

RESTRAINTS ON DESIGN: ADVENTURE PLAYGROUNDS
AND LANDSCAPE ARCHITECTURE

by

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Abstract

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This thesis examines minimally designed adventure playgrounds, what landscape architects, landscape designers and educators think about this type of play space and if it could become a larger part of the American play inventory. It also explores the roles landscape architects have in designing these play areas while still allowing the intended users, the children, to take a lead design role and attain the intended benefits of the space. To do this, this study explores the origins of adventure playgrounds, their ability to develop in the United States, and how landscape architects are involved in this process. Landscape architects, designers and educators are interviewed to collect data about prior knowledge of adventure playgrounds, the benefits and the limitations about this type of play and values lost from traditional prefabricated playgrounds. This data is analyzed to expose common themes that emerge from the interview process about the adventure playground and how restraint to design impacts this type of playground for children. By creating venues for children to use construction supplies, discarded items and other materials, children become in charge of building their own environments and special places. In this way it is important for playground designers

to avoid 'over designing' their outdoor area, as the greatest possible proportion should be available for children to freely use and modify their environment (Play England 2009).

This thesis engages in a literature review, focusing on the history of adventure playgrounds and their evolution in the United States as well as play theory and the different types of play. A key focus is the value of minimally designed playground space for children and the types of experiences that less designed spaces offer. Interviews of landscape architects involved with park design were conducted, along with other landscape architects educators and professionals involved with children and/or park design. The interviews included discussions of how restraint on design impacts landscape architecture and adventure playgrounds. These interviews were then analyzed using the constant compare method to develop common themes and set of ideas about the role of the landscape architect and adventure playgrounds

The above method of literature review is studied for the origin of the adventure playground along with the study of different European and American examples of adventure playgrounds from the past and ones of today. Data from the interviews are collected to reveal common themes that emerge through the interview process. These themes are the basis for this thesis and reveal the benefits and limitations of this type of play.

Table of Contents

| | |
|---|-----|
| Acknowledgements | iii |
| Abstract | iv |
| List of Illustrations | ix |
| List of Tables | x |
| Chapter 1 Introduction..... | 1 |
| 1.1 Research Objectives | 4 |
| 1.2 Research Questions | 6 |
| 1.3 Definition of Terms..... | 7 |
| Chapter 2 Literature Review | 8 |
| 2.1 Adventure Playground Defined..... | 8 |
| 2.2 The Origin of the Adventure Playground | 10 |
| 2.2.1 PlayEngland Charter | 14 |
| 2.3 Play Theories..... | 16 |
| 2.3.1 Play Theory Defined | 16 |
| 2.3.1.1 Play Theories: | 18 |
| 2.3.2 Roger Harts Ladder of Participation | 21 |
| 2.3.3 Two Main Types of Play | 23 |
| 2.3.4 Risk Play..... | 24 |
| 2.3.5 Differences Between Child and Adult Design Values | 24 |
| 2.3.6 Cognitive Play and Playground Design | 26 |
| 2.4 In Depth Analysis of Research Study by Hayward, Rothenberg and Beasley | 27 |
| 2.5 Adventure Playground Examples | 35 |
| 2.5.1 The European Model: Berlin's Kolle 37 | 35 |

| | |
|--|----|
| 2.5.2 The Adventure Playground, City of Berkeley | 37 |
| 2.5.3 Huntington Central Park Adventure Playground | 39 |
| 2.5.4 City of Mercer Island, Washington Adventure Playground | 40 |
| 2.5.5 Ithaca Children’s Garden with Adventure Play in the Hands-on- Nature Anarchy Zone | 41 |
| 2.5.6 The Parish School Adventure Playground | 43 |
| 2.5.7 City of Irvine Adventure Playground..... | 45 |
| 2.6 Chapter Summary..... | 46 |
| Chapter 3 Research Methods | 47 |
| 3.1 Introduction | 47 |
| 3.2 Methodological Approach | 48 |
| 3.2.1 Constant Comparative Method..... | 50 |
| 3.2.2 Interview Questions | 51 |
| 3.3 Challenges to Research | 51 |
| Chapter 4 Data Analysis and Findings..... | 53 |
| 4.1 Previous knowledge of Adventure Playgrounds..... | 53 |
| 4.2 What Landscape Architects and Designers think about Restraint to Design..... | 57 |
| 4.2.1 Introduction..... | 57 |
| 4.2.2 Limitations of Minimal Design on Playgrounds | 58 |
| 4.2.2.1 Playworkers and Accessibility..... | 60 |
| 4.2.3 Funding..... | 61 |
| 4.2.4 Perceptions of Safety | 64 |
| 4.3 Benefits of Minimal Design on Playgrounds..... | 65 |
| 4.4 Values Lost from Designed Playgrounds | 69 |

| | |
|--|-----|
| 4.5 The Role the Landscape Architect Plays in the Minimally Designed Adventure Playground | 71 |
| 4.5.1 Site Selection..... | 73 |
| 4.6 Can the Adventure Playgrounds Described in this Research Study Become an Ongoing Part in the American Recreation/Play Inventory?..... | 80 |
| 4.7 Conclusion..... | 86 |
| Chapter 5 Research Summary | 88 |
| 5.1 Introduction..... | 88 |
| 5.2 Implications for Landscape Architects..... | 89 |
| 5.3 Future Research..... | 91 |
| 5.4 Quotes from Interviewees..... | 92 |
| Appendix A Introduction E-Mail Letter to Interview Prospects..... | 93 |
| Appendix B Exemption Determination IRB Form..... | 95 |
| References..... | 97 |
| Biographical Information | 102 |

List of Illustrations

| | |
|--|----|
| Figure 1-1 Adventure Playground in Australia..... | 4 |
| Figure 1-2 Adventure Playground in Copenhagen, early example..... | 5 |
| Figure 1-3 Example of Adventure Playground in Berkeley, California..... | 6 |
| Figure 2-1 Adventure Playground Berkeley, California..... | 10 |
| Figure 2-2 Camberwell Junk Playground..... | 12 |
| Figure 2-3 Lollard Adventure Playground..... | 13 |
| Figure 2-4 Crawley Adventure Playground..... | 13 |
| Figure 2-5 Roger Harts Ladder of Participation..... | 21 |
| Figure 2-6 View of Traditional Playground in Hayward et. al. Study..... | 28 |
| Figure 2-7 View of Contemporary Playground in Hayward et. al. Study..... | 29 |
| Figure 2-8 View of Adventure Playground in Hayward et. al. Study..... | 30 |
| Figure 2-9 View of Kolle 37..... | 36 |
| Figure 2-10 Berkeley Adventure Playground Entrance..... | 38 |
| Figure 2-11 Huntington Beach, California, Rules Sign..... | 39 |
| Figure 2-12 Mercer Island Adventure Playground..... | 41 |
| Figure 2-13 Ithaca Hands-on- Anarchy Zone..... | 42 |
| Figure 2-14 The Parish School Adventure Playground Building Materials..... | 44 |
| Figure 2-15 The Parish School Adventure Playground Loose Parts..... | 44 |

List of Tables

| | |
|--|----|
| Table 2-1 Play Types and What You See..... | 17 |
| Table 2-2 Elements for a Rich Play Environment..... | 20 |
| Table 2-3 Distribution of Playground Users According to Age Group..... | 31 |
| Table 2-4 Distribution of School-age Children’s Companions..... | 32 |
| Table 2-5 Length of Playground Stay for School-Age Children from the Settings Record..... | 33 |
| Table 2-6 Children’s Reports of Favorite Playgrounds..... | 33 |

Chapter 1

Introduction

There are important aspects of childhood absent from play experiences in standard playgrounds. Traditional playgrounds fail to meet the development needs of children because they do not promote activities involving loose parts and free play with some risk (playengland.org.uk). They are not places where children can explore and build on their own with loose parts. In non-rural areas especially, where access to such unrestrained types of play are limited or nonexistent, opportunities for children to make their own decisions in how to play and to take risks in doing so, have decreased in recent generations.

One way to meet this need in a child's development in cities and suburbs is through the adventure playground, a type of playground common in certain European countries but almost non-existent in the United States (<http://adventureplaygrounds.hampshire.edu>). For the purposes of this research, adventure playgrounds are defined as a space dedicated solely to children's play, where trained playworker staff enable and facilitate the ownership, development and design of that space - physically, socially and culturally - by the children playing there (playengland.org 2014).

Physical activity, creating and play are crucial parts of a child's development. Uninhibited, imagination-driven play that allows kids to design and build their own environment, rather than a structured play environment that is already built, is especially useful for enhancing a child's physical well-being, cognitive and social skills (Hughes 2002)..

Interviews were focused on professionals that would have insight on playground design and their professional opinion on the role that the landscape architect would play in the minimally designed adventure playground such as creating a safe environment and education of the community. Benefits and limitations of the adventure playground and the values lost from the traditional prefabricated playground were discussed to discover if this type of play could become a more widely accepted part of the American play inventory. Common themes emerged for what an adventure playground could be today in the United States and how this may differ from the adventure playground of the past.

Play is an important part of every childhood and is essential to development because it contributes to the cognitive, physical, social, and emotional well-being of children and youth (Ginsburg 2007). It informs how a child develops and how they learn to interact with the world around them. Playgrounds are meant to serve as a stage for this growth and development, however they are often too rigidly designed to fully benefit their users. An alternative to traditional playgrounds is the adventure playground, a minimally designed space where children can interact with their environment and influence its shape and function.

The traditional playground, with its out-of-the-box prefabricated swings and slides, does not offer children a chance to create, build, destroy and build again. What they do offer are standard plastic molded structures that are not able to be manipulated by children and can become boring over time. Children who play on traditional playgrounds also tend to be under the age of ten. Pre-teens and teenagers do not use these facilities unless they are acting as a caretaker or another similar role to a younger child attending the traditional playground (Hayward, Rothenberg and Beasley 1974).

Adventure playgrounds attract a larger age range of children and offers a different type of play, allowing children to use their imagination and develop their

cognitive abilities by interacting with a minimally designed space that provides loose parts that can be changed, built and then changed again. Offering minimally designed play areas, adventure playgrounds, allow the users of the play space to be the designers. Creating these adventure play spaces that become a venue for children to create, build and change their own environment.

To facilitate this creation the playgrounds have on hand discarded or donated items with which to build, to play hide and seek in, to climb on or to use in whatever manner that can be devised. Available materials include building materials, discarded industrial parts, used tires, crates, ropes, wood and other types of donated items. Typically, there are hammers, nails and other tools for children to use along with the supplies to create club houses, cars, ladders and an endless list of possible structures as seen in the example of an adventure playground in Australia (fig. 1-1). Adventure playgrounds, additionally, are a place where children can explore elements of nature they are normally discouraged from interacting with, such as water, soil and fire. They are dedicated locations where children can experiment and make messes without being heavily influenced by the preconceived notions and aesthetic sensibilities of adults.

Many of the activities possible at adventure playgrounds have some risk involved, but this risk is managed by an employed play staff that is on site to watch over, but not take over, projects that the children create. Volunteers are also there to help, but their roles are limited to lending out the tools and to give a hand when needed building.

With the idea of adventure play coming out of observation and not through psychological means, it marks the beginning of the involvement of landscape architects in playground design (Kozlovsky, 2008). Sorensen, who created the first planned junk playground in 1943 (later the term changed to adventure playground), was inclined towards functionalism and strived to create a playground design upon analysis of play

activity rather than formal or compositional concerns (Kozlovsky,2008). The design of adventure playgrounds follows the idea that the “imagination” at play should be that of the child, not that of the architect (Kozlovsky, 2008). The following image of an Adventure Playground in Australia depicts the structures built by children.



Figure 1-1 Adventure Playground in Australia (Dusick,2007)

1.1 Research Objectives

The primary objective of this study is to examine the value of minimally designed adventure playgrounds and the impact of the minimal design philosophy on landscape architecture. The second objective is to describe the results collected from interviews and ascertain the professional opinions and perceptions that landscape architects, designers and teachers have regarding how these findings apply to the field of landscape architecture. The third objective is to identify the opportunities and constraints that

minimally designed playgrounds offer their users. Once these steps are undertaken, the research objectives can be combined to provide insight on the role of the landscape architect in minimally designed adventure playgrounds. Literature review gives insight to the history of adventure play ((fig 1-2) along with examples of more recent adventure playgrounds such as the Adventure Playground in Berkeley, California (fig. 1-3) to aid in the research objective of if the adventure playground can become a more prominent type of play in American today.

“In a sense, you and I have always played in ‘adventure playgrounds.’ We created a fort in the kitchen cabinets, jumped from couch to couch across oceans; we snuck out through a hole in the fence to a new world. We climbed trees and hid in bushes. We played in the mud and the rain. We chased each other, made secret worlds ...” (Sutton 2005)

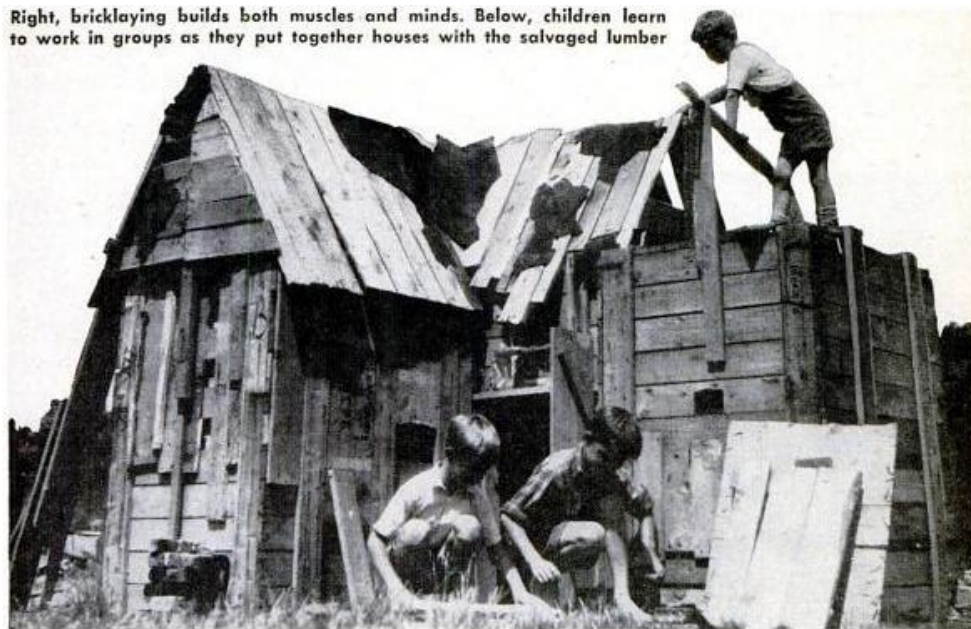


Figure 1-2 Adventure Playground in Copenhagen, early example
(playgroundology.wordpress.com 2014)



Figure 1-3 Adventure Playground in Berkeley, California (Gilkey 2014)

1.2 Research Questions

The research questions addressed in this thesis are as follows:

- What role does the landscape architect play in the minimally designed adventure playground?
- What do landscape architects think about restraints to playground design?
- Can the adventure playgrounds described in this research study become an ongoing part in the American recreation/play inventory according to the interviews?

1.3 Definition of Terms

Play area: A designated play space that is in a defined area (playengland.org.uk 2014).

Adventure playground: A space dedicated solely to children's play, where skilled playworkers enable and facilitate the ownership, development and design of that space physically, socially and culturally by the children playing there. It usually offers both indoor and outdoor play experiences (playengland.org.uk 2014).

Play: A process that is freely chosen, personally directed, and intrinsically motivated. That is, children and young people determine and control the content and intent of their play by following their own instincts, ideas and interest, in their own way for their own reasons (Playwork Principles Scrutiny Group 2005).

Play types: The different ways that children play, such as the classification system developed originally by Hughes (Hughes 2002).

