyle reshaped ones everyday living. Relations between societal groups are placed in new context where link among nuclear family members lost on its strength.

In an age where human modification of urban spacial structures suppressed connectivity and accessibility with nature, revitalizing of this concept is critical.

This project in the fist place aims to reintroduce nature to children who are living in growing cities and reinforce the bond between generations. Where grandparents and elderly are involved as transmitters of knowledge and wisdom.

The main value of project is to connect and teach children about their surroundings throughout system of objects enabling them to read and interact with natural shapes.

Today kids are the adults of tomorrow.

Bruno Munari

The problem of design is born by need. Then designers are ones who materialize it into products, services and artifacts using various methods. In this project my childhood experience helped me recognize a need for reintroducing nature to nowadays children. Unlike today's juveniles I had advantage to be surrounded by nature and explore the beauty of it constantly. Thinking about what it means for children to grow up now, and how different their experience of nature and definition of life is, stimulated me to undertake this assignment and shape it with educative values. As the nature deficit grows, it is becoming more than evident that direct exposure to nature is essential for physical and emotional health not only for young but for adults as well.

Introducing nature in urban environment is a complex task where nature wide range of aspects must be filtered in order to obtain best results. This project combines several elements sunlight, natural shapes, color, interactivity, all put together for one purpose, reconnecting our senses and awareness towards nature.

The following research focuses on analyzing importance of child outdoor activities and increasing its relation with nature but also drawing in elderly as growing population. These two social groups benefit from interpersonal relation by exchanging each others knowledge especially when it comes to nature and life experiences.

The birth of grandchildren is rebirth for grandparent due to the fact that they reflect themselves into new roles. This relation is build on reciprocal exchange where both grandparents and grandchildren share various types of knowledge. In return benefit is followed by activating elderly and placing them as educators who in comparison with parents are more patience, have more time to dedicate and more over their past experience unveils. As mentioned before today's kids perceive nature as an abstract fact. Additionally they are habituated to see the life wrapped in plastic where reality is imperceptible. Interaction with reality ,that we are part of, its essential both for kids and adults. An awareness and relation with space we are living in is what this project aims to apprise.

Demographic analysis





Demographic analysis

introduction

Picture of a world in which modern society lives in the last decade is changing at progressive speed. We are witnesses of a new lifestyle, hobbies, relationships, relationship to what is around us, our attitude towards life. Consequences of the new realities in which we are the main actors in some of its segments are positive and negative. We are increasingly faced with the fact that the world's population ages, while the number of those to whom the world remains is less.

New economies that influenced rapid urbanization should focus more on environmental services, green jobs, health sector. The key lies in process of creating enabling solutions where social innovation is put in front line.

Today we have the phenomenon of densely populated urban areas. Social and urban structure of the city is changing. Modern people live rapid way of life, and therefor has become a unit in itself. Isolation and alienation are words that are used more often in today's terminology.

The context of the local project aims to connect people with nature, the world that surrounds them to refresh their familial relationships and interpersonal as well.

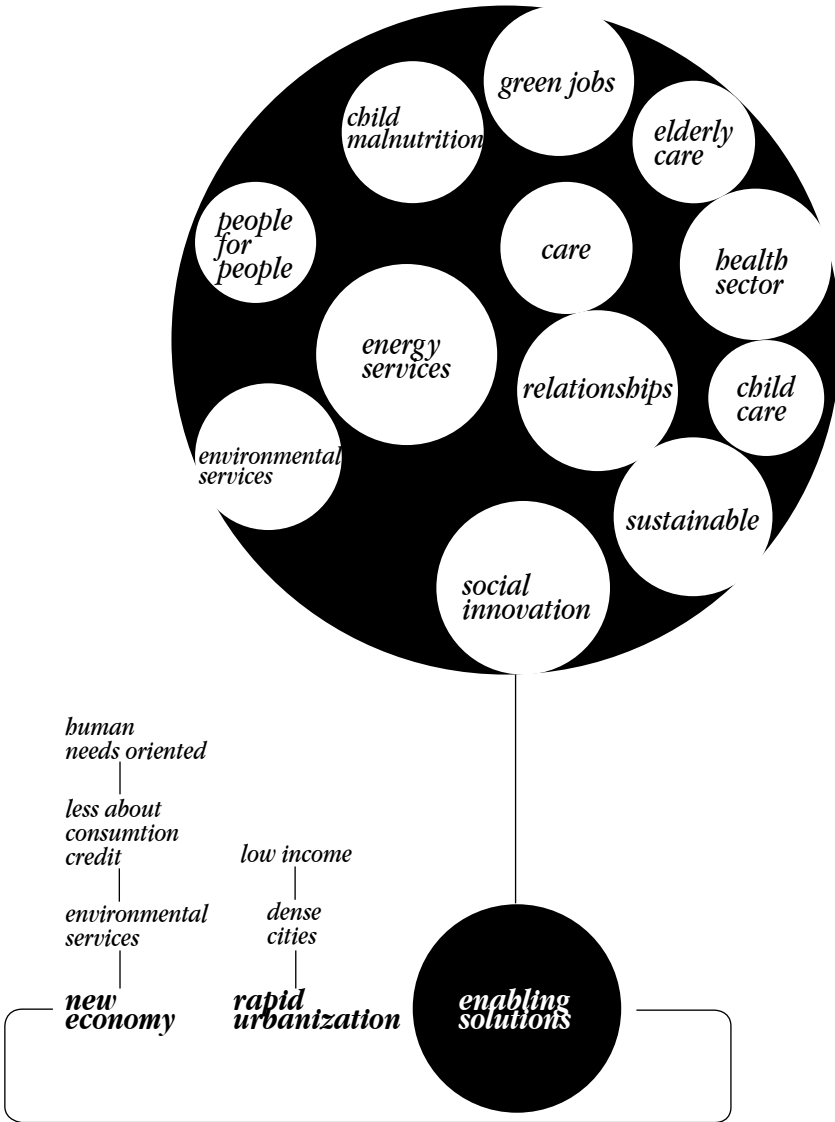


figure 1.
 Manzini E. , *Enabling solutions for Sustainable Living*

Demographic analysis

elderly

From the societal perspective, aging is one of the mega trends in our century. This holds in particular for Europe, which is the continent already with the highest proportion of older citizens. This population aging process will continue for the better part of this century. Our longer lives, however, also provide fascinating opportunity. The overlap of four generations is a novelty in human history and will provide the younger generation with more experiences to draw from. Modern technology and the increase of professions in which experience and management abilities count more than physical strength will open new possibilities for older individuals to actively participate.

Life expectancy age has increased significantly and average birth rate has come down. A decade back, 9 percent of world's population was in the age group of above 60 years old but now it has shot up to 16 percent and by the year 2025 it is projected to be more than 20 percent of total population. This large group of aged and non-productive people is going to create complications for the whole world if no proper planning is initiated now. Western European countries such as

Germany, Italy and Spain, by contrast, are aging fast. In Germany and Italy, for example, the share of the population that is 65 or over is expected to rise from one-fifth today to more than one-third by 2050.

In Italy there are 147.2 elderly per 100 young; is what is called "aging index", and in Europe, only Germany has an index of our more pronounced.

Italy has a slightly negative natural population growth and is among the last in Europe, close to Greece and Portugal, vice versa, the increase due to migration is significant and places Italy at the top of the list of countries more "attractive." The average life expectancy of women is 84 and a half years, one of the men a little more than 79 years, among the longest of the European Union.

The rise in the number of those who are old and are non-productive and those who do not generate any hope immediately raises an alarming economic problem. It is also a social and cultural problem. Who is going to provide support to them and how?

Apart from food and shelter, the old people need care and medicines.

They also crave love, affection and tender care. They would like to interact, to

be heard, to be visible, and they would like a bit of space of their own and they would like to have a constructive and creative role to play in society. They expect regard and involvement. They don't want to be pushed towards the margin. They don't want that the society should ignore them just because their bodily prowess has diminished.

Italy

In Italy according to ISTAT there are 12 million 384 thousands of elderly (147,2 elderly on 100 young people). In entire Europe only Germany represents the higher index of elderly.

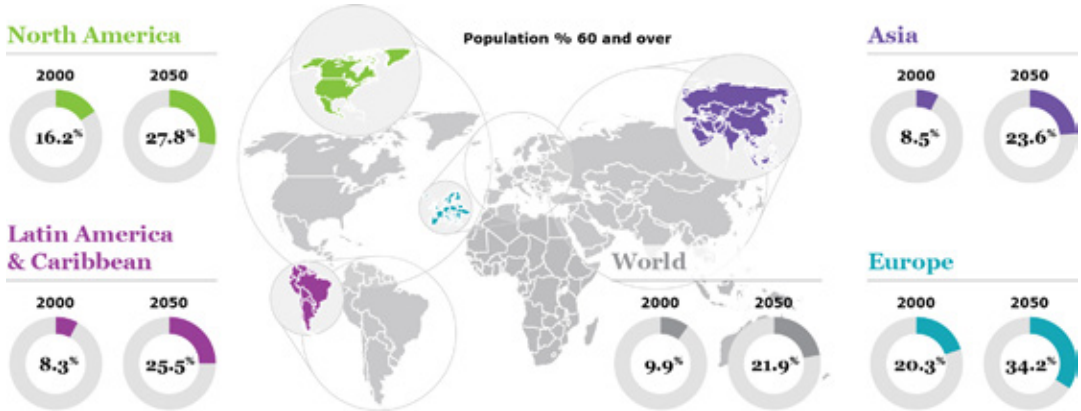


figure 2.
In the next 40 years, one-out-of-five consumers worldwide will be over 60 years of age. According to The Worlds Population Prospects, the world over 60s will double by 2050.

Demographic analysis

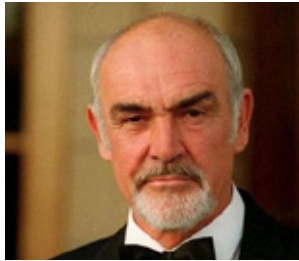
elderly

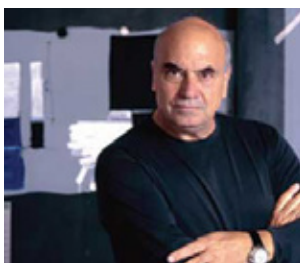




Demographic analysis

elderly / baby boomers





Demographic analysis

elderly/ Quality of life

With regard to QoL in old age there is a tradition of gerontological research on successful aging, positive aging and healthy aging. Furthermore, the dominant scientific and professional approach to assessing QoL in old age has tended to homogenize older people rather than recognizing diversity and differences based, for example, on age, gender, race and ethnicity, and disability.

It is not surprising, therefore, that this paradigm is associated with the idea of old age as a problem, something that must be adjusted to. Housing is a very important aspect of the QoL of older people everywhere. In Western Europe it is usually a place associated with individual and family biographies and, therefore, is imbued with meaning and aspects of identity. It is also the location where older people spend much of their time and the proportion of time spent at home rises in old age.

For example, in Germany, the Berlin Ageing Study shows that, between the ages of 70 and 103, 80 per cent of activities are carried out within a person's home. In Sweden older people spend 80 to 85 per cent of the day at home. In the five countries and across the EU

as a whole there is a clear trend towards living alone in old age, a trend that is particularly marked in advanced old age.

Elderly and disabled people who do not have meaningful occupation find leisure a burden. Social and recreational activities are limited by income, physical design and transport facilities. Many of them will not carry out activities alone, because they lack the confidence to use the city. Elderly and disabled people benefit a great deal from some exercise, social contact and pleasurable activities of skill or fun, but they do not have the opportunity to do so.

Parks and public spaces, when available, are rarely designed to accommodate the special needs of elderly and disabled people. Concert halls, auditoriums and theaters are centrally located requiring transport. Sports facilities are rarely designed to include use by elderly and disabled spectators. The problems they face are not of their own making but rather due to structural causes and the development conditions of the city.

Local governments must address these problems if they are to ensure that the economic and social development of the city is to progress. Otherwise, elderly and disabled people are excluded from the benefits arising from city life while they add to welfare, health and social service costs of the city.



Demographic analysis

elderly/ activities screening

*yoga
festivals
clubs
house work
walks
advising*



*activities
men*

*reading
caring
sat sangs
chatting
festivals
cooking
parties*



*activities
women*

*neighbours
friends
siblings
children
grandchildren
relatives
colleagues
doctor*



relations

Elders



concerns

*health
safety
memory
politics
family
emergency
grandkids*



tangibles

*book
watch
radio
spectacles
rocking
chair
mobile*



intangibles

*memories
recipes
stories
anecdotes
riddles
lullabies*

*talking
chatting
emails
skype
letters
mobiles*



comunnication

*diary
photo
mobile
spectacles
handbag
gifts
wallets*



*things
personal*

erly

At a senior stage, people have the same basic needs as at any age. By activities screening of elderly people we can get the picture on their life style.



characteristics

*experience
patience
ssharing
wisdom
relaxing
caring
sitting
listening*



environment

*market
home
temple
dubs
playground
parks*



Demographic analysis

kids / yesterday, today and tomorrow

The culture of childhood that played outside is gone and children's everyday life has shifted to the indoors. Children today have few opportunities for outdoor free play and regular contact with the natural world. Their physical boundaries have shrunk due to a number of factors. A culture of fear has parents afraid for their children's safety. Due to stranger danger, many children are no longer free to roam their neighborhoods or even their own yards unless accompanied by adults. Fears of ultraviolet rays, insect-borne diseases and various forms of pollution are also leading adults to keep children indoors. Furthermore, children's lives have become structured and scheduled by adults, who hold the mistaken belief that this sport or that lesson will make their young children more successful as adults. But not all the children wants to be organized. The physical exercise and emotional stretching that children enjoy in unorganized play is more varied and less time-bound that is found in organized sports. Playtime- especially unstructured, imaginative, exploratory play- is increasingly recognized as an essential component of whole- some child development.

Demographic analysis

kids/ Quality of life

Today kids are deprived of the outdoor adventures of previous generations. Contemporary children mainly exercise their fingers on computer keyboards, TV and game controls rather than kicking a ball about in the street. Are the generation who appear to have so much more than their elders suffering from a lack of freedom because their over-anxious parents wrap them in cotton wool?

In the United States, children are spending less time playing outdoors or in any unstructured way. From 1997-2003, there was a decline of 50 percent in the population of children nine to twelve who spent time in such outside activities as hiking, walking, fishing, beach play, and gardening, according to a study by Sandra Hofferth at the University of Maryland.

Generation of children is not only being raised indoors, but is being confined to even smaller spaces. Jane Clark, a University of Maryland professor calls them "containerized kids". They spend more and more time in car seats, high chairs, and even baby seats for watching TV.

When small children go outside, they're often placed in containers strollers and pushed by walking or jogging parents. Most kids containerizing is done for safety concerns, but the long-term health of these children is compromised.

British study discovered that average eight-years-old were better able to identify characters for Japanese card trading game Pokémon than native species in the community where they lived: Pikachu, Metapod, and Wigglytuff were names more familiar to them than otter, beetle, and oak tree.

The amount of TV that children watch directly correlates with measure of their body fat. In the United States, children ages six to eleven spend about thirty hours a week looking at a TV or computer monitor. Parents are told to turn off the TV and restrict video game time, but we hear little about what the kids should do physically during their non-electronic time.

Most children today are hard-pressed to develop a sense of wonder, to introduce what Berenson called the "spirit of wonder" while playing video games or trapped inside house because of the fear of crime. Asked to name their favorite place, children often describe their

room or an attic- somewhere quiet. A common characteristic of special places is quietness, peacefulness. So finding wonder outside of nature is surely possible. But electronics or the built environment do not offer the array of physical loose parts, or the physical space to wander.

If we hope to improve the quality of life for children, and for generations to come, we need a larger vision. We can make changes now in our family lives, in classrooms, and in organizations that serve children, but in the long run, such actions will not seal the bond between nature and future generations.

Yet no matter how designers shape it, any city has limits to human carrying capacity- especially if it includes nature. Children in the future will still grow up in residential areas outside cities. The current models for that grow in unsatisfactory; they include suburban sprawl at the edges of the cities and buckshot development in rural areas. Both separate children from nature.

When seen through prism of green urbanism, however, the future of small town and rural life is exciting. Children who grow up in new "Green Towns" will

have the opportunity to experience the nature as the supporting fabric to their everyday lives.

The technology and design principles for widespread creation of "Green Towns" already exists, and an incipient back-to-the-land movement is emerging, imagining and creation of them can be the great work of for children and their quality of life.

Demographic analysis

kids/ activities screening

*sport
playing
studying
playgrounds*



*activities
boys*

*sport
chatting
studying
bday parties
festivals*



*activities
girls*

*neighbours
friends
siblings
parents
relatives
teachers*



relations

Kid



concerns

*play
friends
family
emergency*



tangibels

*book
ball
toys
joystick
spectacles
mobile
computer*



intangibels

*lullabies
games
riddles
stories*

*videogames
talking
skype
computer
emails
mobile*



comunnication

*toys
diary
color pencil
photo
shool bag
mobile*



*things
personal*

ds

Either indoor spaces become more attractive, or outdoor spaces become less attractive or BOTH.