Risk: The chance, high or low, that somebody could be harmed by a hazard, together with an indication of how serious the harm could be. (playengland.org.uk 2014)

Creative play: An opportunity for children to manipulate their environment to achieve their own ends, and to sense that the world around them can be changed and need not to be taken as a given (Moore 1966).

Chapter 2

Literature Review

2.1 Adventure Playground Defined

Adventure playgrounds are places where children can create, build and modify their own environments. They are staffed play areas where children can enjoy themselves by engaging in a full range of possibilities in their play. These places provide children a form of play that they often cannot develop elsewhere and provide opportunities that adults used to take for granted when they were children (playengland.org.uk 2014). Rather than relying on rigid equipment that only serves a limited set of programmed purposes, these playgrounds give children opportunities to build and create, and actually do some risk taking such as riding a zip line or walking a rope bridge. Children learn for themselves how to deal with challenges and risks and build resilience for future encounters in life. The most important thing about adventure playgrounds are that when children are there, they can be children. They choose how, with what, with whom and for how long they play. The United Nations recognizes the importance of play for children and has stated in Article 31 in the UN Convention on the Rights of the Child that Play is the right of all children. Adventure playgrounds encourage children to think for themselves while playing.

The conventional playground is designed to function without adult intervention, the adventure playground is predicated on the presence of a play leader who administers the use of tools and materials and guides the behavior of children to maintain safety and promote cooperation among them (Kozlovsky 2007). Play leaders are trained on how best to let children discover and build on their own and do not push their ideas onto the children. Instead, they mostly are there to help mediate and to lend a hand when asked.

An adventure playground has no readymade play equipment and no predetermined agenda for what should take place in it. Children introduce content and meaning to the playground through their own action. Whereas the conventional playground operates by inciting kinetic modes of pleasure, the adventure playground engages the child through a qualitatively different kind of gratification. It induces the pleasure of experimenting, making, and destroying.

'All children and young people need to play. The impulse to play is innate. Play is a biological, psychological and social necessity, and is fundamental to the healthy development and well-being of individuals and communities' (Playwork Principles Scrutiny Group 2005)

The adventure playground environment is a great way for children to socialize with other children and adults. Because the children are building structures, it requires others to participate and collaborate. These types of playgrounds are spaces that can bring children, teenagers and adults together. For example children and young teenagers can come to build and create while adults can meet with other adults and socialize. This can be seen through the adventure playground located in Berkley, California (fig 2-1) that has been open more than thirty years allowing not only a space for adventure play, but also a meeting place for people in the community.



Figure 2-1 Adventure Playground in Berkeley, CA (kaboom.org 2014)

'Play is a process that is freely chosen, personally directed, and intrinsically motivated. That is, children and young people determine and control the content and intent of their play, by following their own instincts, ideas and interests, in their own way for their own reasons' (Playwork Principles Scrutiny Group 2005)

2.2 The Origin of the Adventure Playground

The concept of adventure playgrounds originated in Emdrup, Copenhagen in Denmark. The first planned adventure playground was started in Emdrup in 1943 during the German occupation of the country (Bengtsson 1972). Contributing factors for the playground came from observation of children's play and new ideas about childhood and play. C. Th. Sorensen, a landscape architect, and Dragehjilm, a school teacher, observed

that children would play in construction sites and not on conventional, predetermined designed playgrounds. They opened the first "Junk Playground" in 1943 which utilized wood, natural materials, rope, canvas, tires, bricks, nets, balls, abandoned furniture, wheels, other building materials that were not being used for construction and many other items that changed periodically (Bengtsson 1972). It was opened as part of a housing project, and it was very popular and successful. The first play leader of the Emdrup playground was John Bertelsen from 1943 to 1947. He had a basic philosophy about how important play was to the development of the child. He wrote in an article in 1946:

"The adventure playground is an attempt to give the city child a substitute for the play and development potential it has lost as the city has become a place where there is no space for the child's imagination and play. Access to all building sites is forbidden to unauthorized persons, there are no trees where the children can climb and play Tarzan. The railway station grounds and the common, where they used to be able to fight great battles and have strange adventures, do not exist anymore. No! It is now not easy to be a child in the city when you feel the urge to be a caveman or a bushman." (Bertelsen 1946)

For Bertelsen it was essential that there be a link between the physical environment and the psychological environment of the child. For him play had to do with attacking life in an unconventional manner. He recognized that children needed the opportunity to be the designers and constructors of their own spaces. He felt that children really wanted to experience life and that the junk playgrounds were the ideal environment to do so (Brett 1993).

Two important figures in the further development of adventure playgrounds are Marjorie Allen (better known as Lady Allen of Hurtwood) and Drummond Abernethy, pioneers of British Adventure Play (Bengtsson 1972). Lady Allen was a landscape architect and chair of the Nursery Schools Association. She visited the Junk Playground in Emdrup and became very excited and impressed with how the children played. She observed that they took care of each other and how they seemed to have feelings of

responsibility for their actions. She also suggested that the adventure playgrounds be built on bombed sites so that the children would have a safe place to play off the streets and opened Britain's first junk playground in Camberwell, London in 1948 (fig 2-2). The Lollard Adventure Playground opened in 1955 (fig 2-3) and was located on the site of a bombed school (Kozlovsky. ed Gutman p179). Crawley Adventure Playground was active in 1955 (fig 2-4). Drummond Abernethy became the secretary of the National Playing Fields Association Playground Committee in 1948. He utilized Lady Allen's ideas to create projects in Britain for children's playgrounds. He changed the name from junk playgrounds to adventure playground to reflect a more positive image. Over time, funding became limited and the earlier adventure playgrounds did not last.



Figure 2-2 Camberwell Junk playground on the site of a bombed church. Times Educational Supplement, 5 June 1948 (Kozlovsky 2007)



Figure 2-3 Lollard Adventure Playground on the site of a bombed school (Kozlovsky 2007)



Figure 2-4 Crawley Adventure Playground, 1955 (Kozlovsky 2007)

Learning from the past, the London Adventure-Playground Association (LAPA) was created in 1971 and had built sixty-one adventure playgrounds by 1973 (londonplay.org.uk 2014). Other adventure playgrounds were later created to include children with disabilities in conjunction with the Handicapped Adventure Playground Association (HAPA). HAPA opened its first playground for children with disabilities in 1970, and then five other children's playgrounds for the disabled followed across London. They have since changed their name to KidsActive and, in the recent past, to KIDS (kidsactive.org.uk 2014).

In 2005 there were more than 1000 adventure playgrounds in Europe, with many of them in Denmark, Switzerland, France, Germany, the Netherlands and England (adventureplayground.hampshire.edu). Germany has a big bulk of the adventure playgrounds topping out around 400. Japan also has many adventure playgrounds (Sutton 2005).

2.2.1 PlayEngland Charter

The PlayEngland Charter shapes the vision of PlayEngland and sets out the abiding principles on which the play sector is founded, along with the UN Convention on the Rights of the Child Article 31, which states that play is a right all children and teens have. All PlayEngland members and staff must sign this charter (playengland.org.uk 2014). The PlayEngland Charter serves as a good overview of the goals of the adventure playground movement from the perspective of those who create and manage such play spaces.

The PlayEngland Charter describes play as “what children and young people do when they follow their own ideas and interest, in their own way, and for their own reasons” (playengland.org.uk 2014). The Charter states:

- Children have the right to play
- Every child needs time and space to play
- Adults should let children play
- Children should be able to play freely in their local areas
- Children value and benefit from the staffed play provision
- Children’s play is enriched by skilled playworkers
- Children need time and space to play at school
- Children sometimes need extra support to enjoy their right to play

The adventure playground, with its loose parts and user designed space, meets these specifications in the charter by acknowledging that each child can play with what they want, when they want in a space designated for them without adult intervention. The trained staffed play leaders are imperative for the operation of the adventure playground and children benefit because their training teaches an approach that does not dictate to children how to play and the play leaders are always available when the child needs extra support. To achieve these principles the PlayEngland goals are:

- All children and young people have the freedom- time, space, permission and opportunity – to play through their childhood and teenage years
- All residential neighborhoods are child friendly places where children and young people can regularly play outside
- Everyone is aware of the importance of play – outdoors and indoors – as part of children and young people’s daily lives (playengland.org.uk 2014).

This charter helps to ensure that children are given the time, space and permission to play while emphasizing the importance of play as a child and teenager. PlayEngland is hosted by the children's charity NCB and have support from trust and foundation grants, central government funding and the corporate and public sector.

There is a volunteer organization called the Free Time Consortium that is open to charities, not-for-profit organizations, social organizations and organizations registered as a community interest company (playenglan.org 2012). In England, adventure playgrounds are popular because they provide interest and fun with exciting possibilities. That is, parents see them as challenging environments for their children, yet safe places to play because of they are staffed by skilled play leaders who are from the heart of the neighborhood community.

2.3 Play Theories

2.3.1 Play Theory Defined

Playworkers would describe different types of play as they observed children and what they did at the playground. This was put under the one heading of "play" and not divided into subheadings (Hughes 2001). They would observe the children doing many types of play such as imaginative, climbing and talking, but only described them all as play (Hughes 2001 p96). A taxonomy of categorization was produced to describe various playtypes so that playworkers could use this in their everyday language of playwork (Hughes 2001).

The four play theories and sixteen types of play can be observed in children's behaviors to different degrees based on the type of environment they are in. The types of play include: social, socio-dramatic, rough-and-tumble, exploratory, object, creative, communication, deep, recapitulative, symbolic, fantasy, dramatic, imaginative, locomotor,

mastery and role play. Hughes' work indicates the range of play types and their utility to the child (table 2-1). At any one time, a child may be engaging in a number of different types of play at different levels, and may be processing ideas and information in different ways (Melville 1999).

Table 2-1 Play Types and What You See (Hughes,2001)

| Play Types | What would be seen the children are doing |
|-----------------------|---|
| Communication | Talking, singing |
| Creative Play | Exploring materials and permutations of colors |
| Deep Play | Interfacing with death and mortality |
| Dramatic Play | Experiencing events by playing them out |
| Exploratory Play | Ranging and investigating new spaces |
| Fantasy Play | Manifesting ideas that are unconnected with reality |
| Imaginative Play | Manifesting ideas that are connected with reality |
| Mastery Play | Interacting with the physical environment |
| Object Play | Exploring the tactile and cognitive properties of objects at close hand |
| Recapitulative Play | Recapping on previous evolutionary stages |
| Role Play | Exploring adult functions by engaging in them. |
| Rough and Tumble Play | Calibrating one's own and others' tactice and muscular properties. |
| Social Play | Investigating and applying social protocols and rules. |
| Socio-Dramatic Play | Experiencing catharsis by dramatizing difficult experiences. |
| Symbolic Play | Represent abstract and conceptual ideas. |

2.3.1.1 Play Theories:

Loose Parts – The theory of Loose Parts indicates that children are benefited in play when given parts to put together and build their own play experiences. Observing that children will play with junk that is laying about, such as old cardboard boxes, wooden pallets, pieces of wood, old tires etcetera and will use their imagination to create and build something, led to the theory of loose parts. A key aspect of loose parts is for adults not to give direction on how the child plays, let them choose how to put things together. Nicholson, an architect, stated that in any environment there is both the degree of inventiveness and creativity, with the possibility of discovery directly proportional to the number and kinds of variables in it (Nicholson 1971, p30). Nicholson characterized children as finding “the world incredibly restricted-a world where they cannot play with building and making things, or play with fluids, water, fire or living objects, and all the things that satisfy one’s curiosity and give us the pleasure that results from discovery and invention: experiments with alternatives” (Nicholson 1971, p30).

Play Cues and Play Frames – The two theories of Play Cues and Play Frames establishes boundaries between children and adults during playtime, allowing children to make their own fun and adventures without influence from adult’s preconceived notions of play. These theories draw an imaginary frame around the play area. This frame becomes the child’s play place and should be left to the child unless the adult is given a cue to join in from the child. The adult is only there to help facilitate play, but should only join in if asked for help or asked to join. The idea is that the adult is not directing the play, the child is. Looking for cues to join is one thing, but also looking for cues to move away is another (Else 2003).

Edge of Chaos – The Edge of Chaos theory discusses the freedom that should be accorded children during playtime without it becoming an environment that is unsafe. When children play they tend to migrate to playing in a chaotic fashion. Based on this theory, children will play best when on the “edge of chaos”. On one side of this edge is orderly play, where children are in a structured environment and are directed as how to play and on the other side is complete chaos where children would find it difficult to play because of different contributing factors such as bullying, lack of boundaries or real fear for their own safety (Battram and Russell 2002).

Adventure playgrounds can facilitate all of these principles. Loose parts are always available for children to design their own spaces. Play cues and play frames of children are respected, with adults serving limited roles in the design of the space and the dedicated play workers who are on hand being trained to facilitate design, not direct it. These same play workers serve to keep the playground from tipping past the edge of chaos into a dangerous space, allowing the chaos of the space created by the children to flourish. Adventure playgrounds are especially useful for providing materials for the Loose Parts theory. Items that are often used in adventure playgrounds include: wood, tires, bricks, cement blocks, cloth and carpet, paint, foam, cardboard, furniture, stones, branches, and rope.

Adventure playgrounds have rules that are implemented for the borrowing of tools and other equipment (www.ci.berkeley.ca.us). This teaches children responsibility in taking care of tools and how to use them properly. Tools they may be borrowed could include hammers, hand saws, nails and shovels. Adventure playgrounds can also have equipment that a child can borrow for an activity such as bicycles, roller skates, soccer balls, footballs, games such as board games or cards, and art supplies such as markers or paint and paper.

Natural and loose parts incorporate built in flexibility due to the nature of the materials and are preferred by children over manufactured structures (Kirby 1989; Hart 1979; Heerwagen and Orians 2002). Access to loose parts allows children to engage in constructing activities as compared to playing on fixed structures that do not allow modifications (Ryan et al. 2012).

Hughes also suggests a combination of elements for a rich play environment that would include elements, physical environment, materials and tools, challenge, movement, emotions, sensory stimulation, experimenting with identity, change and social interaction. The following table describes what the children would have the opportunity to experience (table 2-2).

Table 2-2 Elements for a Rich Play Environment (Hughes 1996)

| | Children have the opportunity to experience: |
|-----------------------------|---|
| The Elements | earth, air, fire and water |
| Varied Physical Environment | plantings/construction, height/depth, enclosed/open, varied surfaces, habitats for wild and domestic animals |
| Materials and Tools | fabricated/natural consumables, loose parts (Nicholson, 1971) |
| Challenge | in relation to the physical environment, both within a social context and in private |
| Movement | running, jumping, rolling, balancing |
| Emotions | sadness/gladness, rejection/acceptance, frustration/achievement, boredom/fascination, fear/confidence |
| Sensory Stimulation | sounds, smells, tastes, tactile, experiences |
| Experimenting with Identity | concepts of self, role play, dressing up, masks, face paints |
| Change | building/demolishing, seasonal growth/decay, weather, cooperating/resolving conflict, environmental transformation |
| Social Interaction | a wide range of individuals and groups across age ranges/interest groups, abilities, genders, ethnic and cultural differences |

2.3.2 Roger Harts Ladder of Participation

In 1992, Hart designed methodologies for working with children. He organized his theory of how children are allowed to participate in play as a ladder. And identifies eight levels of children's participation in projects. This ladder is used to encourage those that work with children to think more about the process of children's participation in activities and projects and the different degrees of participation.

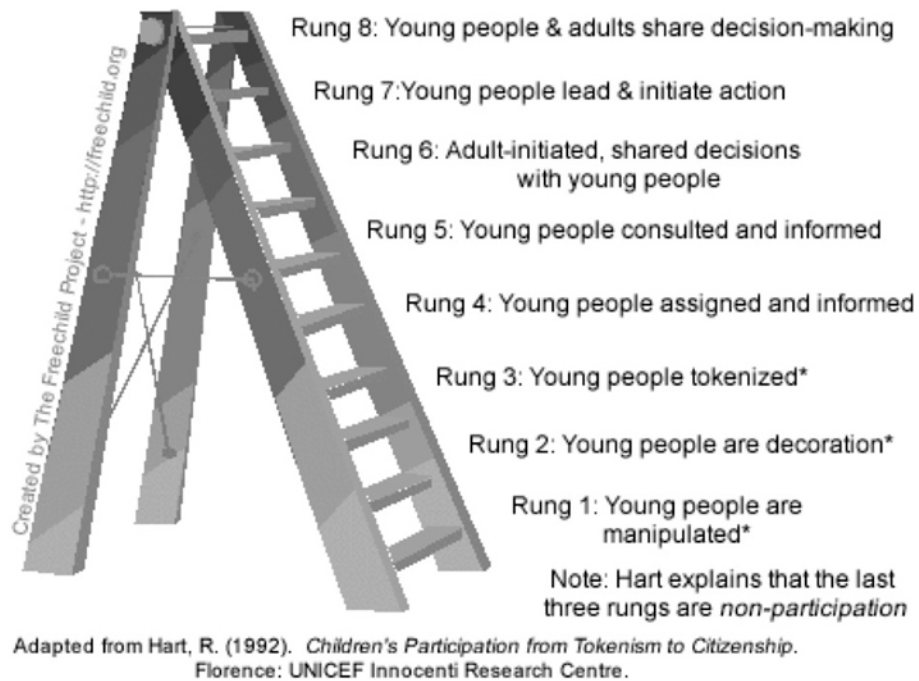


Figure 2-5 Ladder of Young People's Participation (Hart 1992)

Hart conducted a two year field study that examined exploratory behavior, spatial behavior, place knowledge and place feelings. Among many other findings, Hart's research found that the development of children's spatial ability and spatial representation ability in their everyday geographic environment is related to the range of their free play spatial activity and to the freedom of this spatial activity and that their memory for places is related to their ability to modify their environment (Moore 1985).

Children's ability to explore and manipulate the world has been increasingly constrained. If children have the chance to freely mingle with their neighbors and interact dynamically with their environment in public outdoor settings, a healthier proportion of them will grow up caring for the communities and urban environments in which they live (Hart 1990).

"I have a trick I play on architecture students. I ask them to draw for me their ideal playground from when they were nine years of age. And they draw this amazing natural environment. I then compare them with what they now design and ask them to explain the contrasts. It is terribly embarrassing for them, as it should be. And it's an indictment of not only the design profession, but where we've gone in our society in the past 30 years, with the limited freedom of children and growing liability concerns" (Hart 1997).

Data shows there are significantly more cognitive play behaviors on adventure playgrounds than in neighborhood play settings (forty percent of all behaviors observed on adventure playgrounds versus only ten percent in neighborhood settings), and in particular that there are from two to, as much as, ten times more fantasy and constructive play on adventure playgrounds than in everyday neighborhood settings (Moore 1985 p 28). The greater incidence of cognitive play activities may be related to the character of the physical setting and the number of loose parts available (Moore 1985 p27).

Specifically, designed traditional play environments that children spend their time on amounts to less than fifteen percent of their total outdoor time and yet this type of playground receives the most attention for playground design (Cooper-Marcus 1974).

The data reviewed above would suggest that more time might be spent with greater benefits if more appropriate play environments were provided that incorporated the principles from Hart to increase cognitive behavior (Moore 1985).

It is that part of the total environment which environmental professionals such as architects, landscape architects, planners and policy makers are manipulating, in many cases, with little understanding of human developmental consequences and scant scientific evidence on which to base design interventions (Dattner 1969, Essa 1981). The need for scientific evidence on which to ground policy, planning, and design decision argues for a convergence between developmental and environmental points of view (Moore 1985). Development of environmental cognition and perspective taking as one sub-ability are made easier when the environment has clearly articulated spatial cues (Acredolo 1976)

2.3.3 Two Main Types of Play

Many other theories of play acknowledge the beneficial nature of the adventure playground, including the Ritual and Experimental model. Ritual and experimental are two types of play. In the ritual form, the interest-arousing object, which in principle is unrecognized, is of ceremonial importance; whereas in the experimental form, it is of real importance (Anderson 1971). In adventure playgrounds, experimental forms of play are encouraged, while in the traditional playground, with its swings and skipping rope, play is oriented towards the ritual form. If play is to be of any educational worth, the experimental form is of importance (Anderson 1971).

2.3.4 Risk Play

Judgments about the acceptability of risk are made on the basis of risk assessment. Risk assessment and management are not mechanistic processes. They crucially involve making judgments about acceptability based on an understanding of the balance between risks and benefits (playengland.org.uk 2014). In any human activity, there is an element of risk. Three factors are central to determining whether or not the level of risk is acceptable or tolerable and include the likelihood of coming to harm, the severity of that harm, and the benefits, rewards or outcomes of the activity (playengland.org 2014).

"The safety record of adventure playgrounds is excellent," states Joe Frost, a professor of education. The Mountain Park Adventure Playground in Houston, Texas recorded few injuries only fourteen hundredths of a percent of the fifteen thousand people attending the park during its first four months of operation sustained injuries and these were mostly skinned knees, scrapes, and hammered thumbs" (Cooper Marcus 1970).

2.3.5 Differences Between Child and Adult Design Values

The loose parts theory was first identified by Nicholson and documented in several studies (Nicholson, 1971). In any environment, both the degree of the inventiveness and creativity and the possibility of discovery were directly proportional to the number and kind of variable in it (Nicholson 1971). The idea is children must be able to invent, construct, evaluate and modify their own play space. The methodology, involving what is called the "discovery method," has been developed by a group of researchers (Nicholson 1971). The main pattern of behavior that is identified is a self-instructional pattern, namely that children learn most readily and easily in a laboratory-type environment where they can experiment, enjoy and find out things for themselves

(Nicholson 1968). In one of the most extensive studies of child landscape preference and use ever conducted, it was determined that children's experience of place results, in part, from their ability to modify the landscape (Hart 1978). Through a variety of methods, Hart documented the landscape use and values of children in a small New England town. His research reveals that the spatial richness and meaning attached by children to the landscape is related to their access to natural areas and elements (Hart 1978).

The finding that movable equipment invited cooperative play and was most popular with children is reinforced in one of the few studies which compared children's use of traditional and child built or 'adventure-playgrounds', which discovered that an adventure playground attracted a greater variety of child activities than a more traditional adult designed playground. They also learned that children spent more time at the adventure playground (Hayward et al. 1974).

The implications of these and other studies reveal several basic preferences of children for open spaces and neighborhood landscapes such as a need for access to minimally designed, natural areas, a desire to modify and change the landscape, interest in claiming found spaces as their own, and a desire to use a network of spaces in the neighborhood. These landscape values suggest significant design and management implications for existing and future neighborhood open spaces and that child landscape values relate to adult landscape preferences, and how these differences and similarities get translated into open space design plans and policies (Francis 1988).

Introducing a talk at the parks department headquarters in New York City, attendees were asked to share their own favorite memories of playing outside. "There were 25 people, and only one person mentioned the designed pieces of playgrounds", recalls Roger Hart the director for the Children's Environments Research Group at the City University of New York (Jost 2010 p2).

Allowing children to engage in planning processes through the nature of loose parts play served to promote sense of 'environmental competence' (Moore 1986). In traditional play, area design processes focused on adult perspective rather than the child's viewpoint. Design of play areas as approached by adults focused on safety and durability, while children focused on opportunity for components that allowed manipulation (Kylin 2003, Iltus and Hart 1995).

2.3.6 Cognitive Play and Playground Design

Research verifies the importance of the outdoors to children. A comparison of visual motor integration (VMI) of three and four year olds who stayed inside during free play, to those who played on creative adventure playgrounds with novel forms, textures, and heights as well as manipulative materials like cardboard boxes, toys, sand and water showed increases in VMI as well as in verbal and social skills, assertiveness and imagination (Yerkes 1982 as reviewed by Striniste and Moore 1989). As the availability of open space in our urban areas decreases it may be that the diversity of opportunity is as important as preference for specific activities (Hayward et al. 1974). As towns and cities grow, children are deprived of more and more possibilities and in the modern city one must provide suitable areas where they can use their energy and vitality (Brammer 1971). It is not enough to give them an area of asphalt, a small sandpit, a few swings etc. and then leave it to them to organize their games (Brammer 1971).

Adventure playgrounds not only provide materials and opportunity for work and play for children; it is equally important to have a qualified supervisor who is not only there to prevent misuse of tools, but also to suggest ideas and to influence the behavior

of children and adolescents in such a way that each child is able to develop his or her talents (Bengtsson 1972).

The aesthetics of adventure playgrounds may offend grown-ups because of being the least attractive visually with adult reactions divided and some seeing the playground as a place to teach destructiveness as a means of creativity (Bengtsson 1972).

'We must exercise caution and not make it too much an object of adult gaze. Children's play belongs to children; adults should tread lightly when considering their responsibilities in this regard, being careful not to colonize or destroy children's own places for play through insensitive planning or the pursuit of other adult agendas, or through creating places and programs that segregate children and their play. Adults should be aware of the importance of play and take action to promote and protect the conditions that support it. The guiding principle is that any intervention to promote play acknowledges its characteristics and allows sufficient flexibility, unpredictability and security for children to play freely' (Lester and Russell 2010:46)

2.4 In Depth Analysis of Research Study by Hayward, Rothenberg and Beasley

When discussing research on nontraditional types of playgrounds and children's use of them, it is necessary to examine the findings of *Children's Play and Urban Playground Environments: A Comparison of Traditional, Contemporary, and Adventure Playground Types*. This research study forms a foundation of information on which much of the subsequent research into children's play in adventure playgrounds was built. The study, which examines three different types of playgrounds, looks at who uses these spaces, how they are used, and how often they are used, with a particular focus on school-aged children.

There are differences in how these three types of play spaces are designed and built, with traditional playgrounds tending to be built around standard, mass produced equipment, the contemporary playgrounds having professionally designed play fixtures which are unique to that location, and the adventure playgrounds containing mostly structures built up by the children who play there over time.

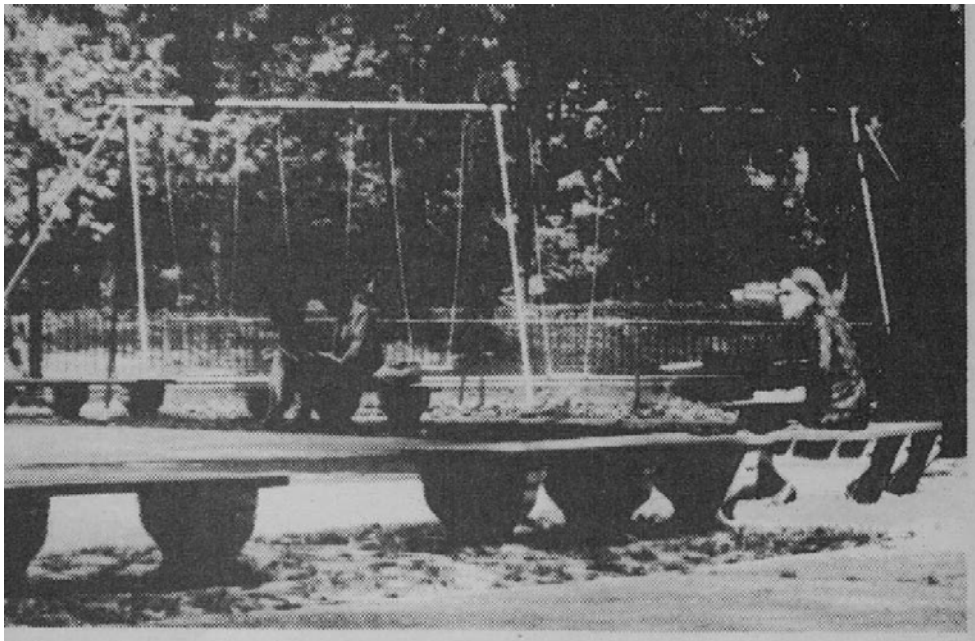


Figure 2-6 View of traditional playground from Hayward Rothenberg and Beasley study (Hayward et al. 1974). This playground exhibits the standard equipment you might find on a traditional playground such as swings and other prebuilt items that children use. The way you would play with this type of equipment does not vary greatly.

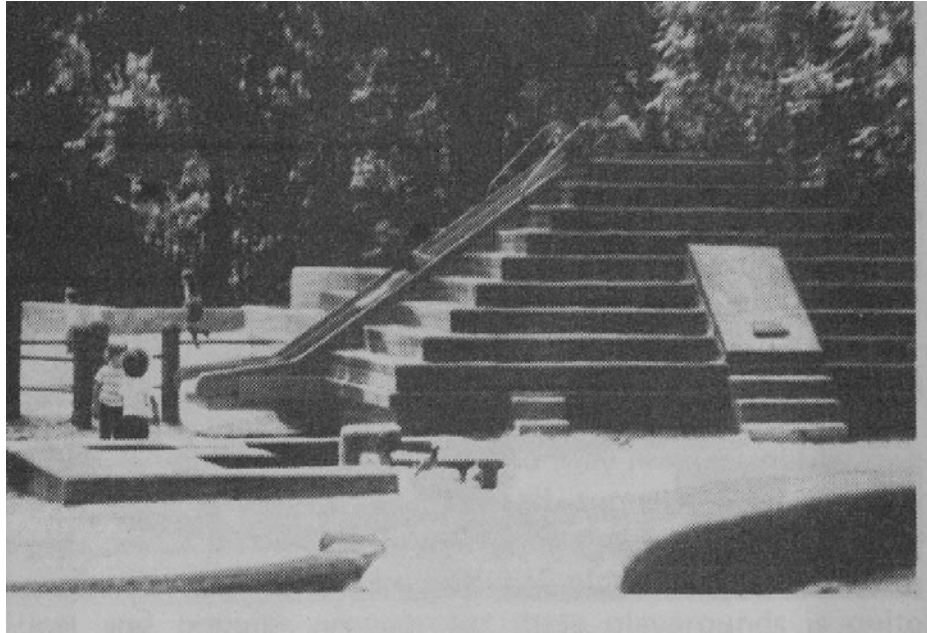


Figure 2-7 View of contemporary playground from Hayward Rothenberg and Beasley study (Hayward et al. 1974). This playground has structured play pieces, but are not built in the traditional way as the standard playground equipment. The slide for example is built on a tower of steps that you climb to get to the top. This is creates a bit more interest for children as opposed to the standard slide you would see at a traditional playground.

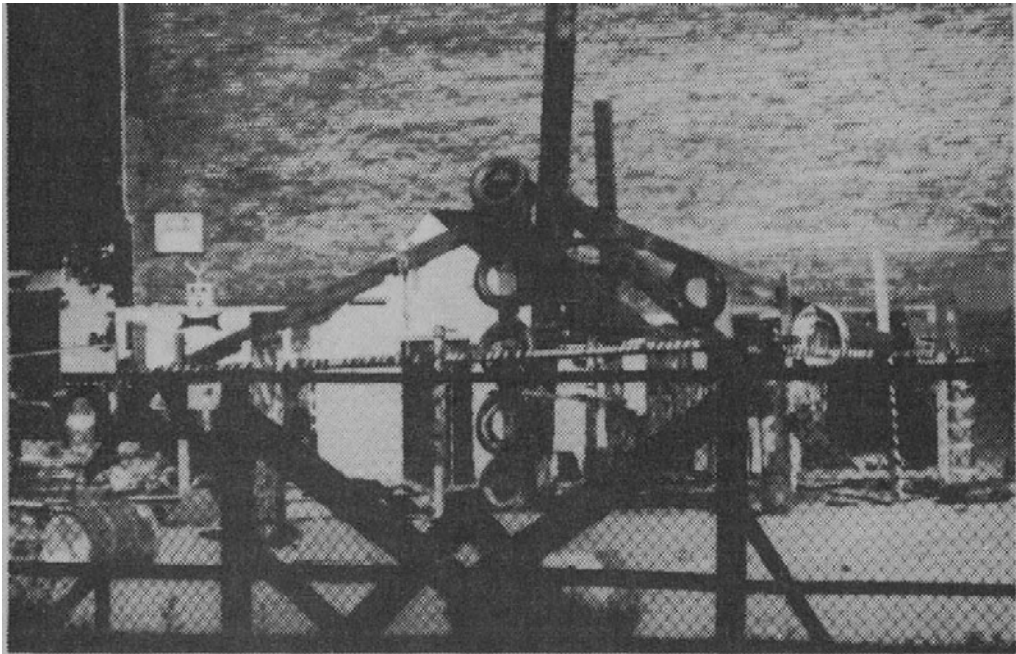


Figure 2-8 View of adventure playground from Hayward Rothenberg and Beasley study (Hayward et al. 1974). This playground has contributed items that the children can use to build such as tires, left over construction lumber and other items. The adventure playground is fenced around the perimeter and this shows the area that is for the children. A playleader is in charge of the playground.