characteristics

*patience
inexperience
ssharing
immature
active
listening*

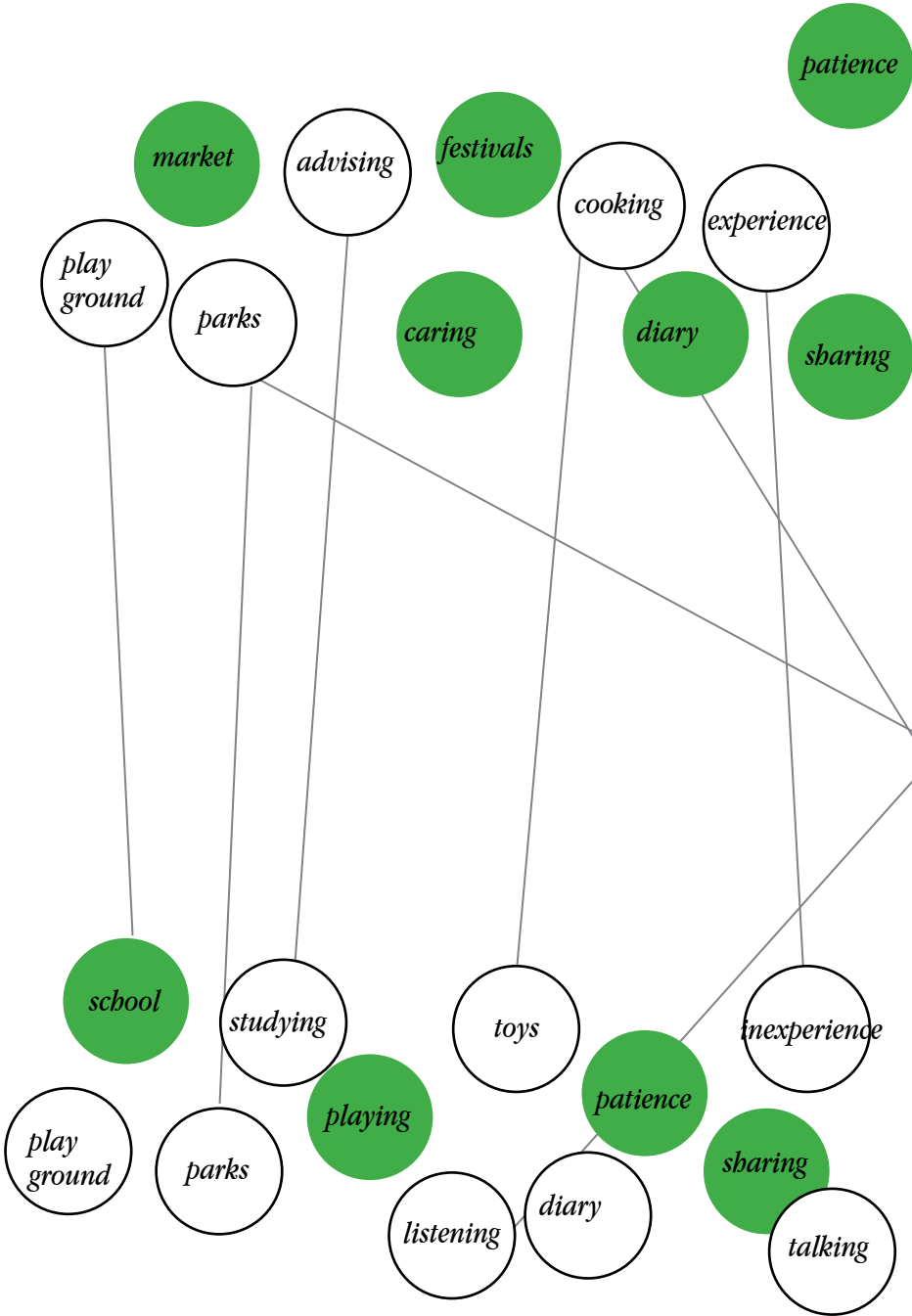


environment

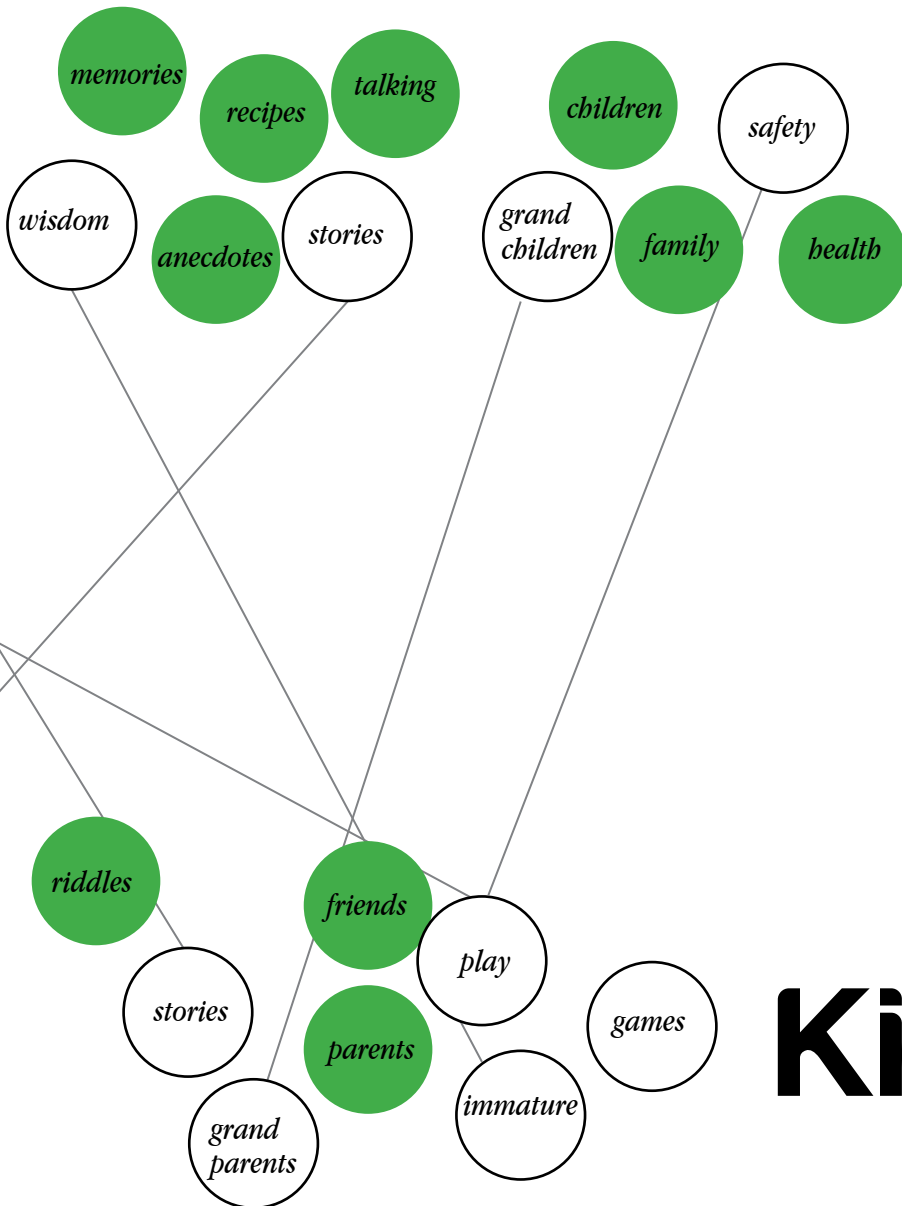
*park
home
house play
room
playground
school*

Demographic analysis

summary kids/ elderly activities



Elderly



Kids

*Grandparents are similar to a piece of string :
handy to have around and easily wrapped around the fingers of their
grandchildren.*

Unknown author

Grandparenthood

introduction

Across Europe increased life expectancy means that there are more older people and it is now much more common for a child to grow up while their grandparents, and even great grandparents, are living. At the same time falling fertility rates mean that the proportion of older people is increasing and there are fewer children per family. A large proportion of children in Europe and other parts of the world will have the opportunity to form long lasting relationships with their grandparents.

The growth in mothers' participation in the labor market is increasing demands for childcare. This may be leading to a greater role for grandparents in looking after children whilst their mothers are working.

In most European countries there has been a decline in three or more generations of the same family living in the same household, and both the nuclear family and older people are more likely to live independently. Even so, family members are the main source of informal childcare and support, and grandparents play an important role in this.

In many countries there has been a rise in divorce and cohabitation rates and in the number of children born outside of marriage. More children are living

in households with just one parent, or in step families. In many countries lone mothers need to work full-time and are less available to look after their children. Grandparents are more likely to care for grandchildren if the grandchild's parents are divorced. Grandparents are likely to act as a "reserve army" filling in gaps to meet childcare needs. In some European countries levels of grand parental involvement in childcare are high.

there are striking differences across Europe in the level and intensity of childcare provided by grandparents. In Italy, Spain and Greece 40 per cent of grandparents provide regular childcare for their grandchildren, compared with 20 per cent of grandparents in Sweden, France and Denmark. On the other hand, more grandparents report providing any childcare in Sweden, France and Denmark, possibly reflecting higher maternal employment rates and grandparents stepping in to provide occasional help to working mothers in those countries, bridging the gap between formal childcare and parental care.

Grand parental involvement in children's lives generally has a positive impact on children's well being.

Research from the UK indicates that grand parental involvement is linked to

better emotional adjustment and fewer behavioral problems among adolescents. US research shows that children with strong relationships with grandparents have fewer depressive symptoms than those with weak grandparent relationships.

Grandparenthood

the Study / Grandparents Role Performance

Method

The survey asked (130 items) about expectations for grandparent role performance, relationship quality, frequency and modes of communication, and family demographics.

Participants

(N = 534)
ages ranged from 18 to 27

Analysis

The current study focuses on the responses to an open-ended question that asked participants to describe their views of major roles grandfathers play.

Constant comparative method (Glaser & Strauss, 1967) was used to analyze qualitative responses. The constant comparative method consists of four stages:

- 1) comparison,
- 2) integration,
- 3) delimitation, and
- 4) theorization

Findings

The analysis identified several major themes:

supporter,
authority,
shaping grandchildren,
spoiler, and
friend

Supporter

In general, the study participants perceived the grandfather as a major source of support for the entire family, providing both physical and emotional support for their children on one hand and for their grandchildren on the other. Participants mentioned the grandfathers role of emotional support by being a friend, and a physical presence or being there at any given time.

Authority

Grandfathers were seen as someone whom the family looks up to when major family decisions need to be made. His word seems to be the final word in the family. Comments expressive of such authority include “the rock of the family”.

Substitute Father

The sub theme substitute father refers to expectations that the grandfather will step up in the absence of the father.

Shaping Grandchildren

The sub theme shaping grandchildren refers to efforts by the grandfather to encourage the grandchildren to become well-rounded persons, being a mentor and teacher to them. This appears to be a character building and socializing role. It includes two sub themes.

Mentor

The sub theme mentor connotes that the grandfather influences the grandchild to become a better person. Participants reported that grandfathers used several mentoring strategies to socialize them: advice, guidance, sharing personal experience/stories, role modeling, and cultivating work ethics.

Teacher

Teacher appears to be the pragmatic arm of shaping grandchildren. This depicts grandfathers as teacher, passing knowledge/information, survival and practical skills.

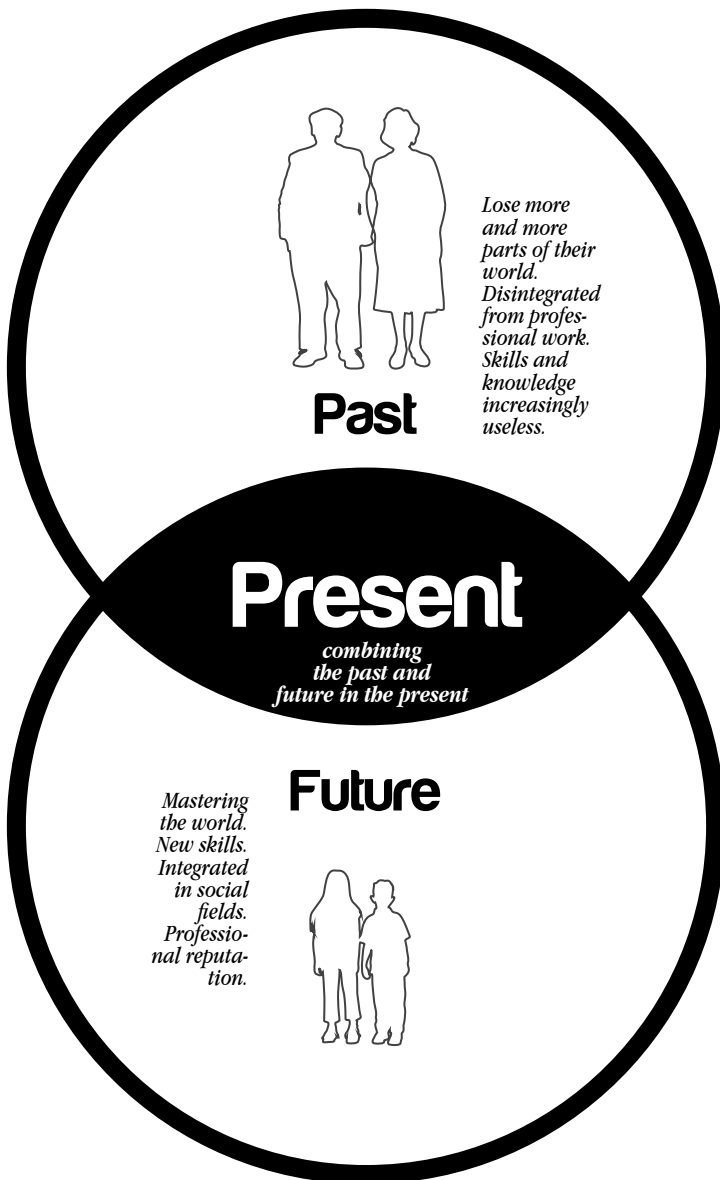
Spoiler

Friend

Grandfathers were viewed as friends by their grandchildren, as indicated in the following comments, ... "like my grandpa helped me and my brother building things, and played lego with us", "grandpa's introduce their grandchildren to outdoors recreation".

Conclusion

The findings from this study show that the participants perceived the grandfather as a key supportive figure. The findings from this study were contrary to the widely held view that grandmothers exclusively provide the nurturing for the grandchildren.



When grandparents and grandchildren are learning together as a result is transformation of ideas.

Grandparents are perceived as important resources of knowledge while at the same time grandchildren are in posses of new competencies that elderly would gladly learn.

For instance the progressive development of technological devices whit which elderly are detached.

*You can discover more about person in an hour
of play than in a year of conversation.*

Plato, Greek philosopher

Play is a pivotal part of a child's life. It fosters creativity, imagination, social connections, and learned behaviors. Play is the activity which can be defined as "a range of voluntary, intrinsically motivated activities that are normally associated with pleasure and enjoyment." Play can also be considered a rehearsal for acting-out real life events- such can be seen when children play house or school. For children, play is a critical element of growing-up. Sheridan Bartlett defines play as passionately engaging in the surrounding world through "exploration, manipulation, physical exuberance, experimentation and pretense, either alone or with others." Bartlett goes on to call play a "basic human drive" which is fundamental to development. This claim is backed by information in the neurophysiology and psycho-pharmacology which indicates "that distinct changes in the brain occur as a result of play" the result of which are specifically important in early life. Bartlett continues by stating that the potential for this important early childhood learning takes place primary in the children's play.

Play

the importance of play and playfulness

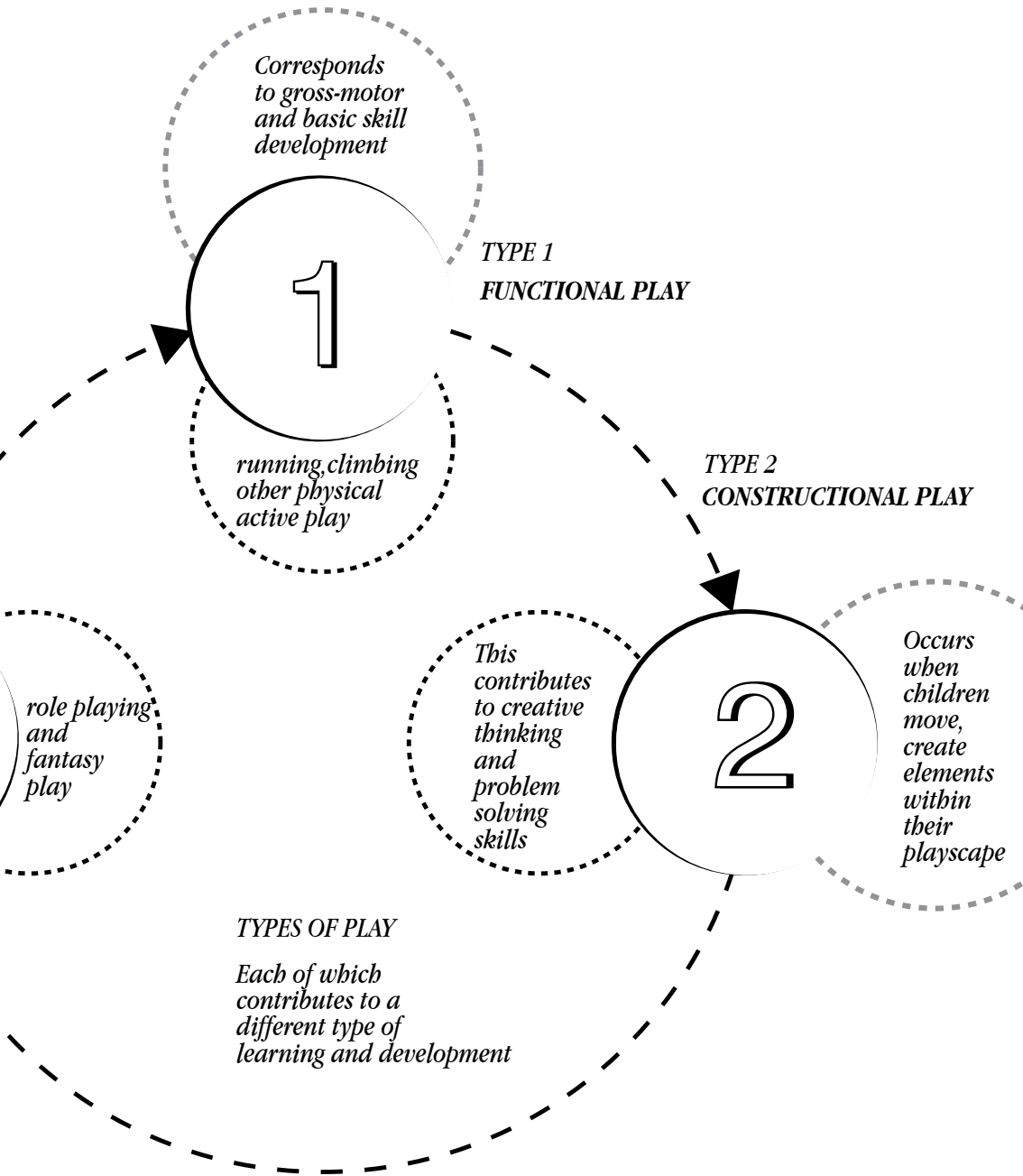
Experts agree that play is a form of informal cognitive learning. Bidy Youell states that play is a form of cognitive development, and “a vital precursor of the capacity for work and love.” Interestingly, Youell also includes within her definition of play the idea that “play and work are not opposites, nor are they mutually exclusive” and play can be considered a form of experimentation with real-life situations; meaning that play can be found within work and vice versa and that play situations often afford some type of real-life learning—whether it be physical, mental, or social. Youell concludes that “play and playfulness in a child’s early relationships is of crucial importance in the development of a secure sense of self or self-esteem. This suggests that the experience of play itself is important in the development of the future and the ability to interact with the social environment and within the work environment.

TYPE 3 SYMBOLIC PLAY

Allows children to experiment with social skills for use in future real-life situations

3

A diagram illustrating Type 3 Symbolic Play. It features a central solid black circle containing the number '3'. This circle is surrounded by a larger, dashed grey circle. An arrow points from the bottom of the dashed circle towards the solid circle. Dashed lines also extend from the top and right sides of the dashed circle.



According to this study the “stimulation of inventiveness and creativity, and the possibility of discovery are directly related to the number and the kind of features in the environment.

Fjortof and Sageie (2000)

Play

*the importance of play and playfulness
skills developed through physical active play*

MOTOR SKILLS

- *balance*
- *coordination*
- *flexibility*
- *endurance*
- *strenght*
- *agility*

COGNITIVE INTELECTUAL DEVELOPMENT

- *attention*
- *problem solving*
- *creativity*
- *goal-setting*
- *exploration*
- *discovery*
- *manipulation*

A background image showing children playing outdoors on a paved area. One child in an orange shirt is on the left, and others are in the background. The image is slightly blurred.

EMOTIONAL DEVELOPMENT

- *self-regulation of*
- *emotion*
- *curiosity*
- *taking measured risks*

SOCIAL DEVELOPMENT

- *child must communicate clearly to one another*
- *they must cooperate on the basic elements of play, such as sharing and taking turn*

The game is continuous activity and mental creation.

From the beginning of 20th century kids and childhood started to be observed by professional pedagogical, pediatrics and anthropologists.

The game is a complex phenomenon that concerns the intrinsic part of man and is too often associated only at the age of childhood.

It is only in recent times that the play is seen as a way to learn and grow better kids and especially educators see the playing field as the best way to observe the way children learn and develop their intelligence. In addition, greater emphasis on the importance of play for the child, in 1989 the United Nations has formulated a charter of the rights of children and childhood.

“If you want to be creative, stay in part a child, with the creativity and invention that characterizes children before they are deformed by adult society“

by Jean Piaget .

However kids experience and learn looking into things and into the adult world.