The focus of the study is on school-age children, children between the ages of 6 and 13 (Hayward et al. 1974, p132), a population that tends to utilize typical playgrounds with less frequency than preschool children. It was found in the study that school-age children “made up a greater part of the playground population at the adventure playground (44.58%), while this school-age user group was only a minor proportion of the total number of users at the traditional playground and the contemporary playground (20.84% and 22.21% respectively)” (Hayward et al. 1974, p144). The traditional (fig.2-6)

and contemporary playground (fig. 2-7), by contrast, have much higher percentage of adults and preschool children than the adventure playgrounds. The adventure playground (fig.2-8) is the only site with a large teenage population. Most teenagers who were found at the traditional and contemporary playgrounds were there in a caretaking capacity, like babysitter or camp counselor, while those at the adventure playgrounds were more often active users there (Hayward et al. 1974, p145).

Table 2-3 Distribution of Playground Users According to Age Group (Hayward et al. 1974)

| | Traditional Playground | Contemporary Playground | Adventure Playground |
|----------------------------|------------------------|-------------------------|----------------------|
| % Preschool | 29.48 | 35.23 | 1.74 |
| % School Age | 20.84 | 22.21 | 44.58 |
| % Teenage | 9.80 | 6.85 | 32.16 |
| % Adult | 39.78 | 35.71 | 21.52 |
| Total % | 100.00 | 100.00 | 100.00 |
| Total Observations | (4,294) | (9,765) | (2,360) |
| Days of Behavioral Mapping | 10.5 | 11 | 11 |

Table 2-3 exhibits data for usage of the three different playground types. Percentage represented the users, age and the percentage of users at each playground. The adventure playground exhibited a higher percentage of users with school age children and teenagers compared to the traditional playground and the contemporary playground.

At the traditional playground swinging, the use of a specific type of equipment, is the most common activity, while at the more unusual space of the contemporary playground the activity is usually centered around several pieces of equipment at once, moving from place to place and using the equipment in short bursts and in different

orders (Hayward et al. 1974, ptabt1). At the adventure playground viewed in the study, the activity is centered around a clubhouse, first as a construction project to be built or added onto and then as a meeting place and play area, used for the purposes it was built for (Hayward et al. 1974, p153). Out of all the activities performed at the different playgrounds, the clubhouse-related activities proved to be the ones that held the user's attention longest, with the most total and average sustained usage times.

No matter how interesting the equipment at either of the pre-built playgrounds, however, the play and conversation of the children at these sites always focused around that equipment, often with the different children there playing in parallel to each other on the different features (Hayward et al. 1974, p154, 155). The adventure playground, on the other hand, more often facilitated different kinds of play beyond interacting with equipment (i.e. fantasy, group, games), often involving several children together, and conversations ranged over a broad selection of topics, with the children bringing "their everyday life experiences with them into the playground... [having] the effect of supplementing the more conventional playground experience (Hayward et al. 1974, p156).

Table 2-4 Distribution of School-age Children's Companions at Time of Entry, From the Settings Records

| Entered with: | Traditional Playground | Contemporary Playground | Adventure Playground |
|--|------------------------|-------------------------|----------------------|
| Caretaker | 60.0 | 40.8 | - |
| Day camp group | 20.0 | 38.8 | 3.3 |
| Peer or self | 17.8 | 10.2 | 96.7 |
| Younger child (the school-age acted as babysitter) | 2 | 10.2 | - |
| Total % | 100.0 | 100.0 | 100.0 |
| Children observed (n) | (45) | (49) | (30) |

Table 2-5 Length of Playground Stay for School-Age Children from the Settings Records

(Hayward et al. 1974)

| | Traditional Playground | Contemporary Playground | Adventure Playground |
|-------------------------------------|------------------------|-------------------------|----------------------|
| 0-40 min. | 35 | 32 | 8 |
| 41-80 min. | 7 | 15 | 8 |
| 81-120 min. | 2 | 2 | 8 |
| 121-160 min. | - | - | 4 |
| 161-200 min. | 1 | - | - |
| 201-240 min. | - | - | - |
| 241-280 min. | - | - | 2 |
| Number of children | 45 | 49 | 30 |
| Median length of stay (min.) | 21 | 32 | 75 |

Table 2-6 Children's Reports of Favorite Playground from the Interviews (Hayward et al.

1974)

| | Traditional Playground | Contemporary Playground | Adventure Playground |
|---|------------------------|-------------------------|----------------------|
| Children interviewed (n) | (26) | (29) | (36) |
| Who had a favorite (%) | 57.7 | 75.9 | 83.3 |
| Who preferred the one they were using (%) | 15.4 | 55.2 | 75.0 |

The desirability of the different types of playgrounds to children is suggested by the frequency with which children attended the playgrounds and how often the child participated in the decision to come there. Of the children who were surveyed about their attendance at the traditional and contemporary playgrounds, there were more children who came to the park less than weekly than those who came weekly or more. Less children participated in the decision to go to these parks than those who had the decision

made for them. At the adventure playground, however, all of the children interviewed attended the park at least twice a week (Hayward et al. 1974, p161) and most made the decision to go to the park themselves. Additionally, the engagement in the playgrounds can be seen in the length of time spent in single visits to the playground, the median length of which was more than twice as long at the adventure playground than it was at the traditional and contemporary playgrounds. Self-reported 'favorite playgrounds' of children varied, with adventure playgrounds once more being the most preferred by current users.

The contemporary playground exhibited similar data. The adventure playgrounds by contrast indicate the longest overall visits by children who "made the decision to be there, came almost every day, and named this playground as their favorite one" (Hayward et al. 1974, p163).

Children exhibit a clear preference for minimally designed adventure playgrounds over the pre-built structures of the traditional and contemporary playgrounds. Children, however, do not make the choices about what sorts of playgrounds are built. Studies have shown that adults, such as designers and park officials, are "quite insensitive to the play preferences of school-age children; therefore, play spaces planned by adults have a questionable relationship to the opportunities desired by children" (Hayward et al., 1974, p132). Adults often feel "that children are not bound by environmental cues to the same extent that adults are; it is felt that a child can "play" in any setting" (Hayward et al. 1974, p146) and tend to design play spaces based on "intuition about what a child needs and desires and how to provide for it" (Hayward et al., 1974, p133).

The adventure playground can change and evolve over time according to the children's interests which contrasts with the sense of permanence at other types of playgrounds (Hayward et al. 1974, p155). "Many definitions of play suggest some

freedom to explore, to act out life situations, and to invest oneself in the play experience, thus exploring one's own identity and relationship to the rest of the world... It may be a logical contradiction to expect an investing of self in a setting which is defined by immutable play equipment, which is designed and built by other people for separate sequences of children's behavior (Hayward et al. 1974, p165)."

2.5 Adventure Playground Examples

To understand adventure playgrounds and their presence in American society, it is useful to look at examples of playgrounds that have already been established. By examining these playgrounds we can see gradients in the amount of formal design put into American adventure playgrounds, as well as how successful these initial forays into the adventure playground movement have been in the United States.

2.5.1 *The European Model: Berlin's Kollé 37*

Because the adventure playground movement is much more established in European countries, a baseline for a typical adventure playground's design and operation can be understood by first examining a playground there. Germany has many of these playgrounds, and a particularly well established site is Berlin's Kollé 37.

This adventure playground was founded in 1990. Between thirty and one-hundred boys and girls between the ages of six and sixteen years visit the playground each day (Kollé.37.de 2014).

The playground is centrally located. The location is highly accessible for the neighborhood and creates a gathering and socialization space along with kids building their own playground. One may think of nails and harmful saws, kids getting hurt. This is

not so, it boasts a better safety record than playgrounds that have been designed to be “safe” (publicworksshop.us 2014). Kolle 37 serves a diverse group of children who come from many different backgrounds (Smith 2014). The park is located between a subway station and the neighborhood’s main square on a tree lined street with regular foot traffic. The park is situated linearly along the street, with several entrances for ease of access (Smith 2014). This park site works because location allows ease of accessibility with connections to public spaces and street life, social activity (Smith 2014).



Figure 2-9 View of Kolle 37 (Play-scapes.com, Johnson 2010)

The structures are sturdy because children have to work together to create and as they do they have to explore, and test what they are working on for sturdiness as they build. Children will test their creation for sturdiness, load bearing capabilities, stability as they go along. Testing in this way is how the children learn. The staff has in place

evaluation systems that help to make sure the children can do their best (Gilliam, A. 2010).

In five years there have been only two broken bones. One may think it is because adults keep a vigorous eye on the kids. In actuality, parents are technically not allowed in the building area. The staff check in on kids as they build periodically. Studies have shown that children usually have a tendency to change certain actions as they go along given the rate of a dangerous situation. Children will naturally be more careful in a more dangerous situation.

Today's children are more watched, contained and tested than ever before. Service providers fear litigation if a child were to get hurt. As a result, many of the play parks and equipment have over time lost their element of risk and challenge and some children may look for these opportunities in unsafe dangerous places that are not managed (playengland.org.uk 2014).

Kolle 37 is an adventure playground that has become an important focal point of its community. Due to its accessibility to children, the freedom given to its users, and its core of dedicated play workers, it has become successful, well established and popular among both children and adults.

2.5.2 The Adventure Playground, City of Berkeley

The oldest continuously operating adventure playground in the United States is the playground at the Berkeley Marina. It is probably the closest playground to the standard European model present in the US. The park's layout is true to the spirit of the adventure playground movement, having very few predesigned spaces on site.

This adventure playground is one of the programs at the Berkeley Marina and has been written up as one of the top 10 playgrounds in National Geographic. Also voted the Best Creative Playspace in Diablo Magazine and rated 4.5 out of 5 on YELP (ci.berkeley.ca.us 2014). This playground was established in 1979 designed for children ages 7 and older, with younger children coming and staying close with a parent. Waivers are signed by everyone, including children and adults, before coming into the park. Adults can volunteer while they are there by filling out adult helper task cards. Jobs may include: small wood helper, helping with sawing and hammering, sand shoveling, or assisting staff at the tool counter to name a few. This is the oldest adventure playground in the U.S.(Chronicle/Chinn P.).



Figure 2-10 Entrance to Berkeley Adventure Playground
(www.ci.berkeley.ca.us/adventureplayground)

2.5.3 Huntington Central Park Adventure Playground

The Huntington Central Park Adventure Playground has elements of traditional adventure playgrounds, with a greater focus on water play. This park caters to school age children.

Huntington Central Park Adventure Playground is located in California. It is opened from mid-June through mid-August of each year. This park is geared towards children ages 5 – 12. Children can use rafts on a small pond, use a rope bridge and try to navigate across, slide on mudslides and build forts. Supervision is provided, and it has certain hours it is open. There is a small fee for admittance, to help with the operating expenses. Children are not told to not get dirty, and a child can be themselves and just play freely.



Figure 2-11 Huntington Beach, CA Adventure Playground (realmomtime.com)

2.5.4 City of Mercer Island, Washington Adventure Playground

The Mercer Island Adventure Playground has few permanent structures and focuses on construction. This playground has a limited operating schedule.

Located in a wooded forest of Deane's Children Park in Washington is the City of Mercer Island Washington Adventure Playground. Children are given toolboxes and building supplies so that they can have the freedom to create their own ideas. There is guidance staff that is there to hand out tools and help where needed. Upon arrival, the kids are issued toolboxes for use to borrow. This is a program that runs during the summer on Tuesday, Thursday and Sunday afternoons. The toolbox contains a hammer, mini saw, nails, goggles and gloves. There is staff on hand to sign kids in and out, lend out toolboxes and help them to learn how to use the tools. Waivers must be signed here also. This program relies on donations of money and building materials to keep going and is looking into being cut in the 2013/2014 summer unless funds are raised to support the adventure playground. The program is free and open to kids ages four to thirteen. The child does not have to be a member of the Mercer Island community to participate in activities at the park. An adult must accompany children that are between ages four and six. Older kids ages seven to thirteen may attend without adult supervision, but parents are welcome to stay if they like. Parents are encouraged to let the children use their imagination and work as independently as they possibly can. Restrooms are adjacent to the play area, and dogs are not allowed in the park area.

To ensure the program continues, donations of money and building materials are necessary. This program at Mercer Island may be cut in 2013/2014 unless fund raising continues. KaBOOM is a national non-profit organization that promotes play for children and envisions a great place to play within walking distance of every child in America.



Figure 2-12 Mercer Island Adventure Playground (Kaboom.org)

2.5.5 Ithaca Children's Garden with Adventure Play in the Hands-on-Nature Anarchy Zone

Children can build, dig and climb and be able to use their hands without worry of getting dirty. Playing and creating by themselves or with other children inspires solving problems with some healthy risk taking. The child can choose what to do, what to build, who to talk to while they are at the adventure playground. A storage unit houses the tools for the children to use. Training of playworkers is done with international play experts. Also, playground models of adventure playgrounds and city farms from Germany and Scandinavia are used to create the Hands-on Anarchy-Zone and Children's Garden. At the Hands-on Anarchy Zone children can climb trees, dig in the soil for insects and

worms, built forts, play with water, sand, clay. All this while getting dirty and reinforcing a connection with nature and free play.

The Hands-on Anarchy Zone integrates models of nature play + adventure playgrounds + city farms from Germany, Scandinavia, and the United Kingdom, and works with international play experts to train playworkers. Ithaca Childrens Garden is the first example in the US of integrating playwork and nature based learning into a children's garden setting (ithacachildrengarden.org/index.php/hands-on-nature-anarchy-zone).



Figure 2-13 Ithaca Hands-on-Anarchy Zone (playeverything.wordpress.com 2014)

2.5.6 The Parish School Adventure Playground

The Parish School Adventure Playground in Houston, Texas serves ages six through twelve who have language and learning differences, often difficulty interacting with classmates. The playground started as an after school pilot program with education of the parents and ongoing information sessions and has grown over the last eight years the playground has been opened. It is located in an area that has space for children and also the natural elements of the grassy floodplain. The child directed outdoor play allows the children to conceptualize their own ideas, learn to work with the other children and to create and build their own ideas in their own time at their own pace.

Their program goals are:

- Work together to get things done through the development of a strong sense of community
- Take responsibility for shared supplies and the grounds
- Integrate other children into their ideas
- Plan and stay committed to long-term projects
- Become more creative and imaginative in their play
- Become excited and learn to verbalize that excitement appropriately
- Increase pragmatic skills
- (parishschool.org)

With the hands on experience and working with the other children, projects can evolve overtime, communication skills can increase along with cognitive thinking and problem solving creating a sense of place for the children.



Figure 2-14 The Parish School Adventure Playground Building Materials (Teague 2015)



Figure 2-15 The Parish School Adventure Playground Loose Parts (Teague 2015)

2.5.7 City of Irvine Adventure Playground

The adventure playground in Irvine is a hybrid park which uses some parts of the adventure playground model while incorporating more standard playground spaces and equipment. Compared to other playgrounds viewed in this section, the Irvine playground is very heavily designed and offers more limited options for creating and risk taking. The Irvine playground's histories of shutdowns and redesigns serves as insight into the trouble adventure playgrounds have had becoming a part of the American play landscape.