Jean Piaget distinguishes different types of game that the child is able to do according to his age. The game is the

real job of the child that he collides and relates with himself and with reality of people and objects, the aim is to become an adult capable of naming things and stand by itself.

The initial effort is that made by the movement of your body and its movements in relation to things around him; Learn the relationship between cause and effect and the principle of gravity, which will then be able to interact with intentionality and effectiveness.

Around 2 years child wants to explore the world on his own to create and transform the space around him. The game is the way of the child to his mental development, not only in terms of cognition (intelligence, ability, performance), but even more so in emotional terms, self-assurance and ability to stay healthy in the world. Children when playing are imitating the world surrounding them, in this way they are developing experience to become an adult.

The game is based on the rules for the achievement of a purpose. The toy is without rules and is a tool for the development of creativity and imagination of the child. The toy becomes game if the rules are added.

sensorimotor stage
touch / shout

preoperational stage
symbolic play /
transitional object

full operational stage
structural toys / rules /
competition

0-2

3-6

6-10

The children initially attribute life to objects both animate and inanimate. This tendency of the child according to Piaget is called "child animism."

Until the age of 6-7 years, all the bodies for the child are conscious and alive, even those still.

Between 6-7 years and 8-9 years, consciousness and life of child are attributed only to the movable objects, regardless of its origin, whether it is caused entirely outside or with proper motion. It is a moment of transition in which the child considered conscious that which moves, simply because it ignores the spontaneous movement. The child does not distinguish, initially, intentional acts from unintentional ones, the psychic world from the physical, the subjective from the objective, and gives things life, consciousness, and emotional.

In the aspect of concentration child tends to observe a single particular neglecting other equally important and deforming in this way his thoughts. For example, if the child sees pour the same amount of water from a small glass to another tall and thin, he assumes that the amount of water in the second glass is greater, since it focused attention momentarily on the height reached by the liquid.

Only at the end of the pre-operative period child begins to take account simultaneously of different aspects of the same situation.

The child towards the end of the pre-operative stage (6 years) is able to do groupings based on similarities more or less complex. Still missing the ability by Piaget called "class inclusions" which will be gained to 7-8 years and allows the child to understand that some objects are subclasses of a common class.

The age of 6 years coincides with the beginning of schooling. Surely all this leads to a profound change in social, emotional and intellectual. If preoperative period, the language had no function as communication objective, at this stage child is very familiar with usage of language. The child after 7 years is able to connect, coordinate and to dissociate its actions from those of others.

Outdoors experiences are important to create connections between children and nature. There is a time-frame in which these experiences need to happen in order to create a lasting connection. While these experiences are often understood by children in retrospect,²⁸ experts point to the need for pivotal experiences to happen in the “developmental window of opportunity” which takes place between early and middle childhood.²⁹ This is primarily due to developmental reasons.³⁰ Kahn states that developmentally children in early childhood begin to develop understandings of the plant and animal world.³¹ Children in early to middle childhood have what Sobel calls “magical thinking” which optimizes “the opportunity for transcendent nature experiences in middle childhood.

3-6

During early childhood between the ages of three-six years children form utilitarian connections; understanding nature as it means to them directly. For example, a child of four or five can see a stick as a sword, king's staff, or drawing utensil.

5-7

After five-seven years when middle childhood begins, children's brains are developed enough to be capable of a greater sophistication of learning, or concrete operations. As children enter middle childhood they begin to see the world in terms of connections to the larger natural world; this is called a bio centric perspective. Children in middle childhood develop humanistic, symbolic and aesthetic perspectives on nature. This means that children are able to abstract the importance of natural elements past their own personal needs or desires.

For example, a child of seven or eight is capable of understanding that not only is the stick a device which can be used for play, he/she is also able to make abstract connections to the stick as a branch that brings nutrients from the tree-trunk to the leaves and assists in the creation of oxygen.

Children in primary school “have clear concepts about the natural environment, its problems and risks, their own ability to reduce the risks as well as the ability of powerful others, and also who they regard as responsible for reducing these risks.

The arts and crafts and Art Nouveau style were the arts that emphasized the unity of form, a return to craftsmanship and a new life of design through organic forms and imagination. Even the new pedagogy was inspired as with art to nature and the creative power of each individual and of every child.

At the end of World War the first educational and artistic movements were formed. The artistic avant-garde evolved simultaneously in several European countries: Futurism in Italy, De Stijl in the Netherlands, Expressionism and Bauhaus school in Germany. The light motif of the avant-garde concept was that innocent eye of the child, there was a revival of pure and simple forms. The designers of the time created new and innovative forms for furnishings, toys and books that evoke the energy and imagination of children and at the same time help the society in the future. and that of new materials and industrial production, the designers develop new schools, clothing and simple decor, light and flexible: a "tabula rasa" on which children could adapt their identity. Interactive books and games of construction allow the child to turn their imagination into reality travel, preparing them to modern industrialized society.

After World War II were introduced new school program that established a spirit of hope and reconstruction. The child was seen as a vision to build a better world and more egalitarian. The toy price skyrockets and in some areas the game is obvious references to violence and nationalism by creating racial and gender stereotypes. As a result, some psychologists, educators and designers put together their forces to creates safe toys that does not inspire violence. From 60's innovation and mass production contributed to the proliferation of children's goods and intensified market research and advertising. During this time focuses the Union between the child's world and the realm of advertising. The child becomes an individual consumer, aware and autonomous. In 60 there was also a improvement in materials and production techniques; also improves the power of the brands and companies, electronics-related techniques and digital media. The modern world is divided between differences in the safety, quality and rights of children: many suffer from hunger, overwork, they are victims of violence and abuse. These realities have emerged throughout the 20th century and in the last 50 years has tried to defend the rights and needs of children through various organizations, including UNICEF.

'20/'30



*Montessori
Didactic material*



*G. Balla
Partition Wall*



*L.H. Mack
Color Mixer*

*J. Torres Garcia
Village with numbers*



'40/'50



*F. Touzet
Mon Alphabet*



*Il gioco delle 3
ocche*



*R. & C. Eames
Child's Chair*



*J. Prouvé
School desk*

'60/'80



Baby Dolls



*Niklová
Wooden toys*



*B. Munari
Abitacolo*



*C. Greenly
Wisboné House*

'90/'2000



*M. J. Grey
Zoób Play System*



*G. Pesce
Crosby Chair*



*H. Sojama
Aibo Entertaining
Robot*



*Ikea
PS Lomsk
Swivel Chair*

Toys through out the history



M. Podbájská



*P. Zwart
Child chair*



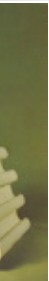
*I. Sutnar
Town blocks*



*K. Bojesen
Monkey*



Lego



*Mc Donalds
Happy meal*



*Tomy Omnibot
2000*



*R. Limbrick
Space Station and Space Rocket
carbord toys*



*Maggis
Puppy*



*Nintendo
Wii*



*Apple
iPad*

Play

conclusion

In a constantly evolving world, social and environmental factors have greatly impacted on children's opportunities for outdoor play. Where once children may have spent time playing in the street riding bicycles, playing chasing games and ball games or enjoying other outdoor pastimes increased traffic has made these areas and play opportunities off-limits for children as the dangers are far too great. Children are now confined to backyards or local parks for relatively safe places to play. Yet even these are changing. With growing populations, the increased demand for housing in many areas, particularly urban areas, is eroding children's play spaces. Housing blocks are becoming smaller and high-density housing is becoming more prevalent. Combined with decreased opportunities for parents to spend time supervising and participating in their children's play because of increased work commitments, this situation has resulted in greatly reduced prospects for children's engagement in outdoor play.



Intergenerational Play





Intergenerational Play

introduction

Children and adults who play together discover a world beyond themselves, engendering respect for each individual's knowledge, strengths and values. Both learning and enjoyment soar as they play. Research shows that children who play with adults demonstrate greater creativity and higher levels of language and problem solving skills than when playing solely with other children.

For older adults, play has psychological and health benefits, reducing stress, promoting relaxation, and giving perspective to the demands of life. Building and maintaining relationships via play is associated with better mental health, less disease and disability, and increased survival. During play, intergenerational shared site facilities observe positive changes in mood and higher engagement even among frail elders. In the past, three and sometimes four generations lived and played together under one roof. There were plenty of potential playmates around. But today's children tend to have fewer brothers and sisters, more working mothers, more single-parent households, and grandparents may live far away. Parents more and more want their children to play at home, thus limiting their play with others. Therefore playing games to-

gether with parents and grandparents is more important now than ever before. Children need time to play alone, but they love to play with parents and grandparents and benefit enormously from parental attention. Amongst the benefits cited for children of parental play together were:

- bonding with parents
- encouraging empathy through playing with others
- learning to share and to take turns
- extending the range of the child's activities in a gentle way
- promoting learning
- heightening attention
- acquiring new skills exploring safely the child's own limitations -and strengths
- understanding boundaries
- releasing emotions and working through emotional issues for the child
- facilitating communication and discussion together through shared fun and laughter



Increase flexibility in thinking
 imagination/symbolic
 Make new connections of meaning
 Gain concrete experience with visual/spatial & mathematical relationships
 Solve problems

Express ideas and negotiate with peers
 language development
 Learn what is acceptable language and behavior in the culture
 Learn to share, compromise
 respond to others
 Make friends

Practice and consolidate small and gross motor skills
 Oxygenate & stimulate blood flow to the brain
 Gain concentrate experience with relationships of weight, size, distance
 Increase control over tools and materials

Interact with others and learn to express feelings appropriately
 Work through emotionally charged experiences
 Experiment with new roles
 esteem
 Learn to show empathy
 Build self esteem



COGNITIVE



SOCIAL



PHYSICAL



EMOTIONAL

Benefits of intergenerational play for children and adults

Increase flexibility in thinking
 imagination/symbolic
 Make new connections of meaning
 Critical thinking
 Solve problems

Express ideas and articulate convincing arguments
 Share perspectives based on life experience
 Learn to adapt and change
 Make new friends and keep the old

Exercise small and large muscles
 Oxygenate & stimulate blood flow to the brain
 Maintain a measure of control over the physical world

Interact with others and express feelings (combat depression)
 Review life (integrity vs. despair)
 Imagine new roles for self (growth)
 Express empathy (give love or perish)
 Build self esteem



Intergenerational Play

emphasis on design

As populations age across the developed world, attention is turning to ways of preserving the quality of life for the growing number of people experiencing an extended old age. Information and communication technologies have great potential for supporting older people to maintain their independence and standard of living.

Rather than being characterized as frail and impaired, older people, as discussed before, are active and engaged, seeking opportunities for interactions with the wider community.

Grandchildren are often a significant source of expertise for their grandparents when it comes to learning about computer-based technologies. Intergenerational contact also provides an important motivator for older people to engage with new technologies in the first place. For example, older people willingly adopt new technologies to fit into the schedules of their adult children and are eager to engage in SMS and MMS when it strengthens ties with grandchildren.

Despite the dramatic changes to everyday family life in developed societies, intergenerational bonds remain very important within families continuing to operate over great distances and provide an incentive for using new computer-based communication technologies.

The intergenerational context is therefore important for designers and researchers to accommodate as an explicit focus for design efforts. So far these efforts have focused on supporting social connectivity between generations within families through the sharing of presence information via message boards and video links in dispersed family homes. Others have focused on the development of computer-based games and activities that augment face-to-face intergenerational play and interactions within families. These approaches are interesting because they move away from more traditional computer-based communication, such as chat tools and email, and start to explore different modalities as the focus of interaction.

They show that the opportunity for inter generational play is a strong motivator for older players to engage with the Wii initially. Looking at four different generations of gamers, they also identify a number of different generational roles that are assumed during game play. The authors group these into five inter generational pairings (decision maker/ negotiator; configurer/bystander; instructor/instructed; discouraged gamer/encourager and strategist, and performer/ audience) that frame game play and the inter generational dynamics within it.



Intergenerational Play

conclusion

Many changes in society - such as increased geographic mobility - have led to generations frequently becoming distanced or segregated from one another, particularly younger and older people. This separation can lead to unrealistic, negative stereotypes between generations and a decrease in positive exchanges between them. Yet these separated generations have resources of value to each other and share areas of concern. Inter generational Learning describes the way that people of all ages can learn together and from each other. Inter generational learning is an important part of Lifelong Learning, where the generations work together to gain skills, values and knowledge. Beyond the transfer of knowledge, inter generational relation fosters reciprocal learning relationships between different generations and helps to develop social capital and social cohesion in our aging societies. Inter generational learning is one way of addressing the significant demographic change we are experiencing across Europe and is as a way of enhancing inter generational solidarity through inter generational practice.

Nature

chapter 4





Nature

etymology

The word nature is derived from the Latin word *natura*, or “essential qualities, innate disposition”, and in ancient times, literally meant “birth”.

Within the various uses of the word today, “nature” often refers to geology and wildlife. Nature may refer to the general realm of various types of living plants and animals, and in some cases to the processes associated with inanimate objects – the way that particular types of things exist and change of their own accord, such as the weather and geology of the Earth, and the matter and energy of which all these things are composed. It is often taken to mean the “natural environment” or wilderness—wild animals, rocks, forest, beaches, and in general those things that have not been substantially altered by human intervention, or which persist despite human intervention.

Modern humans (*homo sapiens*) evolved and have lived in intimate contact with nature, in the savannahs and forests, for almost their entire $120,000 \pm$ year history. The cultivation of plants and the domestication of animals allowed our ancestors to dwell in permanent settlements, to expand their population more rapidly, thus

beginning a long, sad divorce from nature (Manning 2004). It wasn't until recent history that most people lived in cities. But even until very recent history, children still grew up with intimate contact with nature.

Throughout most of history, when children were free to play, their first choice was often to flee to the nearest wild place—whether it was a big tree or brushy area in the yard or a watercourse or woodland nearby. Two hundred years ago, most children spent their days surrounded by fields, farms or in the wild nature at its edges. By the late twentieth century, many children's environments had become urbanized. But even then, as recently as 1970, children had access to nature and the world at large. They spent the bulk of their recreation time outdoors, using the sidewalks, streets, playgrounds, parks, green ways, vacant lots and other spaces “left over” during the urbanization process or the fields, forests, streams and yards of suburbia. Children had the freedom to play, explore and interact with the natural world with little or no restriction or supervision.

The lives of children today are much different. Children today have few opportunities for outdoor free play and regular contact with the natural world. Their physical boundaries have shrunk due to a number of factors. A 'culture of fear' has parents afraid for their children's safety. A 2004 study found that 82% of mothers with children between the ages of 3 and 12 identified crime and safety concerns as one of the primary reasons they don't allow their children to play outdoors. Due to 'stranger danger,' many children are no longer free to roam their neighborhoods or even their own yards unless accompanied by adults. Many working families cannot supervise their children after school, giving rise to latchkey children who stay indoors or attend supervised after-school activities. Furthermore, children's lives have become structured and scheduled by adults, who hold the mistaken belief that this sport or that lesson will make their children more successful as adults. The culture of childhood that played outside is gone and children's everyday life has shifted to the indoors. As a result, children's opportunity for direct and spontaneous contact with nature is a vanishing experience of childhood. One researcher has gone so far as to refer to this sudden shift in children's

lives and their loss of free play in the outdoors as a 'childhood of imprisonment'. Childhood and regular play in the outdoor natural world is no longer synonymous. In children's lives and their loss of free play in the outdoors as a 'childhood of imprisonment'. Childhood and regular play in the outdoor natural world is no longer synonymous.

Pyle (1993) calls this the 'extinction of experience,' which breeds apathy towards environmental concerns. Kellert (2002) says society today has become "so estranged from its natural origins, it has failed to recognize our species' basic dependence on nature as a condition of growth and development." Not only have children's play environments dramatically changed in the last few decades, but the time they have to play has decreased. Between 1981 and 1997, the amount of time children ages 6 to 8 in the U.S. played decreased 25%, by almost four hours per week, from 15 hours a week to 11 hours and 10 minutes. During the same period, the time they spent in school increased by almost 5 hours. A recent study surveyed mothers and found that 70% of mothers in the U.S. played outdoors everyday when they

were children, compared with only 31% of their children, and that when the mothers played outdoors, 56% remained outside for three or more hours compared to only 22% of their children.

Electrified senses

Not that long ago, the sound track of a young person's days and nights was composed largely of the notes of nature. Most people were raised on the land, worked the land, and where often buried on the same land. The relationship was direct.

Today, the life of senses is, literally, electrified. One obvious contributor is electronics: television and computers. As human beings we need direct, natural experiences; we require fully activated senses in order to feel fully alive. Twenty-first-century Western culture accepts the view that because of omnipresent technology we are awash in data. But in this information age, vital information is missing. Nature is about smelling, hearing, tasting seeing. Almost everywhere we look, whether we see it or not, commodity culture is reconstructing nature. Synthetic rocks, video images of forests, Rainforest Cafes

One way experience

Primary experience of nature is being replaced, "by the secondary, vicarious, often distorted, dual sensory (vision and sound only), one-way experience of television and other electronic media". Children live through their senses. Sensory experiences link the child's exterior world with their interior, affective world. Since the natural environment is the principal source of sensory stimulation, freedom to explore and play with outdoor environment through the senses in their own space and time is essential for healthy development. This type of self-activated, autonomous interaction is what we call free play. Individual children test themselves by interacting with their environment, activating their potential and reconstructing human culture. The content of the environment is a critical factor in this process. A rich, open environment will continuously present alternative choices for creative engagement. A rigid, bland environment will limit healthy growth and development of the individual or the group.

The importance of children's interaction with nature

Nature buffers the impact of life stress on children and helps them deal with adversity.

The greater the amount of nature exposure, the greater the benefits

A decrease in children's time spent outdoors is contributing to an increase of children's myopia in developed countries

Children with symptoms of Attention Deficit Hyperactivity Disorder (ADHD) are better able to concentrate after contact with nature

Children with views of and contact with nature score higher

Outdoor environments are important to children's

development of independence and autonomy on tests of concentration and self-discipline.

The greener, the better the scores

Play in a diverse natural environment reduces or eliminates bullying

Exposure to natural environments improves children's cognitive development by improving their awareness, reasoning and observational skills.

Children who play regularly in natural environments show more advanced motor fitness, including coordination, balance and agility, and they are sick less often

When children play in natural environments, their play is more diverse with imaginative and creative play that fosters language and collaborative skills

Nature helps children develop powers of observation and creativity and instills a sense of peace and being at one with the world

Natural environments stimulate social interaction between children

Children who play in nature have more positive feelings about each other

Mediated experience

Today, with children's lives disconnected from the natural world, their experiences are predominately mediated in media, written language and visual images. The virtual is replacing the real. TV, nature documentaries, National Geographic and other nature TV channels and environmental fundraising appeals are conditioning children to think that nature is exotic, awe inspiring and in far, far away, places they will never experience. Children are losing the understanding that nature exists in their own backyards and neighborhoods, which further disconnects them from knowledge and appreciation of the natural world.

Loss of contact with nature is nature's loss

Not only does the loss of children's outdoor play and contact with the natural world negatively impact the growth and development of the whole child and their acquisition of knowledge, it also sets the stage for a continuing loss of the natural environment. The alternative to future generations who value nature is the continued exploitation and destruction of nature. Research is clearly substantiating that an affinity to and love of nature, along with a positive environmental ethic, grow out of children's regular contact with and play in the natural world.

Nature

outdoor play

Decreased interaction and decreased quality of interaction between children and outdoor environments has a negative impact on children's health, learning, and development. The environment used for play is also important because different playscapes offer different opportunities. Outdoor play is pivotal in creating a connection between children and nature. In addition, outdoor play has the ability to offer children stimulation which cannot be achieved indoors. There are two types of outdoor playscapes: natural and constructed. Each have unique characteristics. Natural playscapes offer the most sensory stimulation and level of diversity when compared to most constructed and wild playscapes. These playscapes have diversity of sensory experience and physical structures which both challenge and engage childhood play. Constructed playscapes can offer similar opportunities if carefully designed. Experiences in nature help to shape children's conceptions and values. Different types of contact with nature play different roles. While each of these types of contact are important for children to develop an environmental consciousness and identity, direct experiences are most important for childhood exploration of natural elements.

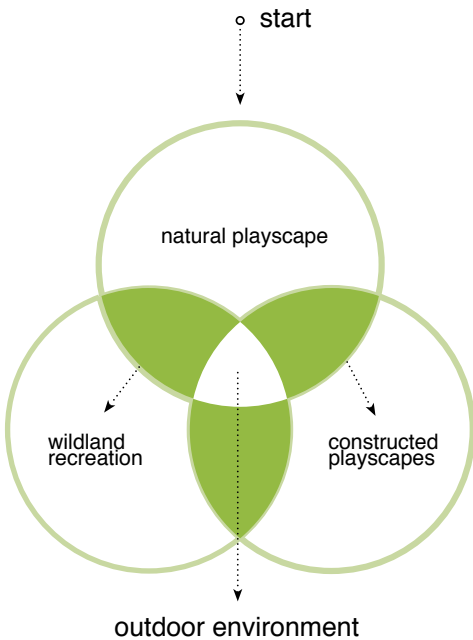
Environmental identities have the ability to shape the way that children respond to protection of the environment.

Nature Play

The first and the least researched environment for play is the natural environment. "Natural" is defined in many ways, most of which include an element of vegetation and the notion of diversity and spontaneity. In addition, natural playscapes are primarily natural process driven. Most commonly these includes areas such as forests, fields, wooded areas, creeks wetlands, etc.

A small subset of natural play is wilderness play. Wilderness is defined as those areas which are completely untouched by human impact. Natural does not exclude human manicured or maintained areas, such as wetland parks, pasture, forests, etc. whereas, wilderness does.

Diversity in natural environment is an important catalyst for children's play. There are three main categories within the context of play and the physical landscape structure: biodiversity, topographical diversity, and playscape habitat diversity. For the purposes of defining the diffe-



Types of outdoor playscapes.

rence between natural and constructed play, diversity plays an important role. Diversity is something that is only inherent in the natural landscape and cannot be developed as richly in constructed landscapes.

Constructed Play

Natural areas may simply be uncomfortable places for many people accustomed to climate-controlled buildings. For this reason, constructed playscapes can offer children the security they may need to enjoy outdoor playscapes. These playscapes must be carefully constructed to offer similar opportunities as natural playscapes. Constructed playscapes have recently fallen short of school-age children's needs by failing to integrate constructed garden and natural areas, offering constructive play materials, and providing spaces for symbolic play. This points to the importance of diversity of the environment required in order to simulate natural play in a constructed playscape. Importance of the prescribed construction of combinations of diverse environments which developmentally serve children. School yards are the most important constructed outdoor playscape for children. Greening schools grounds can

diversify the kinds of play acts as an “important intervention” in children’s physical activities at school. Increasing opportunities for children to have moderate physical activity during play will improve “the quality of children’s play and learning experiences.”

Adult vision and child vision of the world

Nabhan and Trimble discuss this topic in a slightly different way. They state that children see things differently than adults. Adults view the landscape at a larger scale and are able to see the big-picture of the playscape, such as a panorama with picturesque views. Children look at niches within their immediate environment. Bartlett suggests that “children tend to prefer the spontaneous opportunities offered on the streets, sidewalks, alleyways and vacant lots.” she also stresses the importance of availability of these places should be supported by parent, childcare, school, and community involvement to make these spontaneous playscapes safe play opportunities. They see moments in the landscape which offer immediate play opportunity.

This is a difference between adult’s vision of the world as abstraction and children’s vision of the immediate world. The shear difference in how adults see a play space and how children see the playscape can cause conflict.

As discussed in previous chapter, play acts as an “important intervention” in children’s physical activities at school. Increasing opportunities for children to have moderate physical activity during play will improve “the quality of children’s play and learning experiences.” play acts as an “important intervention” in children’s physical activities at school. Increasing opportunities for children to have moderate physical activity during play will improve “the quality of children’s play and learning experiences.”

	BENEFITS	SPECIFICS	DRAWBACKS
PLAY	<i>develop flexible thinking brain development</i>	<i>problem solving</i>	<i>children prefer spontaneous play which often leads to unsafe places for play</i>
OUTDOOR PLAY	<i>therapy</i>	<i>stress relief</i>	<i>children in socio-economically disadvantaged neighborhoods often do not have adequate outdoor playscapes</i>
NATURAL PLAYSCAPES	<i>higher sensory stimulation higher level of diversity</i>	<i>sight, sound, taste, touch, smell biodiversity, topographical diversity, playscape habitat diversity</i>	<i>unsafe, often dislocated from urban environment</i>
CONSTRUCTED PLAYSCAPES	<i>security and predictability</i>	<i>limited</i>	<i>can not be developed as richly as natural playscapes</i>

Figure illustrating key factors of kids play in various natural ambient

Citizen child

play as welfare parameter for urban Life

Cities without children

Once we could hardly wait to get out of the house, as everything that we were most interested in was outside. The home was the fundamental place of security, primary needs and housework. However, it was necessary to go out in order to meet friends, to play, to go to the bar, the cinema, the library. Today we can hardly wait to get back home, as the home is the place for rest, culture, family affection, communication. At home we have frozen food that lasts for months, a library, our CD collection, our favorite films, the possibility of talking on the phone or sending messages or photos over the internet or by mobile phone. The home is no longer an important but insufficient part of the wider reality of the city: it rather subsumes the city itself. It is no longer part of a complex ecosystem, but itself tends towards self-sufficiency, another important and disturbing feature of the modern city. A tendency towards self-sufficiency is displayed by the various parts of the city, from the home to the shopping center. A “wonderful place”, for many families, where they can arrange to meet and spend the weekend together.

Moreover, in recent decades, the city has become a kind of space that is practically reserved for automobiles. Our great cities are obliged to accommodate not only the automobiles but also its typical citizen an adult, male, working and car-driving citizen. The city adapted to suit his needs, in order for the administrators to obtain the votes of this stronger ideal-typical citizen. In doing so they betrayed the needs and rights of those who are not males, adults, workers, or motorists. As a result, these cities are cities without children, where children are prevented from living experiences of fundamental importance for their development, such as adventure, research, discovery, risk, overcoming obstacles and therefore feeling satisfaction, frustration and emotion.

These experiences demand two fundamental conditions that are no longer available: *leisure time and shared public space*. It is difficult for children to go outside the home on their own, to seek playmates or to go somewhere suitable for playing with them.

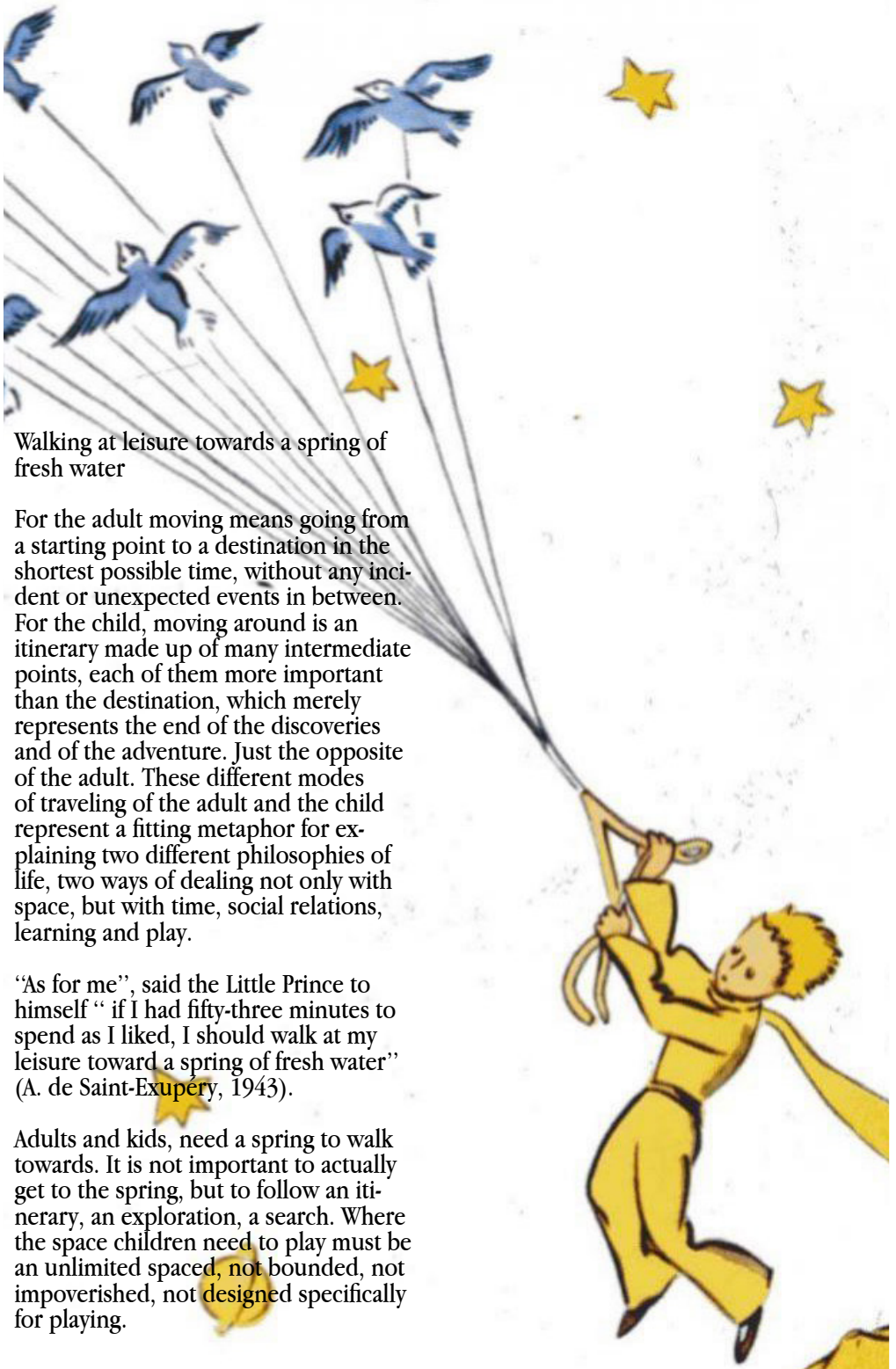
The real or alleged environmental difficulties have convinced their parents that this city does not allow a child of six or ten to go out on his or her own, and so what used to be the children's leisure time has been turned into organized

time has been turned into organized time dedicated to different activities inside or outside the home, in any case rigidly planned and usually having to be paid for. On the one hand, therefore, we have TV, the play station, internet, and on the other the various after-school courses of sport, art and foreign languages. In this way, the most crucial feature of play is lost to the children: they do not have any autonomy.

In the beginning there is a play

When we see our children so well dressed, so well nourished and capable of using such complex devices, speaking foreign languages at such an early age, and really able to play a sport, respecting the rules of the game and aware of all the tricks involved from their early years, we adults often feel that they are really lucky. They can do many things that we could not, partly because they did not exist at the time and partly because we could not afford them and also because our parents did not understand such things. It is true (we also reason) that our children cannot run, go wild, get dirty, do odd and often forbidden things, as we did at their age, but it is worth the sacrifice. Today they know a lot more, they are more intelligent.

When adults become aware of such richness in children's play, they often come up with the idea of helping and fostering the process, e.g. by supporting their children with suitable teachings or didactic materials, as they have started doing with the so called "smart toys". This would remove the principal condition on which this wonder was based, that is, that adults should "let" children play. Children's play, before and outside the school, means "losing time", losing oneself in time, it means encountering the world in an exciting relationship, full of mystery, risk, adventure. It springs from the most powerful driving force known to man – pleasure. This is why the child can even forget to eat in order to play.



Walking at leisure towards a spring of fresh water

For the adult moving means going from a starting point to a destination in the shortest possible time, without any incident or unexpected events in between. For the child, moving around is an itinerary made up of many intermediate points, each of them more important than the destination, which merely represents the end of the discoveries and of the adventure. Just the opposite of the adult. These different modes of traveling of the adult and the child represent a fitting metaphor for explaining two different philosophies of life, two ways of dealing not only with space, but with time, social relations, learning and play.

“As for me”, said the Little Prince to himself “ if I had fifty-three minutes to spend as I liked, I should walk at my leisure toward a spring of fresh water” (A. de Saint-Exupéry, 1943).

Adults and kids, need a spring to walk towards. It is not important to actually get to the spring, but to follow an itinerary, an exploration, a search. Where the space children need to play must be an unlimited spaced, not bounded, not impoverished, not designed specifically for playing.

It is as though the city had forgotten its children, while it has done a lot for adults, and an awful lot for automobiles. It would seem to have done much also for children in the form of childhood services, but in fact day-care centers, infants schools, play parks and play centers are all spaces designed more for parents who do not know where to leave their children, rather than to satisfy the children's real needs. Indeed, in this city children cannot engage in their most important activity, in their real work, in the experience that more than any other will determine their future: playing.

A city cannot accept to be responsible for this severe deficiency. A city can allow its younger citizens to play only if it can restore its public spaces to their original function. Streets, pavements, squares and gardens must go back to being places of meeting and intercourse.

If the city is to succeed in doing this, so must its citizens, restoring to public use the stairs, halls and courtyards. In those spaces the children can go back to playing, to meeting with adults and in particular with the senior citizens, who will again be able to go out of the home.

Playground

evolution / design

LET'S



PLAY



Playground

introduction

A playground, play park, or play area is a place with a specific design for children to be able to play there. It may be indoors but is typically outdoors. Playgrounds often also have facilities for playing informal games of adult sports, such as a baseball diamond, a skating arena, a basketball court, or a tether ball.

Public playground equipment refers to equipment intended for use in the play areas of parks, schools, child care facilities, institutions, multiple family dwellings, restaurants, resorts, and recreational developments, and other areas of public use.

A type of playground called a playscape is designed to provide a safe environment for play in a natural setting.

The idea of the playground as a method for imbuing children with a sense of fair play and good manners originated in Germany where playgrounds were erected in connection to schools, although the first purpose built public-access playground was opened in a park in Manchester, England in 1859.

Over time, organized playing areas have been adopted by other countries of the world and have become commonplace.

Playground design is influenced by the intended purpose and audience. Separate play areas might be offered to accommodate very young children. Single, large, open parks tend to not be used by older schoolgirls or less aggressive children, because there is little opportunity for them to escape more aggressive children. By contrast, a park that offers multiple play areas is used equally by boys and girls.

Professionals recognize that the social skills that children develop on the playground often become lifelong skill sets that are carried forward into their adulthood. Independent research concludes that playgrounds are among the most important environments for children outside the home. Most forms of play are essential for healthy development, but free, spontaneous play the kind that occurs on playgrounds is the most beneficial type of play.

Exciting, engaging and challenging playground equipment is important to keep children happy while still developing their learning abilities. These should be developed in order to suit different groups of children for different stages of learning, such as specialist playground equipment for nursery and pre-school children teaching them basic numeracy and vocabulary, to building a child's creativity and imagination with role play panels or puzzles.

There is a general consensus that physical activity reduces the risk of psychological problems in children and fosters their self-esteem. It can be seen that playgrounds provide an ideal opportunity for children to master physical skills, such as learning to swing, balance and climb. Personal development may be gained through the enhancement of skills, such as playing, communicating and cooperating with other children and adults in the playground.

Playground

evolution / design

Children spend a substantial amount of their time at school. Some school yards offer the only outdoor playscapes that children experience on a daily basis. This is especially true for low income inner city children who either do not have the resources to visit alternate outdoor playscapes, or whose neighborhoods do not offer safe child play options.

Many inner city schools are older than suburban schools and due to budget and space constraints often have the poorest outdoor facilities. Existing schools are deteriorating, school age populations are increasing, and demand for new schools is also increasing.

This demand for renovation and new construction provides an opportunity for designers and educational institutions to work together to create playscape environments that are conducive to childhood health, learning, and natural experiences. Currently, student's time spent outdoors in school yards is often limited.

As discussed previously outdoor play has health, motor development, social, and attention benefits. Outdoor play also has the ability to provide children with experiences in natural landscapes which can assist children in creating an environmental consciousness which could impact their adult morals and values. Schools are places of learning, school yards also have the ability to teach children and act as a safe haven where parental concerns for safety and risk do not inhibit play.

School yards evolved as theories on playground design changed to address research on childhood learning and play. From 19th century playgrounds that aimed to socialize lower class children through exposure to higher class children and adult behavior, to twenty-first century experiments in imagination playgrounds, child playscapes have been on the cutting edge of research in child development and play.

This chapter illustrates the evolution of the playground in the world with some references to playground innovations in England and Scandinavia. Through understanding how playgrounds have evolved as research on play and child development has changed it may be possible to find moments of weakness and benefits in each type of playscape. Additionally this chapter outlines the similarities and differences in each playground type. By correcting these weaknesses and utilizing in future playground design it is possible to incorporate natural elements and encourage childhood experiences in nature as well as increase physical activity levels and motor development.

Playground

evolution / traditional playgrounds

In the late 19th and early 20th century playgrounds consisted of hardwood play pieces such as swings, balance beams and ladders. These early playgrounds served as neighborhood centers and were designed so that children of underprivileged families could experience the high social standards of the upper class in an effort to teach “social morality” through supervised programmed activities. At the time, many playgrounds were developed in response to the creation of child labor laws which limited the time children could spend at work, the types of work children could do, and set age restrictions. These playgrounds were an effort to improve the quality of life for children in inner-city districts and to improve behavior of children in lower class families. Many upper class elites were noticing child behavior problems in lower class children what they believed were negatively influencing the behavior of upper class and higher income children. It was their belief that lower class children could be taught how to behave morally if they were shown by upper class children.

Many urban children only experienced outdoor play in streets, alleyways, and

vacant lots. Public schools in major urban areas during the late 19th century were some of the first playscapes designed specifically for children in the United States. Before public parks began to include playgrounds, most play areas were built by private philanthropic organizations and the public education system.

Early playground equipment was largely constructed out of metal and wood to create minimal play structures which were in the midst of large expanses of concrete or glass used for running and group games. Around 1920 playground equipment began to include “Jungle Jims” used for climbing and constructed from metal pipes. This innovation soon led to the development of steel climbers, swings, and predeveloped play structures. In addition, sand boxes and fences were a common addition to playgrounds of the 1920s.

Playgrounds of the late 19th and early 20th century showed society’s desire to provide children with social environments in which to play and develop moral behaviours. These playscapes provided only the most basic play equipment and encouraged large groups of children to play in vast open spaces. The objective of traditional playground design was social improvements.



Playground

evolution / traditional playgrounds







Playground

evolution / adventure playgrounds

A new playground concept discovered by children in England and Denmark addressed the need for childhood outdoor play and deteriorated urban environment. This new playground was called the “junk playground”. Junk playgrounds were typically spontaneous created by children in vacant or abandoned lots and allowed children to use spare construction materials to build, destroy and rebuild a playscape of their own creation. Eventually junk playgrounds evolved into what is now called Adventure Playgrounds. These playgrounds were found materials (used nails, broken wooden boards, and preused construction materials from destroyed buildings) to construct their own playscapes, but they often addressed parental safety concerns by providing adult supervision.