The Irvine Adventure Playground was created in the 1970's for the communities desire to have a place that children could play, build, create and explore. The playground was closed due to the University Park Community Center expansion. After the expansion completed in 2010, accessibility and safety standards of the adventure playground became an issue so the adventure playground did not re-open.

Through a participatory design process, the park has since been re-evaluated. The existing conditions were studied, and conditions analyzed. A detailed site analysis was created and public workshops were held for the project introduction. From May to August of 2011, other parks in California were researched and studied. In November of 2011, a third community workshop was scheduled with the consensus being to design a park which provided a combination of play experiences. June 2012 the master plan for the adventure playground was approved. Construction is to start January 2015 and to be completed no later than September 2015 (cityofirvine.org/cityhall 2014).

The design concept created was a highly designed space that takes the adventure playground idea, but adds in other aspects of other playgrounds such as a sensory garden, themed play structures and a stream. The end result is a combination of

many different styles of playgrounds, with only a smaller space dedicated to adventure play. The dedicated adventure play space supplies sheets, bamboo and clothespins for fort making. The design does not mention building that utilizes wood, hammers and nails.

2.6 Chapter Summary

The ambiguity of the adventure playground offers the children a potential setting in which to define self as well as space. The playground is not totally open, yet it offers a selection of loose parts (e.g., tires, wood, tools, paint, plants, seeds, and the like) which supplies part of the potential for children to define their own activities (Nicholson, 1970). Thus an important difference in the meaning of the environment to the users is that the built playgrounds were planned by others, they were permanent, and the potential for original combination is minimal. At the adventure playground, the form is created by the users and is only as permanent as they chose it to be (Hayward et al. 1974). Over-designed, expensive play structures have evolved in this new climate with the first assumption that the playground meeting the needs of the children should be questioned and the idea of playing on playgrounds but nowhere else needs to be acknowledged and then critiqued (McKendrich 1999).

Chapter 3

Research Methods

3.1 Introduction

This chapter explains the qualitative method of the constant compare method approach used for gathering data and how that data is analyzed. Qualitative methodology refers in the broadest sense to research that produces descriptive data from people's own written or spoken words (Taylor and Bogdan 1998). Qualitative researchers must set aside their own perspectives and listen to those of the interviewees in order to gather the most accurate data that can be analyzed.

In-depth qualitative interviewing is defined as repeated encounters between the researcher and informants directed toward understanding the informants' perspectives on their lives, experiences, or situations expressed in their own words (Taylor and Bogdan 1998). For purposes of this paper, the constant compare method is used and defined as data gathered through the interview process that is coded and analyzed in order to develop concepts by comparing and contrasting benefits and limitations of the participants.

This qualitative study collects information from landscape architects, designers, university professors, child educators, and playground equipment designers. The interview addresses information gathering about their knowledge of, experience with, and opinions of adventure playgrounds and the design thereof. Interviews with these professionals have been conducted and transcribed in this research paper for further analysis. The transcriptions are simultaneously coded and continuously analyzed with the constant comparative method to expose themes and concepts. These are then refined

and are reproduced in a format that is organized and coherent for explanation of these theories.

3.2 Methodological Approach

The approach to gathering data begins with securing interviewees to participate in this research study. An email letter is sent out to prospective interviewees introducing myself and my research and requesting participation. A request for an interview date and time is also included with the letter. Upon receiving a reply, the time of interview is confirmed and a phone or in person interview is initiated on the confirmed time and date. Prior to the interview, a consent form is either read to the participant, or given to the participant for signature. For the case of consent read over the phone, a date and time is used for signature of the participant. The interviews conducted last approximately one hour and are recorded at the time of the interview. Each interview participant is coded for anonymity and interviews are transcribed for further analysis and comparison of the data collected.

Participants of this study came from varied background and were located through different means. The interviewees included landscape architects, with more experience in park and playground design to landscape architects that have had minimal experience in playground design. Other landscape architects included program directors and professors from different universities ranging from the United States west coast to the east coast. Designers of natural playgrounds and adventure playgrounds were included in the interview process along with an educator and director of an adventure playground at a school and a scientist that also studies history of gardens with an emphasis on the study of children's playground equipment. To secure interviews from the various backgrounds, this included contacting universities with landscape architecture

departments, email contacts from web sites of landscape architects and designers, contacting professors that evolved from the research in the literature review, other landscape architects introducing me to other professionals in the field, and contacting educators that work with directing an adventure playground and work with school aged children. The professionals were interviewed individually and the written transcripts used for the research studies were given codes to assure anonymity for the participants. They were each given one or two letters and a number. The letter came from the first or last name of the interviewee, and the number was used for keeping the interviewees in an ordered manner. For this research study, in-depth interviews were conducted over the phone or in person at a specified time and place agreed upon. In the case of in- person interviews, locations varied. The participant was given the choice of where to meet for the interview thus ensuring an atmosphere that would be most comfortable for the interviewee to answer the research questions. Most of the face to face interviews were scheduled at the participant's place of work and we met either in their private office, or the conference room. Phone interviews were scheduled for specific times, being sure to be aware of what time zone the interviewee resided. Each interview lasted approximately one hour.

Specific questions are used as a guide for all interviews conducted. Important concepts to utilize for the interview process were: to be patient with the interviewees, pay close attention to what the participant is speaking about and asking for clarification of answers when needed. Data that is collected and transcribed is coded for interpretation and analysis of patterns, themes and developing concepts (Taylor and Bogdan 1998).

Challenges to data analysis included going through the many pages of transcriptions, and putting these into coherent themes and interpreting the data without allowing personal biases to color my interpretation of the interviews. Data was compared

to see the themes that emerged and then tallied for how often the same theme evolved in other interviews. These tallies were counted and the themes that emerged from the participants were then compared in more depth.

3.2.1 Constant Comparative Method

The grounded theory approach is used to discover any theories, concepts, hypothesis and propositions directly from data rather than from a prior assumptions, other research, or existing theoretical frameworks. (Glaser and Strauss 1967). A major strategy for developing a grounded theory is the constant comparative method used to analyze data. The data was coded and then analyzed in order to develop concepts (Glaser and Strauss 1967). Concepts are refined by continually comparing data and specific incidents, looking at relationships between data sets and integrating the data collected and analyzed into a coherent theory (Glaser and Strauss 1967). The interview data was studied to determine repetition between the interviewees that would indicate themes. These repeated themes were put into categories to show perceptions of adventure playgrounds, comments comparing the child of present time of 2014 compared with the 1930's to the mid to late 1970's, site location. One of the bigger themes that emerged was that in the present time, an adventure playground may be accepted more readily and actually come to fruition if it could become a part of something else such as a nature center that would already have staff and funding. Continued funding was the biggest theme for limitation, and the increased cognitive learning with use of loose parts, and ownership of what the child creates was a benefit of an adventure playground.

3.2.2 Interview Questions

Interview Questions for Landscape Architects, Designers or Educators:

- What do you know about adventure playgrounds?

- What do you as a landscape architect think about restraints to design for adventure playgrounds?
 - (What are the limitations of minimal design on playgrounds?)
 - (What are the benefits of minimal design on playgrounds?)
 - (What values are lost from designed playgrounds?)

- Can adventure playgrounds described in this discussion have a place in America's recreation/play inventory?

3.3 Challenges to Research

Challenges from this research include limited existing data on adventure playgrounds in recent decades and the initial collection of participants that have any experience with adventure playgrounds. The United States has a limited amount of adventure playgrounds in existence to date, so researching true adventure playgrounds took my research to Europe and other countries where adventure playgrounds are more prevalent.

Interviewing has limitations; people say and do different things in different situations. Since the interview is a particular kind of situation, one cannot assume that

what a person says during an interview is what that person believes or will say or do in other situations (Taylor and Bogdan 1998). To adjust for limitations of the interview process, the interviewee was given the opportunity to choose location, and if local to choose phone or in person interview.

Chapter 4

Data Analysis and Findings

The coding and sorting of data collected with the interview process was compared and contrasted with the constant comparative method. The constant comparative method enables analysis of all data relevant to a theme, concept or proposition. By comparing different pieces of data you refine and tighten up your ideas and gradually move to a higher level of conceptualization (Bogdan 1998). The interviews were compared for commonalities, and themes were listed as they emerged from comparison of data. For each interview information that was not relevant to the study was removed from consideration so the relevant data could be compared. The clarified data that was repetitive was used to gather conclusions and themes that were relevant to the research study. All data was coded and sorted prior to the data analysis. The interview was reviewed and put into categories of each research question. While proceeding with the actual interview, the interview process did not necessarily go in the order of the questions asked of the interviewee, and may have skipped around on the different research questions so reviewing and re-ordering them for the benefit of systematic analysis was necessary. Relevant items that emerged were put under each research question category to aid in organization. Subsequently, the lists were compared for commonalities. Analysis of the commonalities evolved for this thesis topic and these commonalities became the basis for the research findings.

4.1 Previous knowledge of Adventure Playgrounds

The first questions to be asked of the interviewees was if they had any knowledge of adventure playgrounds. The knowledge ranged from not knowing about

them at all, knowing somewhat about them, to being highly knowledgeable about adventure playgrounds and how they function. Almost half of the interviewees had quite a bit of knowledge through research, study, running adventure playgrounds and/or being involved in the actual process.

The interviewees are referred to in this research study as their coded letter and number. Interviewee J1 has working knowledge of the adventure playground first hand. She has been working with children and the adventure play at her school for seven years now and has been able to watch the adventure playground evolve over time. Her school had input from a member of the Houston Playground Association and J1 was able to take this information plus books she ordered from the U.K. and other research to create the adventure playground at her school. After seven years, she has been able to watch the children and the idea of adventure play and what it means. She has much to offer and is very dedicated to the children and the true meaning of adventure play.

“When I first started (with the adventure playground idea) I thought, “Play is icing on the cake.” The more I do it (run the adventure playground at her school), the more I realize, “It’s the cake. It’s the foundation. It’s the part that you cannot mess with. If children don’t have access to play, they lose an opportunity to build identity, to build confidence, to build problem solving, also like talking to each other. I realized the kids can resolve their own conflict because they have time and space. Whereas, in the classrooms, they see educators always scripting everything for the kids and solving the problems for them.” We step back because we’re trained as playworkers to step back. We let the kids resolve their own conflict. How huge is that for the world, for when they grow up, when they’re adults and they have to deal with people who are different than they are.”(J1p)

Among the subjects interviewed, previous knowledge of the adventure playground was distributed with almost half of the participants being very knowledgeable, one quarter somewhat familiar, and one quarter unfamiliar with the idea of the adventure playground. Of those that were not familiar, one interviewee commented:

“You’ve kind of enlightened me. I didn’t realize that they were even around. I think that’s a really good idea. I’m just not sure why it hadn’t

really taken off, or hadn't really been a bigger thing, because kids ... People get bored with the traditional. Even as a designer, I get bored with the traditional playgrounds, so I think that's a good thing." (M1p)

One interview subject that was very knowledgeable about the topic of the adventure playgrounds became interested early in his design career while working for a company that was designing traditional fixed play equipment. He remembers sitting during a lunch break with the marketing director of the playground company he worked with while reading a chapter on adventure playgrounds. The marketing director shut the book and said, "I don't know really know what we're doing with playgrounds. There's nothing better for kids than the adventure playgrounds, that's the best scenario of the best situation, the best opportunity for children to play: free unstructured play and growth and development.". Participant R2 felt that it was interesting coming from a marketing director who's trying to sell playground equipment. Participant R1 had actually grown up during the 1970's and felt as a child like everything was a little adventure playground in that sense.

"Even looking at the Old Sesame Street, kids were climbing on stuff and they were on tires and footage of real kids, whether it's in Brooklyn or Harlem or whatever it was. There were adventures, there were kids in vacant lots building their own kinds of things and having fun "

The feeling from interviewees was often that there was strong support for the adventure playground idea. The comment was made that relative to the number of adventure playgrounds that are actually on the ground, it is remarkable. The concept of the adventure playground is alive and well, but the actual reality on the ground is pretty minimal. (R1p4).

The original idea of the adventure playground allowed the child to design their play space how they imagined it to be. When playworkers in England became too involved in the building aspect of the adventure play, the true idea was lost somewhat, for they built structures for the children and tended to build adult size, and not child size. If

playworkers help too much building structures, then the adventure playground no longer is what it is meant as in this quote by participant R1:

“There are still very good examples, I would say, of adventure playgrounds in England but still they don't really conform to the original concept. In England they went for large-scale structures that were built by the playworkers, which really wasn't the original intention.” (R1)

Knowledge of adventure playgrounds, by those interviewed, spanned from knowing the history and being able to tour many playground sites in Europe and other countries to reading about them in research and viewing photos. When talking about adventure playgrounds with those that were acquainted and those that were not familiar with them, a positive reaction was the norm. Many would remember when they were children and what they did outside as a child, and we would talk about those memories.

While growing up, everything was an adventure playground back then:

“I had my own fort that I built when I was a kid, and it wasn't very safe. I don't know how it stayed up but it was up in a tree. I don't know how it stayed. We had a blast up there. Now, you see, kids don't build those anymore. Their parents build them for them. They are all real neat and proper and you just don't (get the same experience) I mean part of it (the fort in the tree) was cardboard if I remember right.” (F2)

“When I was a kid, I remember jack rabbits and roadrunners and all of these. It was on the southern edge of the Great Plains. I just remember these big open fields and these creeks with trees next to them and I would just go play sometimes by myself, sometimes with friends trying to catch frogs at the creek and just going through tall grass. People who were building homes would leave this huge maze-like stacks of bricks and we would go in between the stack of bricks and we would make things out of them and there's all this construction equipment just sitting there because that was the beginning of the building boom in Allen. We had an adventure playground.” (D2p)

“When I grew up as a kid, we'd spend hours and hours and hours down at the little river creek, and we'd dig little canals with the sand and mud, and we'd build them up and pour the water on the top and watch it go down. That was a half a day deal.” (D1)

Memories of being a child and playing freely are an aspect that is common among the interviewees. These memories can influence the positive idea of the

adventure playgrounds in communities and could be used as one tool to engage the community as well, and to help community members see the positive aspect of free play and what it could bring to their neighborhood. Conjuring up memories of playing as a child and how that felt could initiate the conversation and sway people to think positively of adventure playgrounds.

Memories as a child was a common theme among the participants and seemed to influence their opinions in a positive manner of minimally designed adventure playgrounds. This was true for those interviewees that were knowledgeable to those that had minimal knowledge about this type of play. The desire for children of today to be able to have some of these same experiences was a common theme among the interviewees and was a factor that was highly regarded and influential in the design process of those that work or design adventure playgrounds.

4.2 What Landscape Architects and Designers think about Restraint to Design

4.2.1 Introduction

The research question for restraint on design is broken down into categories to better explain the thoughts about restraints to design and the adventure playground. The first category is the question of limitations, and what values are lost from the traditional designed playground with fixed equipment and no loose parts. The second category discusses the benefits of the minimally designed adventure playground with loose parts, and how this affects the users and the designers of the space.

Several of the participants discussed many different aspects for restraint to design. Because of loose parts and tools, liability is one of the first thoughts of the participants that are less knowledgeable of the adventure playground idea. This reveals

that perception and the visual appearance of such a playground would create a negative response of the less knowledgeable and the need to communicate the actual research studies that show the opposite for an adventure playground would be paramount. Also, one of the participants expressed belief that because an adventure playground is part of the natural environment, that nature should be taken into consideration in order not to deplete the resources of the site, which, in combination with the adventure play, would promote nature awareness.

“There's an adult or a professional role, play work, working with children. If the space has been designed for those kinds of programs to work well, it has really been intentionally designed to serve as play purposes, with a good attention to the site dynamics and survival of the natural resources so they don't get overused, and so there are a lot of issues. How you manage a site that balances nature play but also conserves the resources. That's got to be highly managed to achieve that outcome, otherwise it's very easy for the natural resources to get overused and they disappear.” (R1)

From the landscape architects point of view, there was a consensus that there is not just one model for the adventure playground. Interviewee R1 discussed that there is a set of principles that have to do with the way we create natural landscape for true nature play to take place, which is very much about freedom. Some better examples of free play environments have controlled access, for it would be more difficult to do adventure play in a public park that was not designated for this type of play.

4.2.2 Limitations of Minimal Design on Playgrounds

Limitation concerns from the data collected included liability issues and lawsuit fears that were in the public realm, funding, staffing and training the playworkers, accessibility, view obstructions, maintenance, and community resistance. Because there would be guidelines to follow and standards that must be met, and how to go about

getting approval by the government. Because of liability and playground design, one of the participants that has worked with many playground design and installations of more fixed play spaces had the following comment about liability:

“It’s not going to get any easier. It gets more and more ... It gets more and more challenging to provide playgrounds that are going to be approved by the government and be exciting places to play at the same time. I guarantee every time there’s another lawsuit then the guidelines are going to change.”(F2)

Communicating with the public and having community members with knowledge of the adventure playground, introducing adventure play on a smaller scale to build up at a slower rate, and having release forms could help mitigate liability. In the public realm, release forms may be necessary as part of the practice such as what the Berkeley Adventure Playground does in California. Having some limited visibility of children at play was also a limitation that could come into play in some communities and would need to be addressed with communication and education about the child directed adventure playground and how it functions with playworkers. Without proper education and staffing of adventure playgrounds local governments and police may see this as an issue as stated in the quote below:

“I know that local government and police also have problems with things like, you can’t put those taller grasses in there. We won’t be able to see all the way across. It often takes a lot of work with local officials. Sometimes, you have to make compromises about the structures that are there. I actually could imagine even in the city of, in a bigger city like Houston getting a little bit of push back on some of these structures.”
(D2)

Another limitation is the perception that adventure playgrounds are not safe places to play. This would fall under the category of educating the public and incorporating aspects of the adventure playground slowly over time to increase trust and awareness. Persistence and passion of the playworkers and directors in charge of the adventure playgrounds and continuing education of the community and parents would be

an ongoing job in order for the adventure playground to become a successful playspace.

The following quote from the director of an adventure playground describes the biggest limitation and states that persistence is a key element to overcome this:

“I'm going to have to say that probably the biggest limitation is a misperception about children and their play. Also there are adult fears and some parent and teacher discomfort with the way things (adventure playground loose parts) look. It means that there's maybe a minimization about what's happening on our adventure playground. We just keep showing up and keep doing it and people keep coming around.” (J1)

The adventure playground can look like a junkyard that is ugly and unkempt.

With unfamiliarity of the adventure playground by many communities the adult perception would see the space as messy. Adults tend to like neat, structured planned and painted play spaces. Some adults would not understand the minimally designed playground and how this benefits the users, the children.

Education of communities by a trusted member of the community would increase awareness of the minimally designed playground and possibly increase the positive idea of creating these types of play spaces. Starting an adventure playground off at a smaller scale and building up over time to introduce the idea would get more community members on board with the adventure playground idea. Most of the interviewees commented that persistence, passion of the landscape architect involved and the staff running the playground and education would be advantageous to get this type of play to become accepted in the community.

4.2.2.1 Playworkers and Accessibility

One of the bigger limitations seen by the participants was the training and funding of the playworkers that would staff the adventure playground. The playworker is a profession that is not prevalent in the United States compared to that of Europe, and the

funding to keep them staffed. The playworker is key to the success of the adventure playground and training is necessary for the play staff. Education for the profession of playleader work through college and university level courses would be advantageous for professional playleader training.

“Mostly the biggest limitation is getting someone to staff it (adventure playground). That's always the case. Facilitated play is way better than just plain old free play. When I say facilitated play, I'm really talking about animators. I'm not talking about a recreation supervisor. I'm really talking about an adult who's been trained in play and really knows how not to interfere with a child's play, but to allow them to really explore the environment to its fullest, and that's the hardest thing to get anybody to do because there's never any money for that part.” (S1)

Accessibility could be a limitation, but there are ways of overcoming this. This would be addressed in the design phase by the landscape architect to incorporate accessibility for all children to be able to play at and be a part of the adventure playground. Because adventure playgrounds are enclosed staffed play areas, accessibility and safety could be managed.

4.2.3 Funding

A consensus among a high percentage of interviewees was that having the adventure playground in the private realm compared to the public realm would have a better chance for receiving and getting funding to initially set up the program and then to keep it running with staffed playworkers. In the public realm, if the adventure playground could become part of an existing entity such as the park system, state parks or municipal parks, this would give the opportunity for someone on staff to take the idea and connect it to what is already there such as a state or municipal park. It would be beneficial for a staff member to head up the adventure playground idea and then in turn could convince the

superintendent or whoever is in charge, to go forward with the concept of the adventure playground. The next step would be for the landscape architect to work out the site and the dynamics and essentially to design the site as far as it needs to be designed. "It needs pastures, parking, circulation, fencing, and possibly a landscape berm and that type of thing" (R1)

"I think it [adventure playgrounds] could come about in two ways. One would be a park system. It could be state parks or it could be municipal parks. Someone on the staff becomes a champion of this idea and manages to convince the superintendent or whoever it is to go forward with that concept. Then they're going to look for a site, they're going to look for a landscape architect or someone to help them work out the site dynamics, and essentially to design the site as far as it needs to be designed. It needs pastures and parking and circulation and fencing, and hopefully a landscape berm and that type of thing." (R1)

A nonprofit or community organization could also promote the idea of adventure play and connect it with an existing program such as the zoo, the arts, a nature center. Interview P2 stated that the issue for adventure playgrounds in the United States would be more of a funding issue than a liability concern and also that as a society, the American culture does not have a cultural history with play work and the staffed adventure playground. Europe does have a tradition of play work, and some of the European population would have knowledge of what play work is and how this position is used in playgrounds. Since America has limited associative history with playwork, in order to talk with someone about this, there must be a whole other level of education why funding for this profession is necessary. Funding is a larger limitation that must be overcome in order for the adventure playground to be able to function with playleaders on staff. A participant in the research replied concerning funding:

"People are generally suspicious because their idea of a playground is just of an unsupervised place of equipment and then they find out that it is going to cost them money for the playworker. I do get a little tired of people that say, 'Well we don't have adventure playgrounds here because Americans are too liability conscious.' I think the issue is more about funding." (P2)

Private funding in private spaces and private endowments are the consensus among the interviewees for initializing the adventure playground implementation and for future funding to keep it staffed and running.

Public or private adventure playgrounds would also need to be considered for the success of the play environment. In the public school system, after the completion of building the school, the thought of where the play space should go and elements on the site are an afterthought. A space will be left for the playground and then there is no funding for any type of playground materials.

One interviewee that has worked with installation of playgrounds at schools, commented that it was often up to the PTA to raise money for the playground and that this was not part of the initial funding. For future schools, the interviewee worked with the school districts to get the funding for the playgrounds incorporated into bond packages so that the money is there when the playground goes in and it is already earmarked for this purpose. For future schools and the location of the play space, it would be necessary to look ahead in the beginning phases of school plan design. The landscape architect would do a study in the site research phase of the movement of children throughout the site. This would be applied during the design process and would impact the positive implementation of an adventure playground at a public school. Also, the public adventure playground idea could be incorporated into the municipal or the state park system. A nonprofit organization or community organization would initiate the idea of the adventure playground and then promote it to their local park system, zoo or nature center. Many nature centers are private, nonprofit organizations and zoos are mainly private enterprises. The organization would not have to go through the municipal route.

4.2.4 Perceptions of Safety

With the user built adventure playground and the use of tools and the loose parts, participants responded that the initial reaction from community members that were not knowledgeable about the adventure playground may be negative because they had not heard of this type of play and visually it looks unsafe. Education of the public about adventure play, how it works, how it is staffed and safety records from data would increase awareness of the adventure playground and the benefits. This in turn would develop a positive reaction from community members thus increasing the viability of adventure playgrounds actually becoming a space for children to play. Education to the community should include safety data at other adventure playgrounds and can also be emphasized by the employment of staffed playworkers that are there to keep watch over the children and be there to help. Also, the playground would be an enclosed play space specifically for children and not a mixed use space. When children build, they tend to build to their own body scale, as opposed to when an adult intervenes and creates a more adults sized play structure. Because the child builds to their own scale, this creates more of a sense of safety. Accidents are more likely to happen when the adult builds a structure that is larger than that of the child's body scale as this quote by J1 suggests:

“The other thing I was going to say about safety is just that when you actually let children build the other piece of it is that children build for their own body scale. I think people get nervous when they see a 4-storey tall playhouse. If you actually left children do the building, they can't build a 4-storey tall playhouse. They can build a funky-looking, 2-storey fort. If they get more proficient, they can get some height by building swings.”

One of the research participants commented that she felt a lot of the accidents that happen on a playground are directly related to the fact that they are built by adults and are thought of in terms of an adult body scale. When children are in charge of

building their own space, they build it safely. They know their bodies and build to their body size. They know their own bodies and what they are capable of.

4.3 Benefits of Minimal Design on Playgrounds

Many themes evolved for the benefits of the minimally designed adventure playground with the biggest theme that the children would have many opportunities for learning. Cognitive and physical learning was a major theme as described in this quote from one of the study participants that is a landscape architect and works with children's play spaces:

"I mean, first of all, it's all learning, and you have to play if you're going to become a healthy adult. Every mammal plays, and it develops every single aspect of a human being. You can't be a creative individual, you can't actually learn cognitive structures if you don't play. All that kind of stuff gets developed in your brain as you play in different kinds of areas. There's movement play. There's social play. There's constructive play. There's fantasy play. There's so many aspects to play that, when it's child directed, they all get triggered, and when it's physical, as well." (S1)

Other themes that evolved for the benefits of minimal design from the interview participants included, children feeling they have ownership of what they have created or built on the adventure playground and adventure playgrounds are not organized and there are loose parts. Children would use not only motor skills, but increased cognitive thinking, problem solving and the ability to explore an environment in their own way in a safe staffed playground.

Unstructured play would benefit all the different skill levels of the children that came to play. Kids can create and work with what they want to work with and how fast or slow. They don't have to keep up with others, and can do things at their own pace which

would build confidence. The adventure playground could take elements from its geographical location and incorporate them into a space that fits into its environment.

Each adventure playground could be very much of its own geographical region (D2). Depending on where the site would be located, taking advantage of site conditions, using elements that are in the area or reflect the culture, utilizing shrubs, trees, grasses and other plant materials as part of play and shade, utilizing undulating terrain of a site so as not to have a flat play space, to blend with the environment and make it part of the culture and area it is located.

Another positive benefit from the minimally designed adventure playground is that the children can take ownership of what they have built and created at an adventure playground. The children's perception is that they see numerous possibilities of the loose parts and cannot wait to build, and can take ownership of what they have created or built with their own hands and their imagination.

"There's also the whole idea of challenging children to come up with new ideas to create. You're probably molding some new landscape architects right here. New artists, new people that are going to be creative, have a creative career of some kind because they're challenged to do something like this. That's wonderful and like I said ... If they're not listening to involving your client in a design process, you're heading for failure so that's wonderful part of it as well. "(F1)

Children in an urban environment would be able to have access to and do things they might not be able to in the city settings such as building forts, using hammers and nails, planting and harvesting a garden or building fires to cook with. The adventure playground would offer the playleaders that know how to work with children and puts the child in charge of what they are going to build, or play or how they will use their imagination.

If a child lives in the city, there are many that do not get opportunities to use tools and experiment, and an adventure playground would give children a place to go

to be able to learn about the environment and building. One of the landscape architect interviewees grew up in Allen, Texas and remembered back when he was a child and had this response to the benefits of an adventure playground:

“There are a lot of city kids here who don’t get to do anything like what this kind of space would offer them. I think that would actually get a lot of parents on board. When I was a kid, my mother would have me just go outside on my bike or something and my mom would say, be back when the street lamps come on. That would have been the early 80’s in Dallas. I grew up in Allen. Allen, at that time it wasn’t that developed. It’s nothing like it is now, I remember open fields.” (D2)

The adventure playground is not like organized sports. Children are in charge of their time at the adventure playground, decisions made, risk taken, what to build and who to talk to. The child builds motor skills, increases cognitive thinking and problem solving skills, teaching children to cope and move beyond failure and general independence. Beyond these skills, there is team working and building skills, cooperation, and manual dexterity skills

Children would actually explore the adventure playground environment and would have unstructured play which has benefits to the child of cognition, and problem solving skills. At an adventure playground, a child would be allowed to do things that were less regimented, such as climbing a ladder at a traditional playground as opposed to an adventure playground. The ladder at traditional playground would be evenly spaced, and regular, the next handhold and foothold would be predictable while climbing. At the adventure playground, while climbing a tree or a set of rocks which would not be evenly spaced, adjustments to decisions:

“Climbing a tree or a set of rocks or something like that is actually better developmentally for kids than climbing monkey bars for the same exact reason that kids have to adjust and make micro decisions basically on how to adjust for the next handhold, for the next foot that you’re putting up as you climb in real time, you’re having to do this instead of letting your brain go into this one leg, next leg. You can over-depend on the regularity of the structure.”(D2)

Children when given the opportunity to build and create, and know that it is OK to take something apart and put it back together in a different way will do so over and over and spend many hours without becoming bored.

Other benefits of the minimal designed playground, described by a participant that has experience with the creation of adventure playgrounds, includes the positive effects of loose parts and that the children would play for long durations on the playground and would keep interest in building and playing and did not seem to become bored. Instead of traditional playground equipment, he would use natural playscapes. The adventure playground had a combination of natural elements, such as utilizing existing hills and grasses, the creation of berms and pathways. With these elements on the adventure playground, it not only became a place for children to learn and play, but looked visually appealing also. With the introduction of “piles and piles” and dirt, woodchips, tires, boards and rope, the children could do what they wanted, how they wanted. As the interviewee observed the children at play, he noted that he was able to just “stand back in awe” and after three hours of play the children were still at the playground creating and building and he commented on how incredible this was: ‘Holy moly! Look what these kids did!’ it just was so incredible, so creative.”(R2)

Play is able to go into many directions, and there is a constant evolution of play. There is cooperation between the children, creativity, a rich complex creative play environment as R2, a designer of adventure playgrounds states in this quote as he watched children at adventure play:

“As a designer, I never, ever would have thought of some of the things the children created. You just stand back and you just see constant creativity in action, like somebody is building one thing, and then there’s another idea. Then they do something, and then that gives another group of people ideas and then that does something and then you know, it’s just like constant evolution of play. It’s non-stop cooperation too. It’s creativity and then there’s kids effort, and to me that’s actually the goal

as a designer. That's really what I'm going for. That's really what I hope of my environment to do, a rich complex play.”(R2)

Children are naturally curious about fire, digging, building and other things you might do at an adventure playground and not be able to do in the urban environment. The adventure playground would create a venue for children to explore these curiosities. Regardless, children are going to explore. If they are in a supervised play area, then can feed their curiosities in a safe setting with playworker staff on hand that watches over, without taking over the playground. Children can also learn cause and effect in a positive environment such as when building structures, planting gardens, building fires. To learn what happens if, for instance, a wall of the fort is not secured and falls down, what does the child do? How can this wall be fixed so it doesn't fall down? These are simple ideas that teach problem solving and life skills in a fun safe environment. Trusting children and what they do is also a theme that emerged with this research. Children know what they feel comfortable doing and the adventure playground atmosphere helps children to figure this out. Referring back to earlier playground design, landscape architect F2 noted that: “Children know their limits. They are not going to try to play on a piece of equipment that's too challenging. That was the philosophy” (F2)

4.4 Values Lost from Designed Playgrounds

A constant theme that evolved with the traditional designed playground is that the playground equipment is too structured and becomes boring, especially over time when visited over and over again. These types of play areas do not offer children change. Kids may become too “safe” and use the equipment how it is not intended to be used and thus making it unsafe. Bigger kids get bored and that is how injuries happen and kids are pushing the limits and they want to take uncalculated risks that could cause injury.