Adventure playgrounds often were designed with “natural materials” to integrate the play area into the land itself.

In addition, colors were muted and structures were blended between cast concrete and natural materials such as ropes and large size timbers. By the 1970s safety concerns caused the retrofitting of many adventure playgrounds with more contemporary materials and surfaces to eliminate the risk of child injury.

Where traditional playgrounds only offered programed play in supervised environments focused on social development, adventure playgrounds offer children the ability to experience construction play.

Children using adventure playgrounds have the ability to work together to cooperatively solve problems as well as explore the physical demands of building their own playscape. In terms of nature experiences adventure playgrounds also offer children exposure to natural elements which traditional playgrounds did not incorporate.

A new era of adventure playgrounds has emerged since 1990 which has invigorated interest in child-constructed playscapes. Modern adventure playgrounds are still constructed from the natural environment and children still actively construct their own play space using available materials but in a controlled and supervised environment unlike previous adventure playgrounds.



Playground

evolution / adventure playgrounds



Playground

evolution / imaginal playgrounds

Imagination playgrounds utilize many of the ideas of adventure playgrounds, but are mostly made with a mixture of prefabricated materials that can be moved to The Imagination Playground provides movable play materials and permanent play equipment under the supervision of “play associates” whom have been trained in child and equipment safety.

The Architect worked with the nonprofit playground design company Kaboom to develop large moveable blue blocks which were deliberately big so kids will be more likely to assist each other with them.

Another innovative way that playground equipment companies are addressing the increased demand for child constructed playgrounds is to create interchangeable parts which can be used on any number of playgrounds sites. The Rockwell Group called this “Imagination Playgrounds in BOX”. This concept “places Imagination modules in” numerous sites and kits include a variety of loose parts which can be assembled into countless forms and then deconstructed and stored on site. Often these loose parts include foam blocks, sand/water tools, tarps, and fabric.

Imagination playgrounds address many of the same issues as adventure play

grounds but in a more programmed way. In some ways the preconstruction of play elements can deter some of the creative social interactions, physical development, and innovative thinking that adventure play fosters. This is a trade-off for improved safety and parental security.



Playground

evolution / contemporary playgrounds

Contemporary Playground design began in the late 1950's at the same time as adventure playgrounds. Playground designers began integrating manufactured equipment with site-unique design. Much of early contemporary playground design include artistic sculptural elements designed for specific playground sites. By the 1970s when playground standards for safety were becoming more stringent, uniquely designed elements was replaced by increased use of manufactured playground elements which were preapproved safety and accessibility.

This shift was due to increased demand for children with disabilities to utilize public education playgrounds and other public playscapes.

Contemporary playgrounds typically utilize plastic and metal play structures which include slides, climbing structures, and swing sited on impact absorbing play surfaces.

Holmes and Procaccino claim that contemporary playgrounds can be viewed as improved traditional playgrounds.

Contemporary playground design is constantly evolving as playground equipment companies develop new and improved materials and structures.

Since 1980's, playgrounds have become more focused on utilizing local culture, geography, and history of individual neighborhoods to create a relationship between playground and place.



Playground

evolution / contemporary playgrounds







Playground

evolution / nature playgrounds

Natural playgrounds are play environments that blend natural materials, features, and indigenous vegetation with creative landforms to create purposely complex interplays of natural, environmental objects in ways that challenge and fascinate children and teach them about the wonders and intricacies of the natural world while they play within it.

The technological age has changed the ways in which children play, arguably contributing to childhood obesity. It is therefore up to parents, communities and schools to reintroduce to children what it means to play in the outdoors.

Natural Play Areas are outdoor spaces designated for play that are made of natural components such as plants, logs, water, sand, mud, boulders, hills and trees. These components represent the larger wild environment in a way that feels safe and manageable to young visitors. A few man made components might also be carefully integrated to support creative play, encourage confident exploration and help children develop a lasting affinity for the natural world.

Natural playgrounds are designed to eliminate fall heights. They have rolling hills and fallen logs rather than a central play structure with monkey bars. They have much lower injury rates than standard playgrounds.

Playground

conclusion

Traditional playgrounds often contain large expanses of turf and asphalt that limit opportunities for different types of activities. These playgrounds also limit the amount of physical activity by only offering limited play structures such as swings, balance beams and ladders. Lack of vegetation in traditional playgrounds limits the amount of natural experiences that these playscapes offer. Similarly, conventional playgrounds often offer only manufactured equipment in clusters on mulch or other prefabricated surfaces. While conventional playgrounds are improvements to traditional playgrounds, they still lack the variety of spaces and inclusion of vegetation which encourage a wider range of play and experiences in nature. Adventure playgrounds and imagination playgrounds fill in some of the gaps in opportunity where traditional and conventional playgrounds are lacking, but still do not address all of the areas needed to promote a variety of types of play and opportunities for natural experiences. Natural playgrounds allow children freedom in play and physical experiences in nature, but have a greater but have a greater requirement for school siting, making retrofitting existing schools impossible.

What is needed is a combination of these types of playgrounds which addresses needs for a variety of types of play, social interactions, physical development, and interaction with nature. Constructed green playgrounds can fill this purpose. Through incorporation of the social play typical of traditional playground design, construction play of adventure playgrounds, integration of prefabricated elements designed for physical development in contemporary playgrounds, and nature experiences in Natural playgrounds.

All the case I have studied during my research inspired me greatly in defining and building my project.

I analyzed various types of initiatives proposing new concepts of urban play, learning and involving public in different environment settings.

The examples included here are schools, museums, associations and individual artists demonstrating how by interaction learning process is taking place.

The learning process of kids primary begins in school environment, whereas their free time is fulfilled with organized activities.

Additionally public spaces emerged into insecure ambient where activities are always monitored by adults. However there are still aspirations towards introducing new models of urban perception of space and moreover connecting different societal groups.

The city itself therefor should offer opportunity for stimulating various types of creativity and activity while linking relationship between kids and adults.

Case studies

mapping / overview

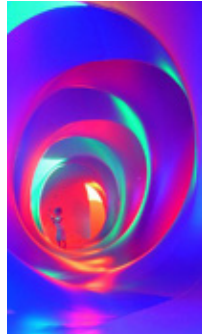
**Toshiko
Horiuchi**
Playscape



Topotek
*Temporary
playground*



**Architects
of Air**
*Domes
luminaria*



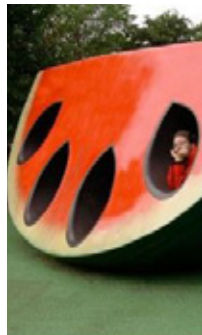
Puff
Solar Sanctuary



**Yulia
Drobova**
Fraternite



**Funny
space**



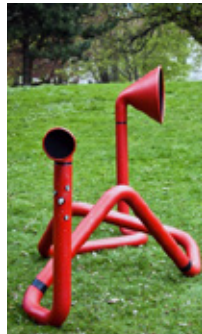
Tangle
Polyglot Theater



**Patrick
Renner**
*Funnel Tunnel
Snakes*



**Karl-Johan
Ekeröth**
Invoxicated

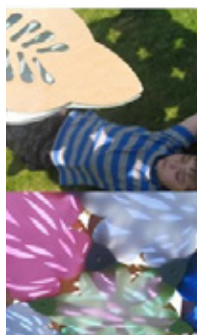




Etre design
*Machida
Kobato
kindergarten*



Richter
*Spielgeräte
Shadow Play*



Puff
Solar Sanctuary



stARTT
Whatami



**Jobanna
Larsson**
*Högskolan för
Design och
Konsthandverk*



Dents Drouet
Order in Chaos



Ned Kahn
Wind Leafs



Montréal
*The Museum
of
Possibilities*

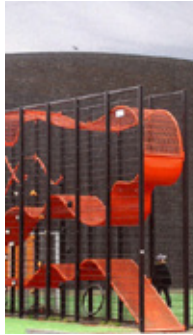


**Emmanuelle
Moreaux**
100 Colors

Johanna Larsson
HDK



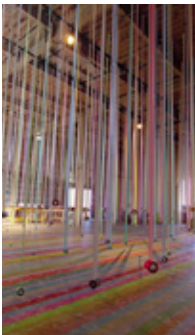
Carve
Wall HOLA



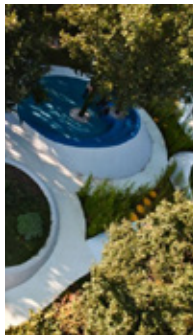
Theodore Watson
Funky Forest



Koji Iyama
Wasbi tape



Nabito Architects
Sensational Park



Senat Haliti
Eu pavilion



Søren Korsgaard
Organic Cube



Christ and Gantenbein AG
Ancient Tree



Sebastien Preschoux
Rainbow String



Case studies

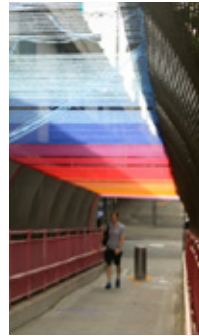
mapping / overview



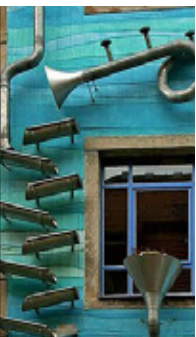
**Sarah
Theis**
*A Play of
Perception*



NTNU
*The
Megaphone*



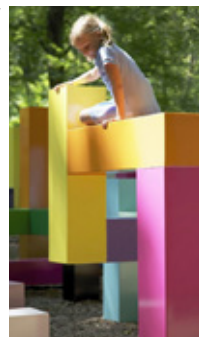
**Williamsburg
Bridge**
Rainbow of Thread



**Rube
Goldberg**
*Funnel
Playscape*



**Simon and
Tom Bloor**
*Formula for
Living*



Jacob Dahlgren
Primary Structure



**Brett
Milligan
and
Lisa Town**
*Planting
Pockets*



**Tomás
Saraceno**
Air-Port-City



Numen
Net

Rinnovata

elementary school



*Giuseppina Pizzigoni
1870-1947, Milan*

Giuseppina Pizzigoni was an Italian pedagogist.

In 1911 he was succeeded at to persuade the Milan City Council to grant the authorization for starting a fundamental reform of the experiment teaching according to a new didactic plan.

Founded at the beginning of the last century, renovated is still a learning experience where the environment plays a decisive role and widely alternative to the traditional. Its particularity is the use of agrary as an integral and background for all educational activities: school includes in fact a real farm, with cultivated fields, orchards, greenhouses, and areas for the animals.

The pedagogical method matches a precise architectural system: single-story buildings with open rooms, courtyards and directly to large areas for agriculture made by orchards, fields and animals. The method is based on idea of educationalist Giuseppina Pizzigoni, where the concept of direct experience is perceived as base for every cognitive process and the manual work, which together educate and foster autonomy and cooperation.

The multiplicity of proposals is supported by the presence of specialized teachers in the method, where some play role of tutor, other disciplinary specialist.

The decision to give priority to agrarian activity arises from the evaluation of the potential offered by the natural environment, which permits endless opportunities for learning and can feed the development from the perspective of experiential, cognitive, emotional and body. It represents gaming environment, observation and study, work place for agricultural activities, and also an opportunity for contemplation of the beauty of nature.

Originally, the Rinnovata school reflected the need to achieve a continuity between school and life since. In the beginning of the last century, was attended mainly by children of farming families, which in this way were prepared for the future. Today that city children's contact with nature appears as a privilege, the agricultural activity of the Rinnovata school retain its charming place potential for an integrated education where nature becomes didactic environment.

**EDUCATION/
DIRECT EXPERIENCE/
EXPLORATION/ALTERNATIVE**



Reggio Children

preschool



*Loris Malaguzzi
1920-1994, Reggio Emilia*

Loris Malaguzzi was an important Italian educationalist, who collaborated with Reggio children project: a kindergarten designed specifically to stimulate sensory and children and make full use of space and materials. He firmly believes that what children learn not descends automatically by a linear relationship of cause and effect between learning processes and outcomes, but is largely the work of these children, their activities and the use of the resources they have. The children always play an active role in the construction and acquisition of knowledge and understanding. Learning is therefore certainly a process Malaguzzi, auto-constructive. The school is compared to a shipyard, a permanent laboratory where research processes of children and adults are intertwined so strong, living and evolving daily. The main objective is therefore to make a lovely school where kids, families and teachers would feel satisfied, where the purpose of teaching is not just learn, but to provide learning conditions. Space is compared to a language that must have an explicit code to be well interpreted, and like any other type of language is a fundamental element of the formation of thought.

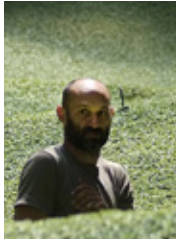
the formation of thought. The preschool of Reggio Emilia has been developed by emphasizing the 5 senses: children in fact reveal an innate perceptual sensitivity and competence to relate with spaces because they analyze and distinguish the reality through sensory receptors that go beyond sight and hearing (senses predominant for adults). For this, when designing, were taken into consideration lights, colours, elements olfactory/tactile/sound that have high importance in the definition of sensory quality of the spaces. All rooms are designed, moreover, are equal to stylistic codes and functions: have a low level of identity, but great flexibility of use why must be the child who chooses how best to use that space. From research conducted by educators, anthropologists and architects for the school "Diana" di Reggio Emilia arose that children, if they have the chance, do not use spaces in straightforward way according to rules set by adults, yet they are nomads and manipulators of space given.

**SPACE/ DIALOGUE/
AMBIENT/STIMULATING/
MULTISENSORIAL**



Numen

design studio



Numen/For Use is a Croatian-Austrian design collective working in the fields of scenography, industrial and spatial design and conceptual art.

The group first formed in 1998, as a collaborative effort of industrial designers Sven Jonke, Christoph Katzler and Nikola Radeljkovic under the banner For Use.

In 1999, they establish Numen as a collective identity covering all projects actualised outside the sphere of industrial design.

The group's early enterprises are characterized by experiments with impersonal design and radical formal reduction, deeply rooted in the tradition of high modernism and mainly applied to various synergetic total-design projects in Croatia.

From 2004, onwards, after setting up a large scale site-specific project for the production of "Inferno" in the National Center for Drama in Madrid, Numen/ For Use become intensely involved with scenography. Further realizations in theaters across Europe ensue.

Since 2008, the collective turns its focus towards configuring objects and concepts without a predefined function, an activity resulting in the more hybrid and experimental works such as the Numen-Light series and Tape Installation.

Parallel to these publicly exposed ventures, the group wins several international awards for their accomplishments in the field of industrial and set design.

The Field

The suspended Field is a spatial project related to our comprehension of nature, its resources and our attitude towards it.

The men's common perception of earth is defined by two paradoxical paradigms, one of earth as immobile mass of infinite weight and other as earth like a plain, two dimensional surface.

Growing the field, which is not tied to the ground, but floating on pulsating piece of textile in between closed walls, provokes both of those concepts. The “green” carpet undergoes the entire vegetative cycle, from sprouting to disintegration.

The emergence of this artificial, yet live installation, puts the designer in a different context, in a position of a dedicated farmer.

In this case, the skills are all about optimization of the density of sowing, the choice of the right sowing culture and determining the precise dosage of the irrigation. This process makes us aware of both the fragility and power of life.

From one side, we witness the incredible fact that plants grow out of cloth, and from the other we face the fatal consequences of insufficient or over irrigation.



**SPACE/ DIALOGUE/
CONCEPTUAL/INVITING**







Excentrique(s)

installation, conceptual art



*Daniel Buren
1938, France*

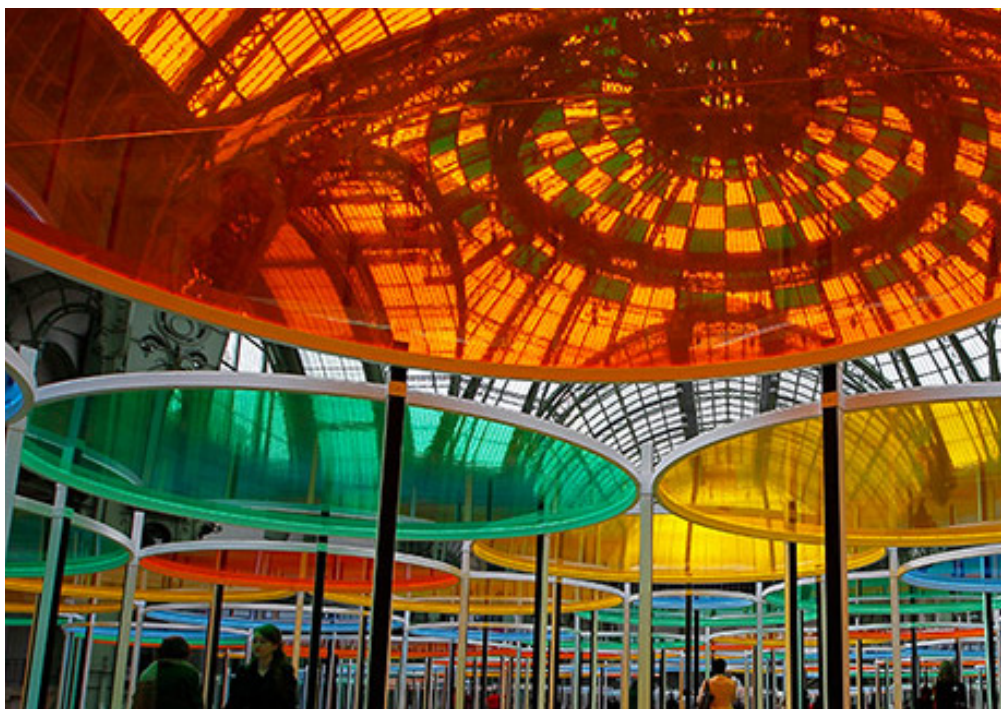
Sometimes classified as an abstract minimalist Buren is known best for using regular, contrasting colored stripes in an effort to integrate visual surface and architectural space, notably on historical, landmark architecture.

Excentrique(s), Grand Palais, Paris is urban installation composed of Rainbow colored disks that act like trees one walks underneath.

The translucent circles, colored in red, blue and green, create a second roof that's just eight feet high.

As light streams in through the windows, the installation comes alive.

**SPACE/ CONCEPTUAL
INTERACTIVE**





Ekip is a collective group of young designer and architects based in Canada.

They are balancing a contemporary design, architecture, city and society, and on the other hand, a light, spontaneous, playful and fun approach/attitude to making architecture.

From the situationist social theory, drifts and detournements, the productivists & constructivist; through the tactile richness of the material world and of the senses; to the landscape, land-art and art;

Ekip inspirations and influences are wide-ranging, attempting to synthesize and react to the many often paradoxical forces of our today's modernity.

Parallax Boogie-Woogie

“Parallax Boogie-Woogie” is a playful construction based on the labyrinth and its complex geometrical patterns. As visitors walk into it, they bodies and minds trace and retrace these patterns. While exploring the labyrinth, they call upon intuition and imagination rather than sense of logic.

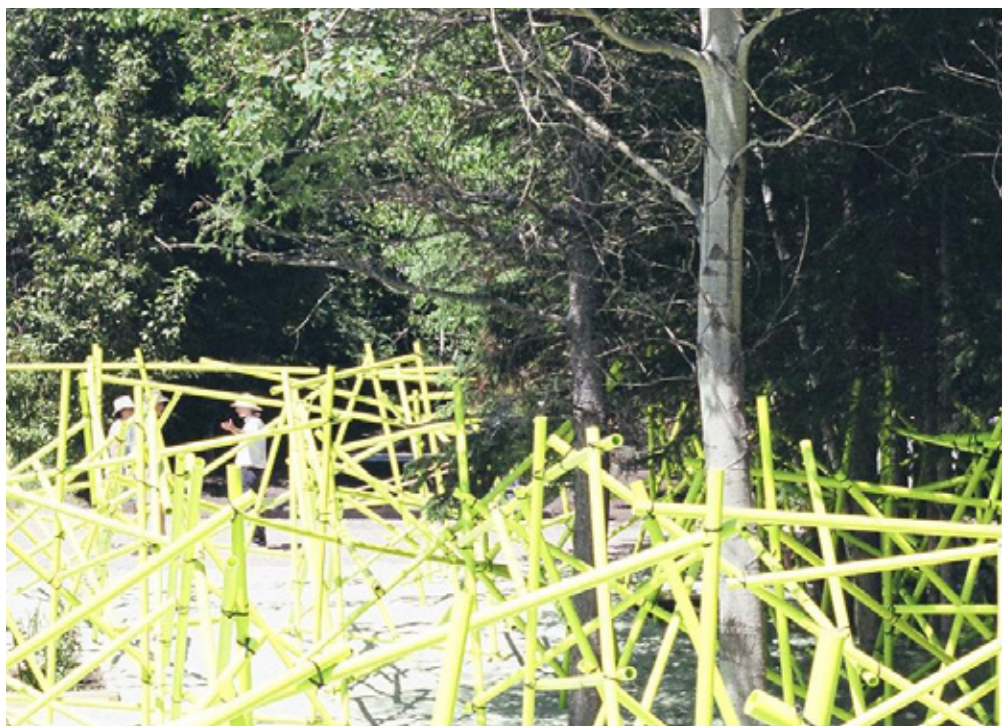
This garden installation juxtaposes a web of 350 green plastic tubes and plants onto a 3,200 square feet ground plane.

Ground, tubes and plants melt into a monochromatic ensemble of greenery. Movement through this dynamic porous composition animates the parallax. Eight stations in this landscape structure the course of discovery and act as anchors and places of experience.

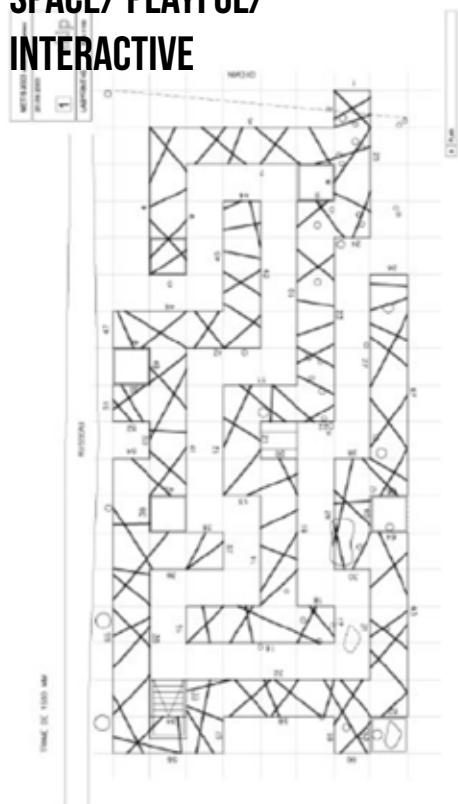
Parallax Boogie-Woogie references the networks, chaotic flows, and hyperactivity of contemporary society into a field of playfulness and exile from rationality into the autonomous territory of Homo Ludens.

It transforms nature, often perceived as an hostile environment filled with scary creatures, into a playful one. This labyrinth creates a cultured space in the mist of a wild expanse of forest.

The visitor can play at getting lost, replacing fear with a joyful experience.



**SPACE/ PLAYFUL/
INTERACTIVE**



Kaboom

playgrounds



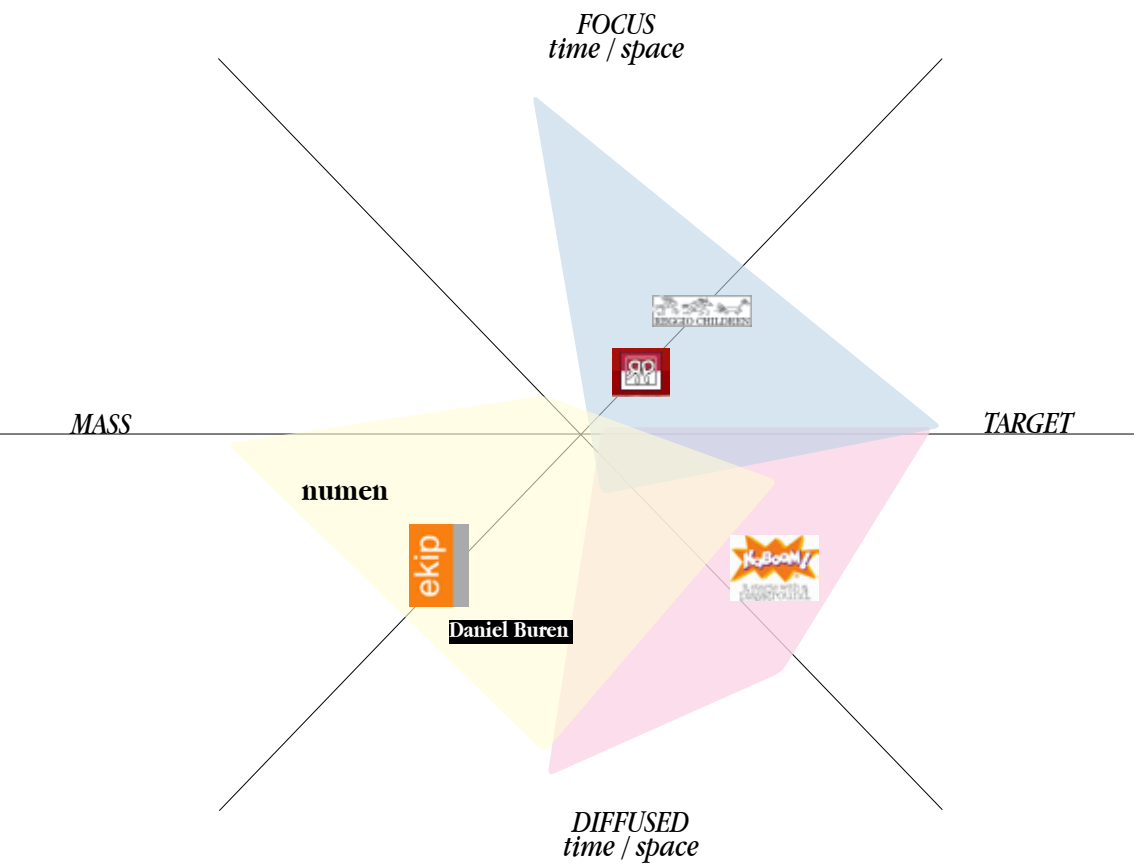
Imagination Playground is a breakthrough playspace concept conceived and designed by architect David Rockwell to encourage child-directed, unstructured free play.

With a focus on loose parts, Imagination Playground offers a changing array of elements that allows children to constantly reconfigure their environment and to design their own course of play.

Rockwell and his firm, Rockwell Group, have partnered with KaBOOM!, to inspire children's inherent ability to dream and create.

**TRANSFORMATIVE/
IMAGINATION/TANGIBLE**





Mapping case studies

The case studies mapped here are placed according to the polarities in order to better understand the characteristics and different approaches that emerged over the time. As illustrated here we can see that, with different location, the type of activity, educational and experience approach varies. Additionally, if we observe schools Rinnovata and Reggio Children we can notice that their approach of providing kids with multisensory experience is solely focused on children where all the activities are held in school institutions. With regards to the space and location the other examples indicated are calibrated for larger audience, stimulating a direct or mediated interaction between participants and the structures.

Taking in account the contrasting nature of examples marked here, helped me define my project and identify elements that would enable it become a workable solution for all.

The commonality between the cases and my project I believe is the creativity and concept of translating the nature into language that all can understand.

If I had fifty-three minutes to spend as I liked, I should walk at my leisure toward a spring of fresh water.

A. de Saint-Exupéry

TaleTellers project is set of simple but intuitive elements aimed at enabling people to connect with nature through their senses.

The project aims to renew and emphasize the link between people and nature in urban structures with the help of today's technology and opportunities, specifically focusing on opportunities where one's experience plays the main role.

The foundation of this project is therefore based on cognitive development and the apprehension of an object through the senses or mind. The focus therefor is to introduce the activity that generates a comprehension of the world that surrounds us.

This is primarily done by involving the people, kids and elderly at the first place, and enabling them with the tools for transmitting their knowledge and learning new experiences.

A set of several elements characterized by different approaches and different modality are combined together in order to create and retell a set of experiences.

The result of this will not only help people to systematically observe but will also foster deeper connection and knowledge towards nature. Additionally by renewing the connection with outdoors spaces through an inter generational prospective project encourage knowledge sharing among seniors and kids.

experience

revive
socialize
connect
exchange
narrative
storytelling
dialogue
perception
stimulate
emotion
educate
observation
personalize
symbolism
transform
inform
communicate
nature

The core of the TaleTellers project is to foster connection between people and outdoor environment in cities but also to educate and reinforce relation among children and adults.

TaleTellers aims to introduce paths of experience through out set of simple elements where each invites users on interaction.

It hopes to create a greater awareness and opportunity to establish better understanding of nature elements. It aims to find a complete solution for problem faced in urban structures where people, in particular today's youth spend less time outside than any previous generation, depriving themselves of the emotional and physical benefits that come from having a bond with the natural world. Rather than "going green," people are "going screen," interacting with electronic media. Therefor providing them with paths of experience will put again in evidence the importance of being conscious about nature and its specific aspects.

Additionally TaleTellers utilizes key feature that helps make the project more practical.

Nature consists of material world and its phenomena. It includes endless amount of entities where each and every one of these are defined by inherent characteristics. Communicating all of them would be a rather difficult task and irrelevant for this purpose that TaleTellers is addressing .

The idea is to single out tree senses and focus on reviving the forgotten experience and knowledge in relation with nature. This helps greatly in understanding the problem in detail and finding the exact solution that will help its growth in the future. The system of elements that TaleTellers is composed of can then be applied to various types of spaces always aiming to communicate same educational and experience values.

Focus approach

elements

TaleTalles communicates through three elements: Light / Tactile / Sound. Driven by idea of connecting people with nature and its values these three aspects carefully selected are linked to three senses of humans sight/haptic/sound. By emerging two realities into simple objects users are invited to converse and interpret their experience with help of TaleTellers.

LIGHT / *perception of light, game, illusion, symbol*

Light communicates through shape, color, shadow. Here light is used as narrative tool, objects personality is based on how light invades it. Light becomes element that materializes object.

HAPTIC / *texture, tangible, stimuli*

Touch is direct contact that one can experience.

SOUND / *frequencies, transmission, noise sensations*

Sound alters the various situations, danger, pleasure, happiness. People use different languages to communicate, nevertheless nature is far richer. There is great spectrum of how nature and its components are communicating.

SPACE/ *outdoor spaces, public places,
urban environments
(parks, playgrounds, school yards)*

** TaleTellers is design
with the intention to be
temporary/permanent installation
of experience elements*



** In the first place TaleTellers
aims to foster link between
kids & elderly together with nature*

PEOPLE/ *project targets kids (>3 years)
and elderly as well as adults and
adolescents*

INTERACTION/

movable parts, manipulative structures, intercommunication between elements and users

** TaleTellers fosters the interaction with users thanks to the its transforming personality*



** TaleTellers implies knowledge gained through one's perception or by experience with regards to nature*

emphasizes the recognition of sensed or felt

AWARENESS/



** All the elements are characterized with user friendly graphics and material identity*



PRODUCT/ *three objects
light/haptic/sound*



LOGO/

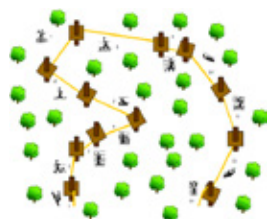
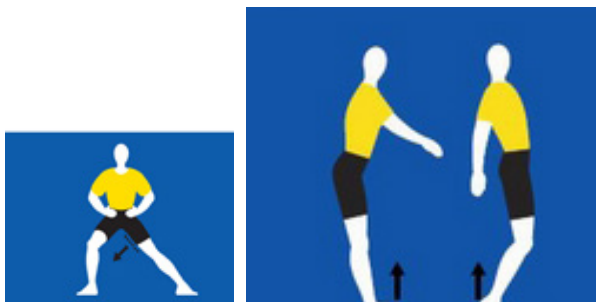
- bright colors recalling the three different experiences
- easy and "catchy" forms
- sketched or handwritten



PERCORSO VITA /

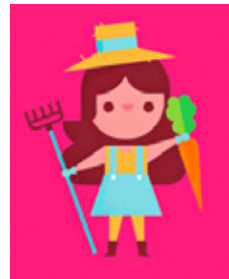
- no writings
- easy to understand
- limited color palette

* TaleTellers reference to Percorsi di Vita



ICONS ILLUSTRATIONS /

- colorful
 - animal shaped
 - soft & rounded
-



TaleTellers, as demonstrated previously, aims to introduce the experience through out set of elements. One of the core referen-ces linked to concept is "Percorso di vita" , accordingly I singled out main communicative components used to inform kids and adults. As shown, information is conveyed with rather clean and explicit graphic entities.

- *area / 311.200 m*
- *year of completion / 1960*
- *architect / Piero Bottoni*

Monte Stella known as “montagnetta” of Milano is a park created in the postwar period by the architect Buttons dedicated to his wife, Stella, in the north-west of Milan in the district QT8.

History & Architecture

The history of the park Montestella is closely linked to those in the neighborhood of QT8, which was designed as a new residential settlement in 1947 on the occasion of the VIII Triennale, which provided high-rise buildings, a church, several schools, a municipal market covered and especially green spaces. The system envisaged artificial hill, about 90 meters, consisting essentially of material from the rubble of buildings bombed during the war. The height was then re sized, due to stability issues, about 50 meters. The green area, completed in the early '60s, it was destined to urban park and enriched with trees only in 1971 and in the 70s and 90s was used for sporting events, celebrations party, trade fairs and shows. Because of the conditions of the park and some landslides a recovery intervention begun at the end of the 90s with the introduction of new trees on the hill arranged for four levels. The slow climb to the summit is marked by dirt roads, paths and steps.

Architectural Heritage and Artifacts

In the park there is a Nursery School Santa Maria Rising designed by Arrigo Arrighetti. In 2003 was inaugurated the “Garden of the Righteous of the world” where every year are entitled to the flowering cherry trees of the personalities who have risked their lives to save lives from racial persecution. The church of Santa Maria Rising was designed by Vico Magistretti.







Flora

Main tree species, curly maple (*Acer platanoides*), negundo (*Acer negundo*), mountain Maple (*Acer pseudoplatanus*), Silver Maple (*Acer saccharinum*), Hackberry (*Celtis australis*), Elm (*Ulmus* spp.), black locust (*Robinia pseudoacacia*), hornbeam (*Carpinus betulus*), red oak (*Quercus rubra*), white birch (*Betula pendula*), cipressino poplar (*Populus nigra* ‘*Italica*’)...

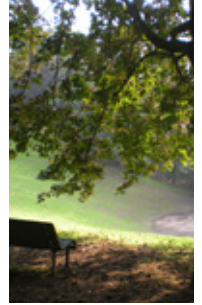
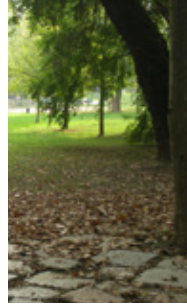
UTILITIES AND SERVICES

-  school/ preschool Santa Maria Nascente
-  dog area/ no dedicated areas
-  security/ periodically monitored by GEV
-  parking/ at entrance in Via De Gasperi and Via Isernia
-  pavement/ asphalt, cement, gravel

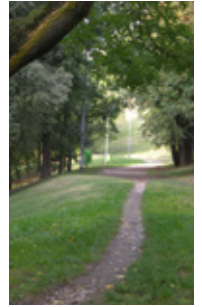
WELL BEING AND SPORT

-  area play/ 2 areas
-  running paths/ 1 running path 2.5 km
-  percorsi vita/ various paths
-  bicycle/ mountain bike paths
-  bowling/ 1 bowling green synthetic grass
-  sport activities/ football field, athletics equipment, tennis courts

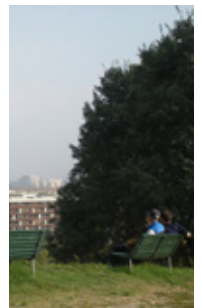
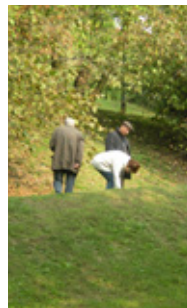
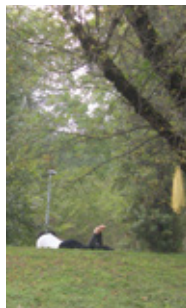
shadow/light

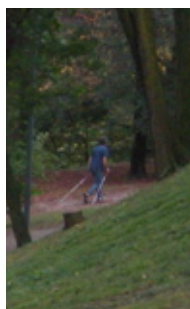
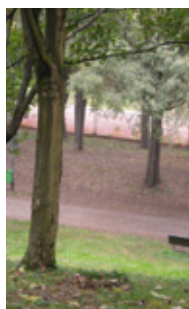
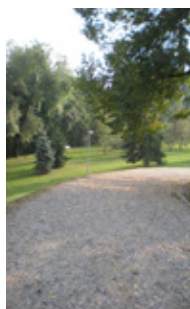
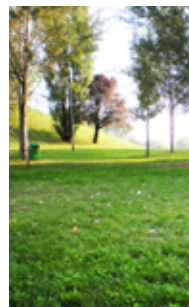
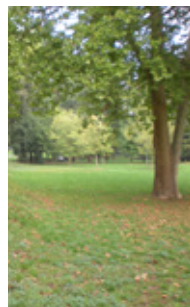
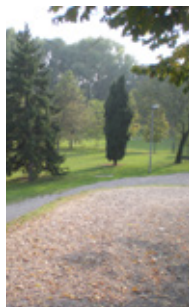
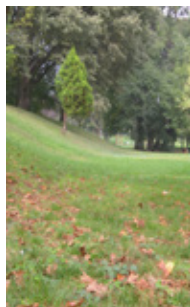


paths



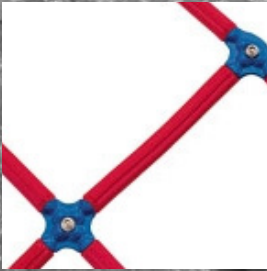
activities/people





context / material analysis

CABLECORE
CLIMBING CABLE



GALVANIZED
STEEL



PERMALENE
MATERIAL



PROSH
FINISH



TEXTURED-POLYESTER
RESIN



ROTATIONALLY-MOLDED
POLYETHYLENE



STEEL-REINFORCED
CABLES



RECYCLED P



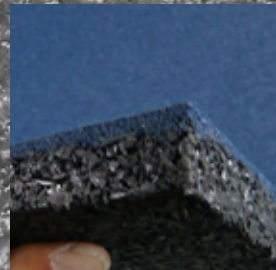
** ref Landscape structures*

FIELD

ANTI
SHOCK

WOOD

ANODIZED
ALUMINUM



LINKS

PROGUARD
FINISH





- Place/ Park Monte Stella, QT8
- Date & Time 6/10/13
- User/ Antonio
- Age/ 70 years old

With you do you come?