” I love landscapes. The playground should be suited to its landscape. Frankly, that's one of the mistakes many manufacturers have made is that playgrounds are designed no matter where they are. They have no relation to the local history, to their landscape and that we should be having more local conversations.” (P2)

A traditional playground emphasizes one type of play, gross motor skills, but this is only a fraction of what the adventure playground would do for a child. At the traditional playground, often children are climbing and swinging mainly. These are gross motor activities only, which is only “on-tenth of child’s play” (J1) The traditional playground is very limited, and is designed by adults. Adults do seem to focus on gross motor skills, but some of the most important aspects of play are on a more personal an imaginative scale. With only gross motor skills, children have less communication and negotiation with other people. “Symbolic play is creating a narrative with other people. That’s so important to society.”(J1) She goes on to comment about the adventure playground she directs:

“A lot of times the most important play for children is symbolic play or imaginary play. On our playground, they can build a castle in 5 seconds out of pallets and make a flag out of a piece of fabric and a piece of bamboo. Immediately, they have their castle space and they can defend it. On a typical playground, it’s really like it’s super focused on gross motor. Maybe there will be a ship. There will be some imaginary things but they were determined by adults, not by children.” (J1)

Children cannot change their environment at the traditional playground with its fixed structures and immovable parts. There are not loose parts as with the adventure playground. “Variability would transform into novelty because if you can change something it is always new. It’s always different.”(J1p12) There is not a cohesiveness for this kind of play. Because traditional playgrounds are adult built, value is lost to children, they can’t change their environment, and they can’t dig in and connect to the natural world. They are only connecting with the playground that is the adult built play area. “If

you do have a playground in your neighborhood, it is probably a pipe and plastic one set up by the parks department. That really doesn't have a lot of complexity to it."(S1)

Traditional playgrounds are limited in what they can do and are often not a defined space. It may be plunked down next to a picnic area not defined as a play area, but as a mixed use area. Because of this, the traditional playground may have dog feces or broken glass that a child could step in. This would also deter families from using the park. "I see glass at our playground and a lot of dog poo, things that make it not defined as a children's space."(J1p13)

Children are not invested in a fixed playground, it does not belong to them. At an adventure playground, the structures truly belong to the children and so they care more about taking care of the space and fixing things. This is also part of the problem solving skills that is a benefit of adventure play.

The benefits of building motor skills, cognitive thinking, playing and building with loose parts, children having unstructured play, increased brain development through social interaction and problem solving, natural elements and diverse play of the adventure playground, according to my research, would outweigh the limitations. The limitations can be overcome by careful planning, education of the public and professionals about adventure playgrounds, how they work, safety records, and finding the funding through various creative means to run and staff the adventure playground.

4.5 The Role the Landscape Architect Plays in the Minimally Designed Adventure Playground

The role of the landscape architect in the minimally designed adventure playground has various roles that range from design such as creating a visually

appealing entry to educating the community. You must know your client, the user of the playground, the children, and keep that in mind at all times. Education and community involvement, location of a site to fit the community and creating a safe environment would be roles of the landscape architect. Connections to other parts of the community may be a way of introducing the adventure playground idea and securing funding. The landscape architect would keep the vision of the adventure playground on track without deviating from the initial idea of adventure play. From this quote a landscape architect participant views their role in the environments of adventure play:

"Our environments are very, very complex, and a lot of them are very built and very designed. You just have to allow flexibility in there so people can interact with them in the way in which they are most comfortable, and so there's choice there. It's all about diversity, choice, and complexity." (S1)

The landscape architect must first and foremost know the users that are being served. Important factors include community involvement with adults as well as children, involvement from other professionals such as child development professionals like teachers. Research should be done into different studies concerning cognitive thinking and play with children to have a better understanding of the children's needs.

Children have the desire and need to play, and working with educators would be a viable entry point to educate teachers and parents. School would be a probable place for adventure playgrounds and would serve the user's needs. Educators could be trained in adventure play and this could become a part of the school day. Childhood development teachers could begin the adventure playground idea with demonstration gardens, loose parts activities, water and nature play. Being able to gather loose parts to

make things such as mud and dirt. This would increase the knowledge of adventure play with parents, and incorporate this type of play into the school day of children. One landscape architect discussed this idea and how he would take the children on tours of natural areas, and they would gather loose parts and build with them. This became a very popular field trip and was done on a regular basis (M1). Schools could incorporate this idea, and the landscape architect could help to facilitate the adventure playground on a school site.

“The hardest is getting municipalities and adults to buy off on giving kids the ability to create. Kids are extremely creative” (J2).

“We’re in 7th year as an after-school program, the special school for kids with language-based learning differences, which encompasses a real wide range of medical diagnoses. The way it affects us are not adventure playground is mostly through communications, where play is so much a form of communication for kids. We’ve been around long enough. I think we’re part of the next, the newest generation of adventure playground that’s cropping up in the US. We’ve been here for a while.” (J1)

As we can see from the above quote, some landscape architects and educators think the idea of the adventure playground at a school is a probable place to have adventure play and that the idea of minimally designed play spaces have many advantages for the users.

4.5.1 Site Selection

Site selection would be a factor to consider highly when deciding the location of an adventure playground. The landscape architect would pay attention to various factors when locating a site for the adventure playground including elevation changes, trees, water and other natural elements. Elevation change creates interest, along with natural features. One participant discusses this point and how when deciding on a site the

landscape architect should work to attain a site with elevation change and mature trees.

Flat mulched areas are not the idea of the adventure playground, as the following quote depicts:

“The further you can get away from flat all mulch and trees on the exterior, the better. Incorporating any kind of nature that you can do, any kind of elevation change, anything that will test their limits, different abilities, different stages, and different ways to test their limits and take risks is all good.”(J2)

Another factor that was prominent with the participants was taking into account wheelchair accessibility to the site. Having accessibility for all children was a recurrent theme from most respondents that were interviewed, and discussed creating access for not only the minimum requirements, but to create accessibility to a larger portion of the playground. In choosing a site, the geographical location would be taken into consideration. In Texas, for example, there would be a need for shade, and elevation change in the terrain would add to the experience of the child. Elevation change could invite being able to climb, flow water downhill or just be a part of the child’s imaginative story that is in their mind. The site should fit into the community and become part of it.

There will be differences depending on where the adventure playgrounds are located and the landscape architect is responsible for detecting these differences and fitting the playground within the community. There may be for instance, historical background of a site or types of vegetation indigenous of an area that could be tied into the adventure playground so that it connects with the community and is seen in a positive light. The adventure playground should be connected to the area they are being created. Using the natural elements that are on site, maybe the entry has a historical theme of the area. With site selection, the landscape architect should keep in mind factors relating to a connection to the community through natural elements or historical features. The following quote shares what several respondents replied concerning site selection:

” The playground should be suited to its landscape. Frankly, that's one of the mistakes many manufacturers have made is that playgrounds are designed no matter where they are. They have no relation to the local history, to their landscape and that we should be having more local conversations.” (P2)

The idea of adventure play in the United States may be different than that of the England model. Because of different cultures and geographical regions of the United States, the model of adventure play may vary depending on the region the playground will be in, the type of natural elements available, average temperatures of the environment and the surrounding community. Making use of natural elements in the community and the historical context of the community can aid in the adventure playground becoming a part of the community and not out of place. This thought process can happen with the entry to the playground and even the surrounding enclosure. One idea for using landforms for the adventure playground is the use of berm land feature to create a screen enclosure. A screen gives children a sense of space and designates the play area. It is also a good way to screen views of the perceived messy loose parts that some adults may have issue with. Using existing trees on the site is simple and effective, and arranging the play areas next to objects that already exist on the site. Also, creating spaces where the child can feel some privacy.

“I mean that's something as simple as effectively using existing trees on the playground, arranging the play next to the objects that already exist on the site. Arranging things so that the child feels some privacy which is important in any playground. I think that these ideas that one can just go into a vacant lot and dump some junk there have the kids play with that, works well for a play-starved child in 1954 who was used to being cooped up inside all the time because of the fear of bombing, right? I think that we do need to be more thoughtful about that for the child of 2014.” (P2)

All the participants felt that from a visual standpoint, the appearance of the adventure playground would not be welcomed by all communities and that it may benefit to screen the communities from the perceived messiness of the playground. The adult

perspective on the visual appearance is much different in many cases than that of the child. The adventure playground is an enclosed space, so to screen the playground the perimeter may be a fence or combined fence and plantings. One of the participants had seen an adventure playground in Europe that created a berm to go around the actual playground itself. When you would come up to the playground you would see a beautiful woodland slope of the earth berm covered with wildflowers. The entry could be another way to create visual appeal for the community that felt the playground was too messy. The children could be part of the design process and come up with ideas for the perimeter of the adventure playground. This type of collaboration would reinforce the feeling of ownership that the children would have because they would be part of the design process.

With the incorporation of elevation changes, with the consensus being further away from a flat space with mulch the better, mixing in trees and nature, elevation changes would contribute to testing limits and different abilities and risk taking.

“ I think one of the most important aspects of playground design is the idea of shaping the ground and how the child moves in that space. At the very minimum, the space, the landscape of an adventure playground, should be thoughtfully approached so that the space promotes good play. “(P2)

A consensus of the participants in the interview process felt it is the landscape architect who would come in to create a safe environment with proper site location, for example the use of trees for shade. Also the addition of comfort items would be a role of the landscape architect such as drinking fountains, bathrooms, accessibility features and even possibly a space for the parents to socialize with each other. A building for storing tools and a place for kids to go if they are younger or if it is raining would be a feature that would be designed and located on the adventure playground site.

Several of the participants felt that with community involvement, and getting community members together to discuss adventure play, that this would give the landscape architect an opportunity to educate the public to realize the benefit of this type of minimally designed playground for children.

Landscape architects are needed for the deliberately undesigned space and begins by generating and encouraging community involvement. Community involvement should not be overlooked and involving children in the planning process is a step that should be taken seriously because they are the end users. Planning meetings should be scheduled to involve giving children a chance to express views of what they want in a playground. Schools can involve children to participate in the discussion of a playground to bring about ideas that adults may not think of for types of materials that could be used, or spaces that could be created such as a quiet space for relaxing,

“If it's kid involvement, most of the time, when I've seen that, it's usually been like a public school or even a private school who would let the kids submit plans. They teach them how to draw plans but they submit plans of the kinds of things that they would want and they submit layout. Sometimes, they just submit a series of ideas and then the committee comes up with a plan of where everything would be. They incorporate ideas that they think are really good or that they hear again and again. They think, this is a very popular idea. This really should be included.”(M1)

The design process would be the responsibility of the landscape architect, thinking about how the space will be used, the materials needed for the space, and figuring out how to tap into the community with the minimally adventure playground idea. Visually watching the children that are going to be using the space would be beneficial for insight into what the interests are for the children of that area. This may be helpful in deciding what kinds of materials the children would like most to have for building and creating. It may be that for older children there is a place for working on bicycles or skateboards, picking up on what interests the child.

“Yeah, they had little nooks and crannies where kids could get in there and hide and adults couldn't see them or anything, just to see how they used those spaces to see if there was anything unique we could pull into the new playground. That's just part of the design process is going and watching the people that are going to use your space.” (J2)

Other roles of the landscape architect would be to connect the adventure playground with other parts of the community such as community centers and schools. Nature and the environment is a connection that was an important aspect of the adventure play and could teach children stewardship for their environment. More than half of the respondents felt an adventure playground would benefit from being combined with other spaces such as those mentioned above. Pinke Panke, an adventure park in Germany, evolved into what one interviewee felt was a better model of an adventure playground. It is both an urban farm and a community gathering place. It has a genuine adventure playground on it, but it also includes animals, a community garden, nutrition, and quite a substantial community building gathering space. It is a combined adventure playground, community meeting place, café and is based on organic community garden and animals.

“The role of landscape architects in this general area of business, I think part of it is creating places where children can gain an understanding of the importance of the natural world, and that would help build a value towards stewardship. Of course, you can take that much further if you have programs or you have playworkers that are also on the same wavelength.” (R1)

Long term success of the adventure playground in individual communities would benefit by having support from an individual that is known and respected from within the community. Because this person is trusted and has a vested interest in their community, this would increase the chances of success as in this quote by P1:

“I think, because the concept (of adventure playgrounds) is new, it does tend to require a community champion, someone from within the community that's a known quantity that is going to say, 'Wow, I really think it would be great for our kids if we have some more adventurous play here. Here's some ideas. How can we go about it?' I think it really

has to be a very grassroots thing happen because it is an unknown quantitative community and so it's important for them to have a trusted member of their community that supports it rather than somebody coming in from the outside. That's essential for long term success of any effort is to have internal community support.” (P1)

Having somebody who's a long time member of the community and that they are a trusted quantity, and not an unknown quantity, would be a key factor to facilitate the adventure playground idea to the community. This person would be the connection between the adventure playground and the community. Starting the creation of the adventure playground off slowly and adding elements in a manner that is comfortable for the community. Because community perception may not be accurate of the child directed play of the adventure playground, starting off smaller and adding items as it goes along would increase acceptance of this type of play by community members. “As they see some adventurous, some aspects, some manipulative log carts, a zip line, some dim building, temporary exercises in their own playground, then maybe they're comfortable with more permanent addition but to ask people suddenly, to take on a completely new idea is a hard thing.” (P1)

Interviewee J1 slowly introduced her parents to the idea of the adventure playground with success. Parent education was a priority and information sessions were done at the beginning of the school year with question and answer sessions. She invited parents from previous years that had children who benefited and played on the adventure playground to talk with other parents. Overtime parents had a sense of safety for their children and that the children were learning in different and positive ways.

“I always did, at beginning of the year, information session with the question and the answer. I would invite parents from past years to come. The brave first 8 parents, so I would ask them to come to the information session. We would give a brief overview and then take questions and answers.” (J1)

“In the third year, we started doing open play days to the whole school where we didn't use things like saws because you have to do a lot of

safety training with children and tools. We were opening it up to kids who didn't have experience.” (J1)

The landscape architect would keep on track the adventure playground as it is meant to be created and not letting the idea turn into an overdesigned project, to have adventure playground educated groups that are involved with the minimal design process of the playground. Knowing the users (the children) of the playground, proper site selection with elevation change, natural elements that fit into the community and possibly have connections to other parts of the community. With the many different geographical regions there would be many different models to the adventure playground, while still being able to keep the user designed playground experience for the children of that community. Also, to have community involvement in the design process would increase the viability of the adventure playground. If different play and loose parts and the education of adventure play is done slowly over time, trust may be gained for the idea of the adventure playground and then it can become a positive part of the community.

Landscape architects roles in the deliberately undesigned adventure playground would begin with generating and encouraging community involvement, proper site selection and the thoughtful process of movement throughout the space, the actual built parts such as the tool sheds, and space that children could go during colder and rainy weather and the comfort items such as bathrooms and water fountains.

4.6 Can the Adventure Playgrounds Described in this Research Study Become an Ongoing Part in the American Recreation/Play Inventory?

There is the idea of the adventure playground, and then there is the actual play space that would need to evolve from that idea. Can this type of play area become an

everyday space that children can access for play all over America? The initial consensus of all the participants is that the adventure playground DOES have a place in the American play inventory. Getting to the point to where this is possible would involve, community support, proper funding, education of the public, and more programs at colleges or universities for the playworker profession. "Models in the U.S. that are starting to crop up are inspired by the European models, but are not doing the exact same things."(R2). With different geographical regions there is the opportunity to have adventure playgrounds that utilize and fit into that area. Utilizing the trees, or topography of the land.