*I come with my two grandchildren (3 and 6 years old) and my wife.
How much time do you spend?*

We usually pick them up from school and if the weather is nice we stay for couple of hours, on contrary we stay for about one hour.

What are the main activities?

Well the older one is playing with other kids while the smaller one is in charge of grandmother and me I just sit on the bench and observe.

What are the spaces that you frequently use?

As soon as we come in playground is hard to give them even a snack. We prefer to stay where they can socialize with other kids but more over going further in park is not so secure for them.

* observations

The grandparents are the observers (passive) or guards(active). Unfortunately, despite of the fact that the true nature is surrounding them, most of the time they stay in crowded playground having both limited chances to explore and learn.

- Place/ Park Monte Stella, QT8
- Date & Time 8/10/13
- User/ Sara, Sweden
- Age/ 39 years old

With you do you come?

Every day I come with my son Paolo (5 years old)

How much time do you spend?

Here in Italy people come to park only if it is sunny but me and my son we do come even in rainy days. We usually stay about 2 hours every day in week on weekends even more.

What are the main activities?

My son likes to climb a pyramid structure but also the trees.

Myself I spend time chatting with other moms while keeping him on my eyes.

What are the spaces that you frequently use?

Sometimes we go in "woods" all together where I can run but still is not too safe. The park is too dispersive and sometimes you might encounter strange activities.

* observations

Evidently security issue is the main reason why certain activities are limited and most of all not placed in action. The communication in outdoor space between adult, child and surrounding is restricted.

- *Place/ Park Monte Stella, QT8*
- *Date & Time 6/10/13*
- *User/ Tata & Mateo*
- *Age/ 20 and 8 years old*

With you do you come?

I come with my baby sitter. She picks me up from school and then I meet here with my 20 friends.

How much time do you spend?

A few hours.

What are the main activities?

I like ramp, playing football with my friends and skateboard.

What are the spaces that you frequently use?

I am mostly near playground especially where the ramp is and football field.

**it would be nice to have path with obstacles.*

AREA play *valuation*



after school hours
pm/weekends



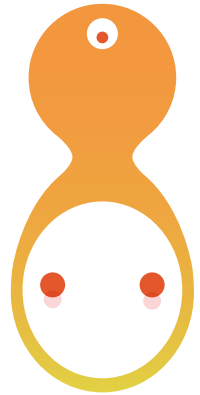
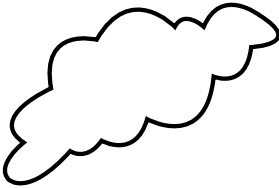
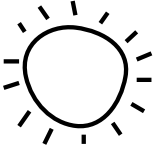
monitored my adults
parents & grand parents,
babysitters



limited areas, mix
free play, monitor and
organized play

*** observations**

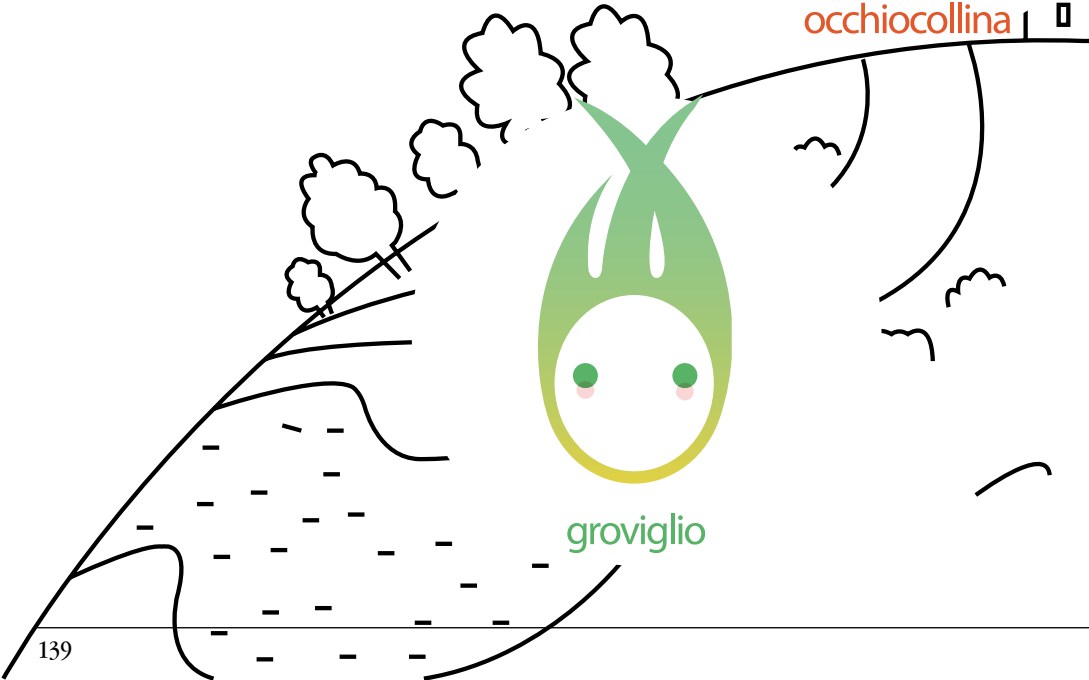
Mateo is mostly with his friends on the side part of the park in natural environment distant from predefined structures where they have more space to express their creativity distant from crowd.

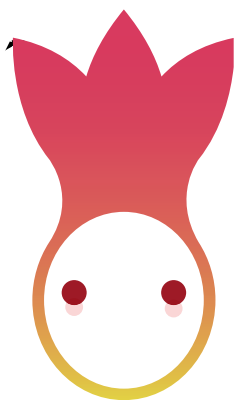
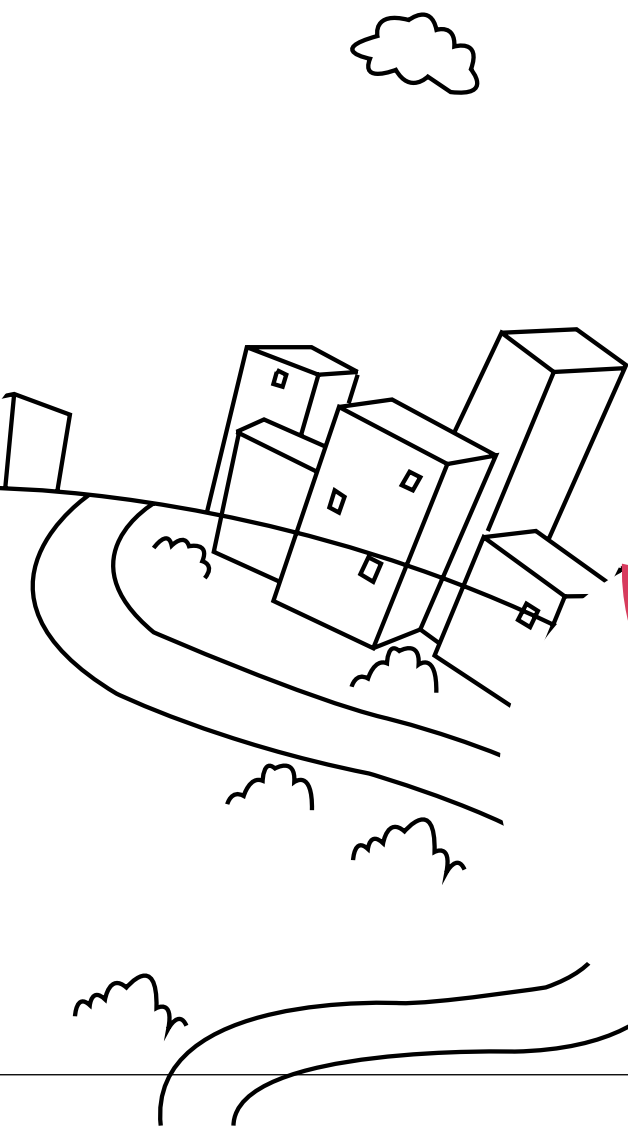


occhiocollina



groviglio





suonardino

perception of light/



color/symbol/game





occhiocollina
sensuous perception

Occhiocollina communicates the experience of landscape throughout shape, color, shadow. Simple but yet symbolic and suggestive shapes are designed to be personalized with stories. Each color is correspondent to color that landscape gains as light in natural setting invades it. Red represents the sunset when the Sun is at the lowest point. Yellow for sunny day, green deep woods of mountain. Blue here is used as tag for mountains near water. Finally white are the those mountain picks covered with snow and ice. Designed installation is window to fantasy, imagination. Element that tells a story together with you.



occhiocollina

6 sheets of HI-MACS
thickness 12mm, max height 1400mm

COLOR PALLET
red/green/blue/yellow/ white/black

TECHNOLOGY
thermoforming



occhiocollina

LG HI-MACS
Acrylic Solid Surface

HI-MACS® is the Solid Surface material of the “New Generation”. The mineral material consists of approximately one third acrylic resin (polymethyl methacrylate or PMMA) and 5% natural pigments. Its main constituent, with 70%, is the natural mineral aluminium hydroxide (ATH) obtained from bauxite (aluminium ore). HI-MACS is produced on a steel conveyor belt in the form of sheets or as mouldings in a modern manufacturing process. It is a two-stages thermal curing process at high temperature. This second stage in the thermal process is what sets Hi-Macks apart from other mineral materials and produces a new and stronger compound in which any structural defects are perfectly evened out. This improved structure automatically affects the quality of the material. Material is manufactured in the form of sheets and mouldings (sinks and bowls).



Black
S 22 (12/9/3 mm)



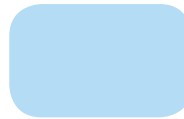
Fiery Red
S 25 (12/3 mm)



Lemon Squash
S 106 (12 mm)



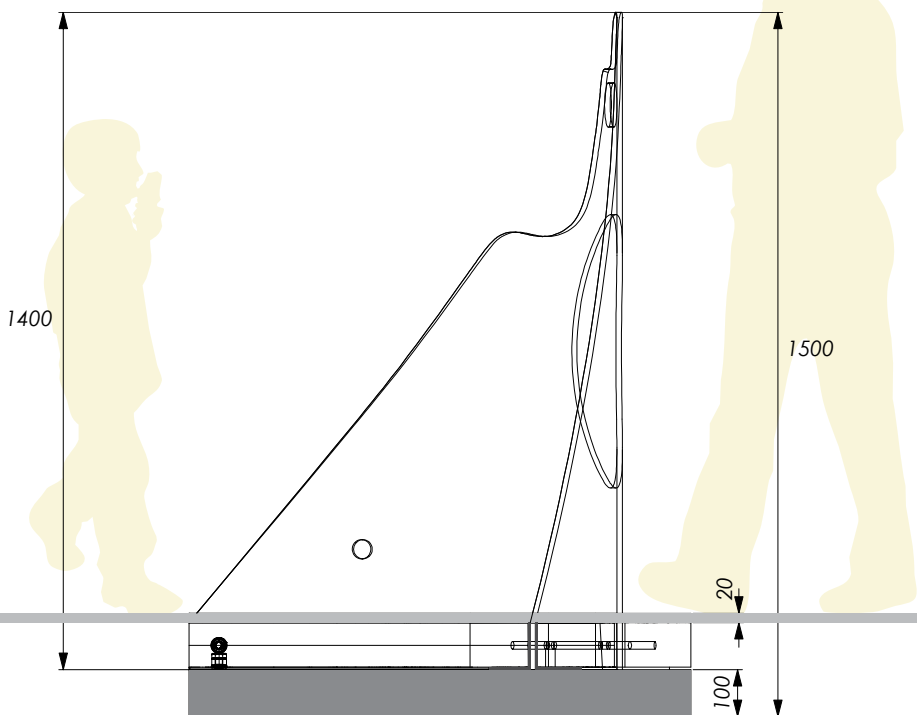
Light Green
S 212 (12 mm)



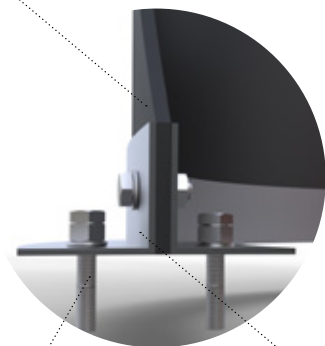
Sky Blue
S 203 (12 mm)



Alpine White
S 28 (12/9/6/3 mm)



HI-MACS®
12 mm

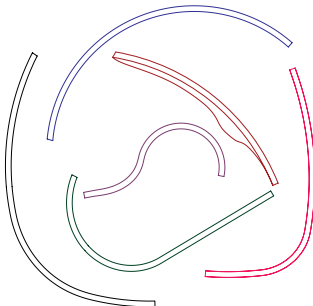
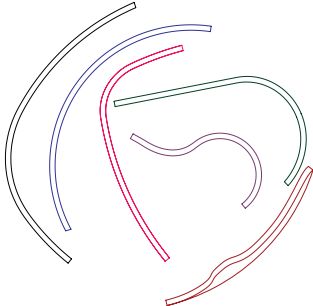


Ancor
Ø 16mm

Steel L profile
100/100/5 mm

01

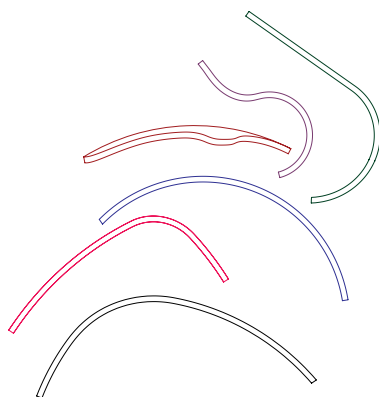
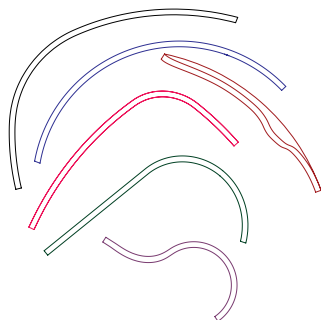
02



03



04



texture / tangible / st



timuli

“Art is the child of nature in whom we trace the features.”
Henry Wadsworth





grovglio
*mysterious
grove paths*

Grovglio symbolize the frontier, thresholds, the unknown. Journeys into them are seen as initiations, tests and challenges; to return the uncertainty of the unconscious laid to rest. XXX is playful construction based on natural labyrinth formed by trees. As we walk into it our bodies and minds trace and retrace these natural patterns and textures. This labyrinth creates cultured space with sense of the wild experience of forest. Here we can play at getting lost, replacing the fear of unknown with smile.

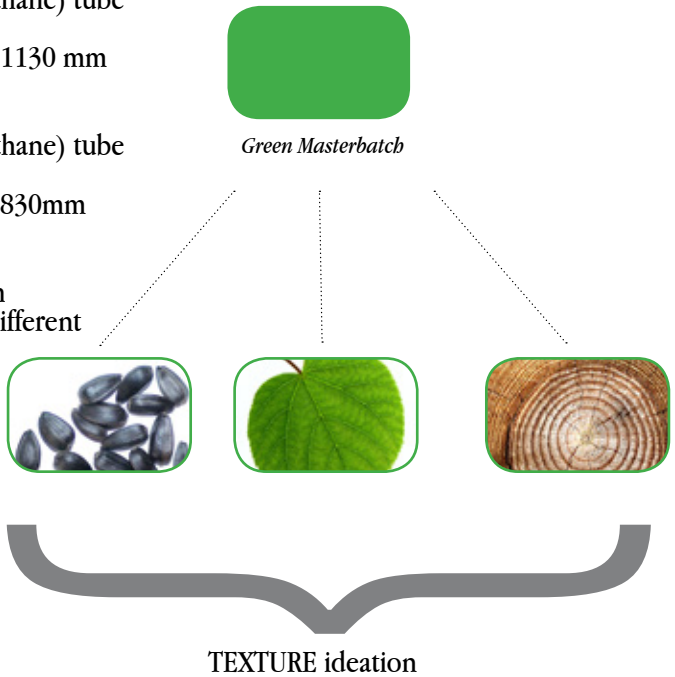
4
TPU (thermoplastic polyurethane) tube
thickness 10mm
diameter Ø 80mm, height h1430 mm

9
TPU (thermoplastic polyurethane) tube
thickness 10m
diameter Ø 40mm, height h 1130 mm

11
TPU (thermoplastic polyurethane) tube
thickness 10mm
diameter Ø 40mm, height h 830mm

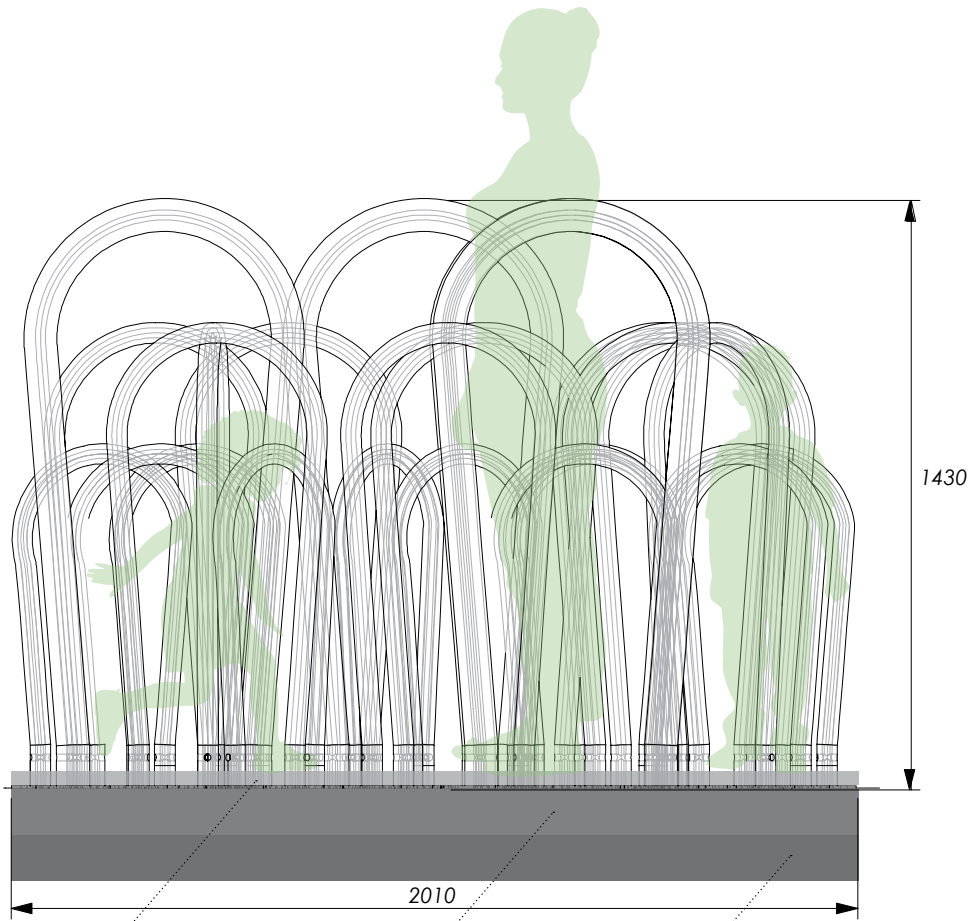
TECHNOLOGY
injection molding tubes with
texture applied, fostering different
touch sensations

Anti shock surface
natural rubber
200x200x20cm



Estane®
thermoplastic polyurethane TPU compounds are specifically designed for fast, easy injection molding of large and small parts. The softer Estane®TPU compounds, in the shore hardness range of 70A to 90A, have a low modulus of elasticity and excellent retention of flexibility at very low temperatures. The harder Estane®TPU compound materials, in the shore hardness range of 50D to 70D, have a high modulus of elasticity, and excellent low-temperature impact strength.

All materials produce a very low-viscosity melt that easily fills the most complex mold cavities under low injection pressure. The low viscosity melt permits the material to flow through small gates and into thin wall sections under low injection pressure. Low-viscosity melt combined with low injection pressure minimizes the possibility of producing highly stressed parts.

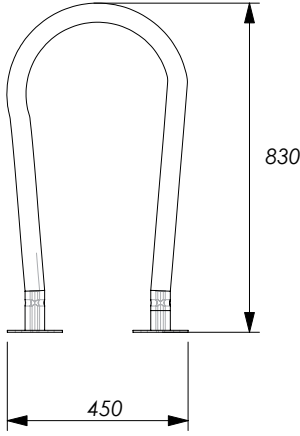
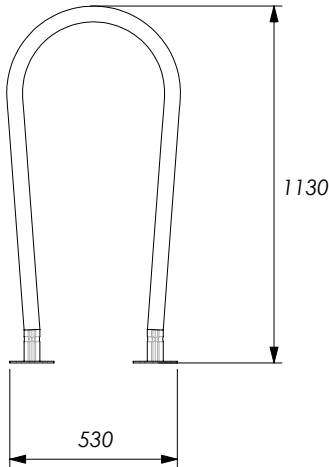
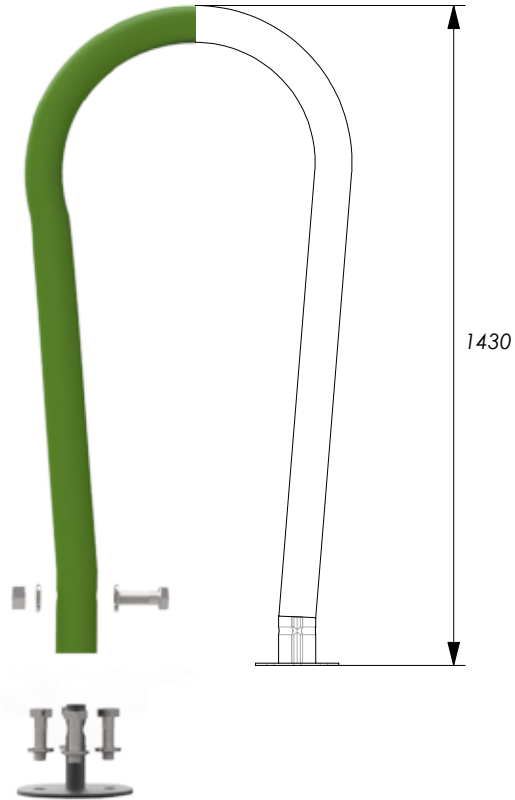


Anti shock surface
20mm

cement base
100mm

reinforced concrete
100mm

groviglio





frequencies/ noise se



sensation/ interaction

“The earth has music for those who listen.”

George Santayana



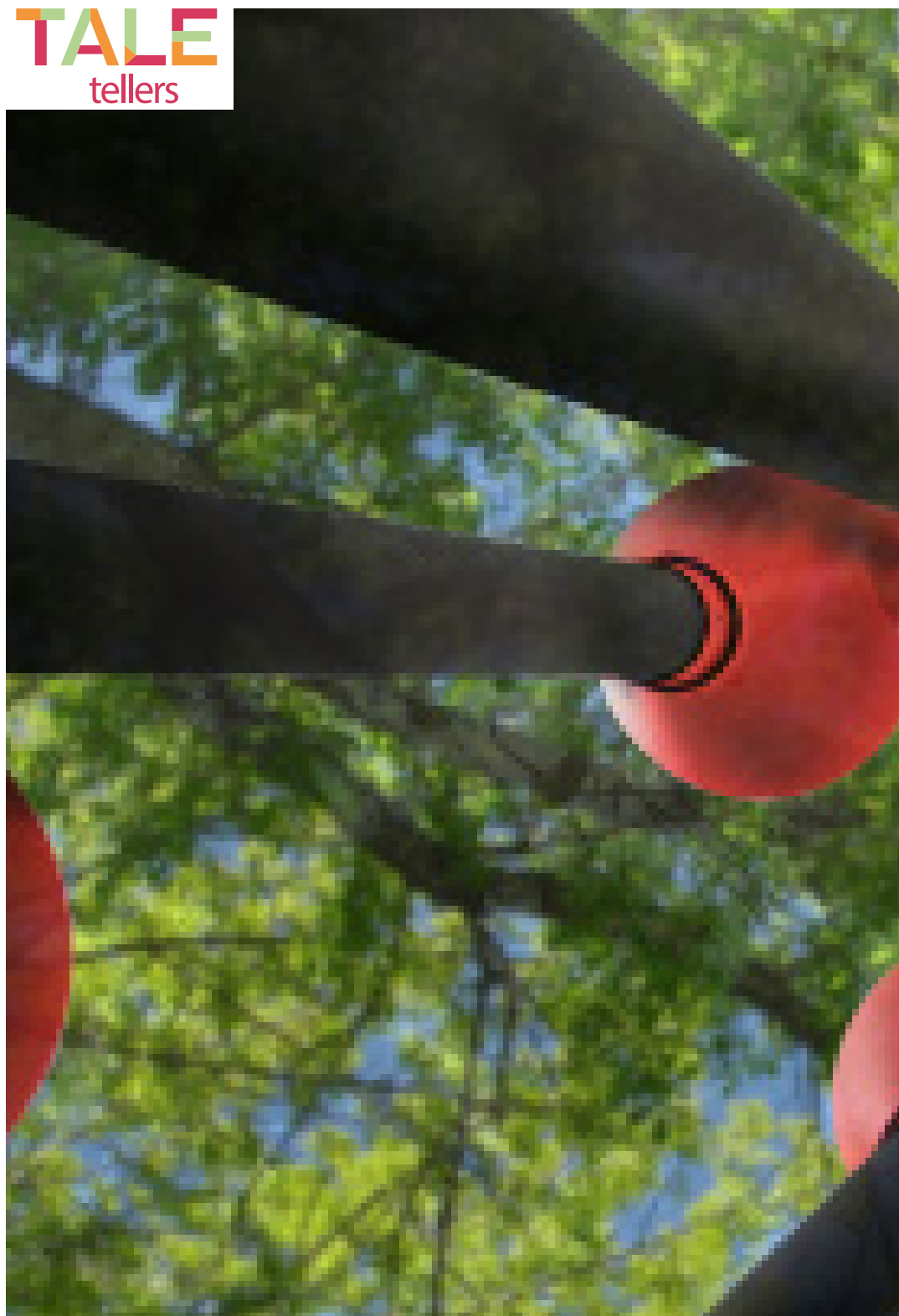


suonardino

*the sense of a world
by its sound.*

Sound has a profound effect on the senses. It can be both heard and felt.

Movement through this dynamic installation evokes responses of the five senses. Sound here is used as a trigger for senses to remember another time and place, encoding the auditory sensation of new experience while interacting. This suggestive units are stimulating us to tune into unique melody of natural sound.



suonardino

20 units rubber / polypropylene
tube thickness \varnothing 40mm, max height 1117mm

COLOR PALLET
red/black

TECHNOLOGY
upper part injection molding
lower part extrusion rubber



suonardino



Eurofoam is the company operating in rubber sector, producing rubber for various types of applications. With regards to necessity for using rubber this company is taken as a possible supplier.

Rubber tubes are reinforced in order to provide the strength and stiffness and to sustain the weight of upper part but also to avoid bending possibilities related to security issues. I introduced three height with max 1117.

(C3H6)_n

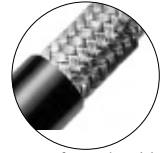
Polypropylene is used in the manufacturing piping systems; both ones concerned with high-purity and ones designed for strength and rigidity.

This material is often chosen for its resistance to corrosion and chemical leaching, its resilience against most forms of physical damage, including impact and freezing, its environmental benefits, and its ability to be joined by heat fusion rather than gluing.

Polypropylene is most commonly used for plastic moldings, wherein it is injected into a mold while molten, forming complex shapes at relatively low cost and high volume



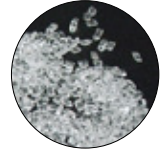
Black



Reinforced rubber tube



Red Masterbatch

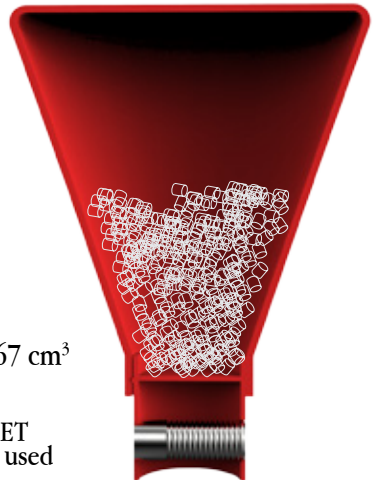


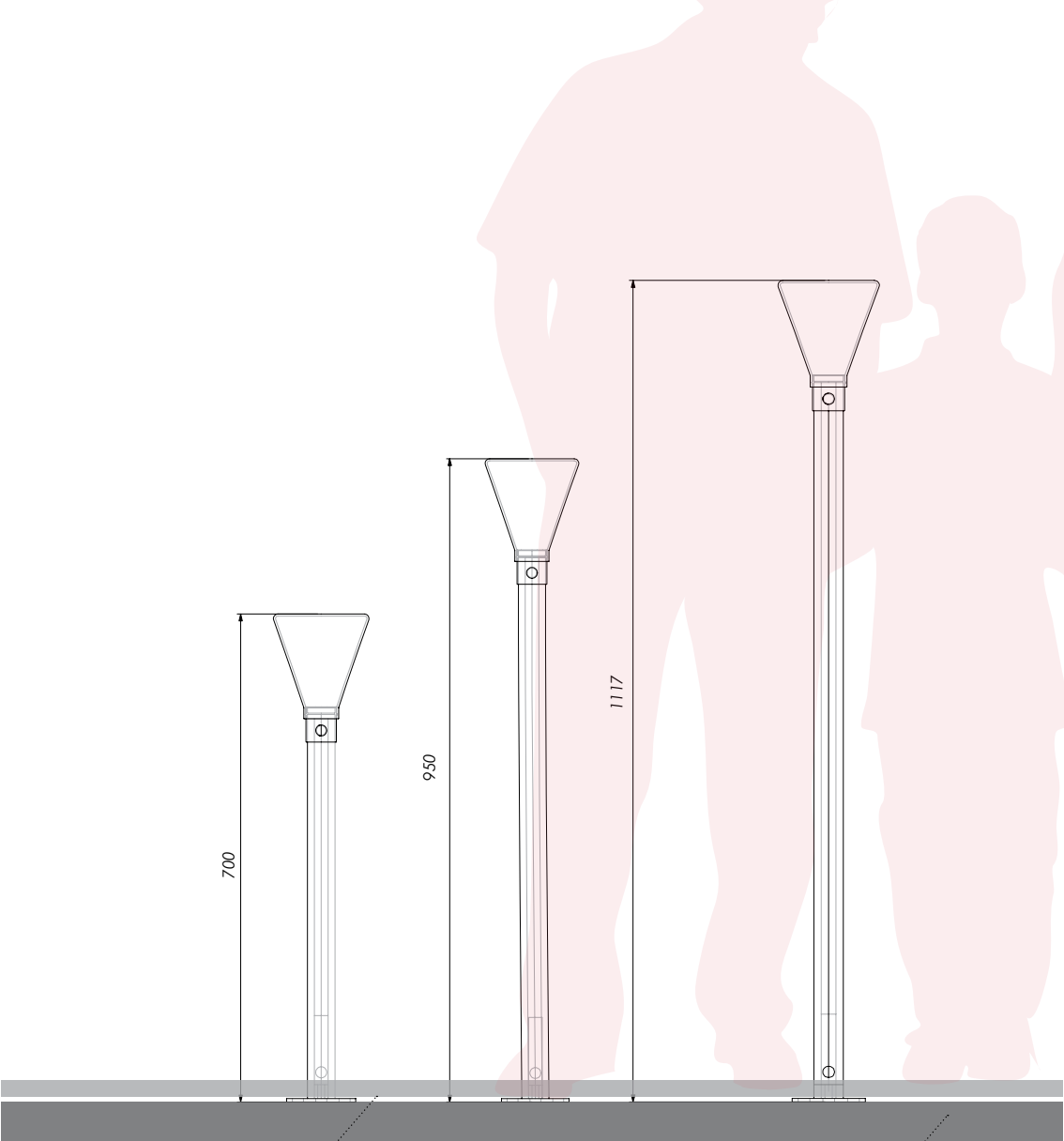
Crystal PET resin as a sound transmitter

total

$$V = 4467 \text{ cm}^3$$

500g
of crystal PET
resin to be used





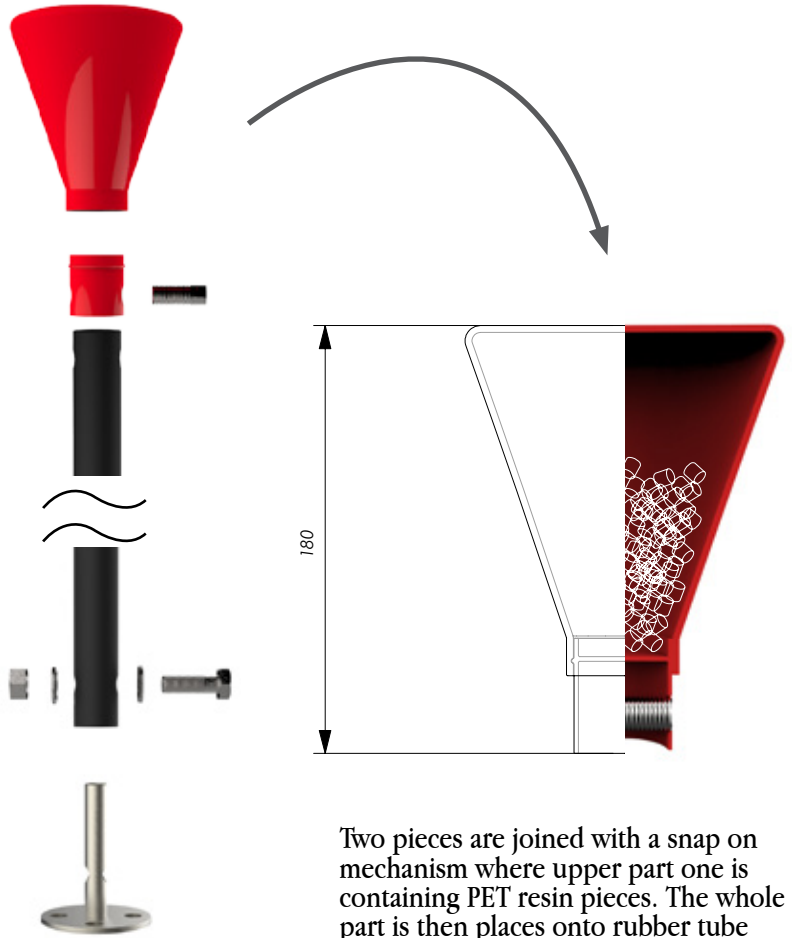
700

950

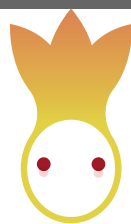
1117

Anti shock surface
20mm

reinforced concrete
100mm



Two pieces are joined with a snap on mechanism where upper part one is containing PET resin pieces. The whole part is then places onto rubber tube and joined with slotted head screw passing throughout both elements. The snap on mechanism provides flexibility in terms of changing the sound producing unit as well as the eventually repairing needs.



suonardino



suonardino

grov

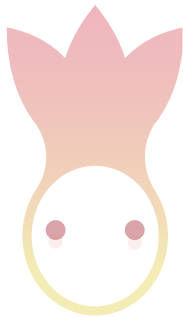


viglio occhiocollina



The main value proposition of the TaleTellers project is to reconnect people to the nature and to foster inter generational relations.

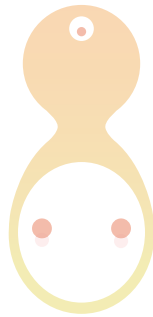
TaleTellers was inspired by my passion for nature. I have always been very close to natural settings during my childhood and over the years I have understood a great importance to accost the attention of today's kids and people around the world to nature existence especially in urban environments. TaleTellers was therefore a project created to help find a workable solution for a problem that I feel needs an innovative approach to help restore human interrelationship and relationship with nature. Today more and more people are interested in the learning, interacting , sharing and growing together. TaleTellers helps provide all this to its users through paths of experience with Occhiocollina, Grovigliò and Suonardino. Its been designed with the hope of creating an awareness among the locals about the varied natural phenomena that exists around them. To inspire them and enable them to value its richness. With TaleTellers, I hope to bring to light the true essence of nature to the the kids through its patterns, colours and textures through the magical skill of taletelling of grandparents supported with products designed.



suonardino



groviglio



occhiocollina

Bibliography

list of reference books

This page highlights the books that I referred to during my research.

- Biddy Y., The importance of play and playfulness, European Journal of Psychotherapy and Counselling. (2008)
- Bixler R. D. and Floyd M. F. "Nature is Scary, Disgusting, and Uncomfortable." Environment and Behavior. 1997 vol 29 no 4 pg 444
- Ceppi G., Zini M., Bambini, Spazi, Relazioni: Metaprogetto di ambiente per l'infanzia, Reggio Children, Reggio Emilia, 1988
- Einon D., Io imparo Prima, Mondadori, 1999
- Fjortoft I. and Sageie J., The Natural Environment as a Playground for Children : Landscape description and analysis of a natural playscape, 2000, vol 48
- Harley D. and Vetere F., Intergenerational context as an emphasis for design. pg 1,2,3 (2011)
- Istat, Sistema Statistico Nazionale: Noi Italia, 100 statistiche per capire il Paese in qui viviamo, Istituto Nazionale di Statistica, Roma, 2012
- Louv R., Last Child in the Wood: Saving our Children from Nature-Deficit Disorder, Algonquin Books, Chapel Hill, 2005
- Kals E. and Ittner H. " Chapter 7: Children's Environmental Identity: Indicators and Behavioral Impacts, Identity and the natural Environment: The Psychological Significance of Nature, Cambridge, MA 2003
- Meroni A. with essays by: Bala P. , Ciuccarelli P. , Collina L., Leeuw B., Jégou F. , Luiten H., Manzini E., Marras I., Stø E., Strandbakken P., Vadovics E., (ebook version)
- Piaget J., Lo sviluppo mentale del bambino, Einaudi, 2001
- Sobel D., Childhood and Nature: Design Principles for Educators, Stenhouse Publishers, Portland, 2008
- Tonucci F., La città dei bambini: Un modo nuovo di pensare la città, Laterza, 2005
- White R., Interaction With Nature During the Middle Years: Its Importance to Children's Development & Nature's Future, White Hutchinson Leisure & Learning Group 2004

Webliography

list of reference pages

This page highlights the various webpages that inspired the process and provided the information that enabled me to design the project

- www.archilovers.com
- www.ar2com.de
- www.architizer.com
- www.archdaily.com
- www.bbc.com
- www.designboom.com
- www.designmilk.com
- www.dezeen.com
- www.designforkids.com
- www.hdk.gu.se
- www.kidsroomzoom.com
- www.kidsomania.com
- www.milanoartexpo.com
- www.moma.com
- www.pinterest.com
- www.play-scapes.com
- www.reggiochildren.it
- www.vimeo.com (Open frameworks)
- www.worldlandscapearchitect.com
- www.yankodesign.com
- www.zpzpartners.it

TALE

tellers