Because some parents feel that their kids are missing out on what they grew up with as far as playing outside and free play, they could be more open to the idea, especially with proper education of the adventure play and inside community involvement.

"Actually there seems to be, when I talk to parents, a hunger for their kids getting the same kind of experiences of freedom to play that they had as kids and that sense of high adventure that you might have when you are, to say it romantically, that they might have had when they were kids in less structured spaces and in less structured forms of play. There is definitely, I think, a desire amongst parents for that thing too."(D2)

The adventure playground bridges the gap the fact that people want kids to have experiences they had as a child of free play, but are nervous about having free-range kids the way that some parents were brought up. The adventure playground would allow children to have diverse opportunities to play and build, with the playworkers are on site, in an enclosed playground space. Because they are there to help children if they are asked, and to watch over the playground, this can give a piece of mind to the parent and let the child have free play building, digging or whatever the child would like to do with their imagination.

“It’s helping both the opportunities for children to have unstructured creative play which research is showing that it’s good for the brain and all this other stuff. Also the fact that it’s also adults are keeping a check on it as play workers, I think they can feel like there’s a lifeguard on duty” (R2)

Adventure playgrounds may mean different things to different communities with the various geographical regions and finding what the community is comfortable with. Starting smaller and building the adventure playground would be one way to introduce the idea. The community could see how an adventure playground works and not immediately decide it is not for their community. The community may have a quick negative reaction without the proper education. Keeping the core ideas of user designed and built space with loose parts, free play, digging, nature, and having the playworkers would be key to success.

“What is it going to mean to different communities to have adventure playgrounds? I think playworkers are really the key. That’s my big thing. Anywhere can be an adventure playground if you have playworkers because if you have loose parts, time, and playworkers because playworkers give kids permission to play. That’s the biggie. I think that’s the part that’s missing in the US is that we don’t have a lot of trained people who know how to help children play.” (J1p)

Fitting the adventure playground into the geographical region could be done by utilizing trees and natural landforms. Americans may be more accepting of the adventure playground if it is connected with other parts of the community such as nature centers, urban farms, community centers, or zoo’s for example. Having a broader model of an adventure playground may be necessary in some communities in order for people to be more accepting of the adventure playground idea. Connecting to nature can be part of the adventure play, as this quote from R1 explains:

“What we’re working on is something that is much more nature-based, so that it fits much more easily into landscape architecture, into park environments. It essentially is an adventure playground, but it’s using natural components rather than scrap lumber and nails.” (R1)

This broader model, I think, is really much more powerful than a classic adventure playground. Because there are just not many examples of a classic adventure playground anymore. Many people are going to go to the Berkeley Adventure Playground and say, "Ahhh!" Even though it's been there for thirty-five years and it has almost a perfect safety record. There's never been a serious injury on the Berkeley site. Maybe a couple of broken hearts, but that's as bad as it gets, and that's pretty good considering how long it's been there."(R1)

If the true adventure playground of lumber and nails is too much to begin with for a community, connecting with nature would be an alternative approach. Adding in days for loose parts and building structures, could again introduce the building idea to go along with the already in place nature center or park. D2, a landscape architect at a nature center, also felt that larger nature centers would be interested in the adventure playground space. "I think that a lot of people, say, in the nature community are on board with this kind of thing (adventure playground idea)." (D2) Some of the staff at the nature center could be trained in playleader training to work in the adventure playground, so staff would be already in place.

Starting small and building up to a true adventure playground was a strong theme among the participants. This would be a good way to educate the public over time, and incorporate more loose parts as time goes on. Maybe start with boxes and tape for building, or have start a Pop-Up Playground at a park or nature center to introduce the adventure playground idea. Again, educating the public as to the kind of play an adventure playground has and build on that. Just introducing the loose parts and variability would be a good start. The education sector may need to introduce the idea this way because they may not be able to use hammers and nails to begin with.

"In the education front because they don't use hammer and nails, they use boxes and tape and a lot of what is the focus of what we're doing at my school. They're really a great first step for people. I did a Pop-Up Adventure Playground downtown last month and it was so great. I could see so many people buying in to the idea of free play. Maybe that's where you start. Make sure there's loose part, time, and variability, and you're good to go." (J1)

With so many existing playgrounds, the conversation to the community could be to add elements of the adventure playground to the existing playground. This would mean adding items that can be manipulated and adding more adventurous features such as a zipline or loose parts. The addition of temporary items added to the traditional playgrounds that are so many and already existing could would give the opportunity for children to interact with adventure playground elements. This could be a variation of adventure play to introduce the idea. Having programs that could bring loose parts, animals, maybe a pizza day to cook over a fire to the already existing traditional playground. The playground space could be the venue to introduce the adventure playground idea.

“I'm a big advocate of adding adventure to existing spaces and doing things at places we already have, a private funding stream to fund a play worker and again, the nature play area makes your exploration areas. At nature centers for example, they generally already have education staff that is paid to be with the children who are there. Then, they just take on any additional aspect of their work but generally, they're already funded at least in summers and until they can get some additional training around play.” (P2)

Most of the participants acknowledge that the playworkers are an aspect of the adventure playground that are necessary for the success of the playground. If colleges and/or universities offer training programs and classes for this profession, this would fill the needed gap of the playworker

Having effective conversations and education in communities is also an essential element that was a major theme with the participants. With the lack of adventure playgrounds in the United States, having ineffective conversations about adventure play only decreases the chances of the adventure playground becoming a part of the American play inventory. When a community feels they are having an idea pushed upon them from someone from outside the community, the reaction may be a negative one. Having a community member that champions the idea of the adventure playground and is

a trusted member that lives in that community would be able to generate that effective conversation and be there to support the ideas as they grow into an actual adventure playground.

"I think we have to be willing to work gradually and in good faith with the public, not make demands on them." (P2)

Another strong theme that emerged was having the right client that cares and has the ability to staff the playground on a regular basis. Funding, especially ongoing funding to keep the adventure playground staffed with trained playworkers, could be tied to a private foundation to actually fund-raise for an endowment to make sure that you have a committed playworker on site. "I'm saying the play workers are absolutely vital to making these kind of playgrounds work." (R2) "I don't see it as a limitation, it's not insurmountable, and it's just the idea. It's a different kind of thing than just putting in a playground" (R2)

If one community can do an adventure playground successfully, and then the community next to them sees how successful it is, and it is not a dangerous place, the idea and the establishment of adventure playgrounds can transfer to connecting communities. Education of the adventure playground in a way that works for the community, is a major theme for getting adventure playgrounds on the ground. Communities are different, so having a voice from that community to advocate for the adventure playground would be highly beneficial to increase how vested the community becomes, how the community is educated about such play and how slow or fast the community would adapt to this type of play in their community.

"It's the thing that I could see that building in popularity through word of mouth over time once they see how well it (adventure playground) has worked. I think it has a place in American public spaces especially if those who advocate for them has academic research behind them and have it ready to show the positive developmental effect, the different studies showing how it improves certain kinds of skills, etc. I think if you've got that with you, I think there a lot of people that if they might

think twice about it, they would think a third time because I think once they saw an academic support for this, I think a lot of people would jump on board.” (D2)

4.7 Conclusion

The adventure playground of today can succeed in communities through ongoing education of the public, and at times recognizing the pace to educate the public for acceptance of the type of play that adventure playgrounds encourage. Having a trusted member of the community be involved in the process and promotion of the adventure playground idea. Keeping the users, the children, always at the forefront of the process and involvement from other groups such as child development professionals. With proper site selection that combine elevation, trees and other natural elements and screening the “messy look” that adults may perceive if necessary.

Securing the initial funding for the adventure playground and the ongoing funding for the vital role of the playworkers could be done through means such as connection with nature centers, the arts and private schools or other entities that have funding and staff on hand that can be trained.

The adventure playground of today can be successful by first realizing child directed play is an essential part of the development of children. The idea of the adventure playground of free play for children without adult intervention can be successful with play being a part of the growth of a child that helps to build confidence, cognitive thinking abilities, problem solving and social skills. The adventure playground can succeed by educating the public, proper site selection, while keeping the geographical region in mind, possibly connecting to other entities such as parks nature centers urban farms, community centers and schools. Success of the adventure

playground begins with having a liaison from within the community to promote the idea, and starting at a rate that the community would be comfortable with and building from there. With the steps carefully thought out, funding secured, persistence and passion, the adventure playground can be a successful play space for children in America today.

Chapter 5

Research Summary

5.1 Introduction

The level of knowledge of members of the community would greatly affect the adventure playground becoming a part of their geographic area. Some of the interviewee's from this research that had limited to no knowledge of the adventure playground had negative initial reactions at the sight of an adventure playground. Through the interview, the mindset changed once the idea was understood how this type of undesigned space is utilized by the users, the children, for child directed play with child built structures. These types of reactions would be typical of community members with similar knowledge levels. Information of what an adventure playground is and how it functions could be conducted at community meetings and introduced in a fun and educational way.

Adventure playgrounds that are in existence in America today are minimal. This is partly because perceptions of the adventure playground, with the visual appearance not being appealing to adults, there is not always an understanding of how the adventure playground functions for children and it is wrongly deemed unsafe. The benefits from the minimal design of the adventure playground of cognition, problem solving skills, social interaction and loose part building skills are not apparent to unknowledgeable adults.

The main limitations include funding, staffing and training the essential playworkers. To overcome these issues, the adventure playground could start off smaller and add more space and loose parts over time, educate the public through various methods, and include training programs through universities or colleges for playleader work. The landscape architect could present to the community the idea of adventure play

with loose parts and the safety of this type of play by utilizing data concerning the safety of adventure playgrounds compared to traditional playgrounds. The landscape architect could be the connectors of people and the adventure playground ideas.

Because the visual appearance creates a negative impact to those that do not understand the true meaning of the adventure playground, the landscape architect could take this opportunity to first introduce the idea of adventure play with boxes, tape, rope, water and other items that do not involve hammers and nails, as a means of beginning education to the community, and showing the benefits of loose parts. The idea then could be more readily accepted when the adults are able to watch the children play with loose parts, will understand better the adventure playground idea and more likely be supportive of this type of play. It would also be the landscape architects job to locate a site for play, being sure to utilize existing trees and elevation changes. Screening could be created with a berm, fence or shrubs and trees. The addition of comfort items would be necessary and also accessibility for all children. The study of movement of the child through the space would be a beneficial element to the thought process while locating a site. Keeping all these things in mind while creating the adventure playground would impact the success of the play space.

5.2 Implications for Landscape Architects

Restraint to design could translate to other areas of design in the adult world. The landscape architect should come to realize that not every space needs to be fully designed, and that a space would benefit from minimal design and loose parts, natural elements and the ability to manipulate a space. This could become an important feature

to an area and add another element all together that people could utilize and feel they have ownership of a space that is similar to that of the adventure playground.

This may be an outdoor environment for adults with spaces that can be changed to be what they want it to be that day. This type of restraint to design would promote socialization and interaction with others in a way that might not happen in a more structured designed space. Children and adults alike would have the freedom to change and interact with their environment. As a landscape architect, this would be another element to keep in mind when working with and creating a space for people; that not all spaces should be totally designed. This in itself could be considered a design element which is that of minimal design.

Landscape architects will need to be organized in order for the adventure playground to succeed for the long term. Their role would be to bring together the community and the idea of the adventure playground and to work with the right combination of professionals, secure funding and to establish an adventure playground where it will be utilized by many children and be easily accessible. Landscape architects would fill the role of educating the public because they would be the ones in charge of gathering the professional team together to make the adventure playground come to life. Understanding that restraint to design has value to the user because with the addition of loose parts that can be manipulated. Landscape architects can introduce the idea of the adventure playground to other professionals and then in turn, the idea can travel to other communities and become actual playgrounds that children can utilize for adventure play. With the landscape architects realization that not all spaces need design, this would give the opportunity for people to be able to have other experiences that they may not otherwise have in a totally designed immovable space.

5.3 Future Research

More research into safety data that could be presented to community members would be beneficial towards the realization of an actual adventure playground for those with perceptions that it is not a safe place for children to play. Doing more injury related research studies into the traditional vs adventure playground would add validity to the fact that adventure playgrounds really are safe places for children to be, and that some risk in play teaches life lessons.

Other future education opportunities for the landscape architect to the community would include Introducing the idea of the adventure playground through “pop-up” adventure play days. This would entail securing a space to be able to gather children of all ages, obtaining loose parts such as boxes, tape, rope, blankets and other items that would be easy to work with, and having an adventure play day advertised in a manner to reach many people. With the pop up adventure play, the children could come and experience what loose parts and adventure play is and the parents could see firsthand how this type of play encourages their child to create and how fun and educational the loose parts building type of play is. While the parents are there, the landscape architect and other volunteers could have conversations and hand out educational fliers that discuss what an adventure playground is and how this would benefit the children of their community.

Adventure play is a natural way for children to play, but in today’s environment of many designed spaces, the landscape architect must realize that not all spaces need to be designed and that because of this many benefits to the users would evolve. The fact that a space can be manipulated, or utilized for what the user wants, is to be such as

playing music or building and painting. This type of interaction would create a sense of ownership and evoke positive outcomes for the users of the space.

5.4 Quotes from Interviewees

While growing up, everything was an adventure playground back

“When I was a kid, I remember jack rabbits and roadrunners and all of these. It was on the southern edge of the Great Plains. I just remember these big open fields and creeks with trees next to them. I would just go play sometimes by myself, sometimes with friends trying to catch fish in the creek and just going through tall grass. People who were building homes would leave huge maze-like stacks of bricks and we would go in between the stack of bricks and we would make things out of them and there’s all this construction equipment just sitting there because that was the beginning of the building boom in Allen. We had an adventure playground.” (D2)

“When I grew up as a kid, we’d spend hours and hours and hours down at the little river creek, and we’d dig little canals with the sand and mud and we’d build them up and pour the water on the top and watch it go down. That was a half a day deal.” (D1)

Appendix A

Introduction E-Mail Letter to Interview Prospects

Introduction E-Mail

Dear Mr./Mrs. _____:

I am seeking participants for a research study that examines the value of minimally designed adventure playgrounds for children.

I am completing my Masters of Landscape Architecture degree at the University of Texas at Arlington. In order to complete my degree I am writing my thesis, titled "Restrains on Design: Adventure Playgrounds and Landscape Architecture".

I would like to request your participation in this research via an interview over the phone or in person. The interview will take approximately 60 minutes of your time. Please let me know if you would be available for one of the following dates and times for phone interview or in person interview:

October xx, 2014

October xx, 2014

Do not hesitate to call or email me if you have any questions. Thank you for your time and consideration. It is only through the generous support of people like you that our research can be successful.

Sincerely,

Karen D Teague

Graduate Student

School of Architecture

Program in Landscape Architecture

The University of Texas at Arlington

Mobil: (214) 597-4331

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Email: kteague5@sbcglobal.net

Appendix B
Exemption Determination IRB Form



**Institutional Review Board
Notification of Exemption**

October 29, 2014

Karen Teague
Dr. Pat Taylor
School of Architecture

Protocol Number: 2015-0162

Protocol Title: *Restraints on Design: Adventure Playgrounds and Landscape Architecture*

EXEMPTION DETERMINATION

The UT Arlington Institutional Review Board (IRB) Chair, or designee, has reviewed the above referenced study and found that it qualified for exemption under the federal guidelines for the protection of human subjects as referenced at Title 45CFR Part 46.101(b)(2).

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, either directly or through identifiers linked to the subject; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

You are therefore authorized to begin the research as of **October 24, 2014**.

Pursuant to Title 45 CFR 46.103(b)(4)(iii), investigators are required to, "promptly report to the IRB any proposed changes in the research activity, and to ensure that such changes in approved research, during the period for which IRB approval has already been given, are **not initiated without prior IRB review and approval** except when necessary to eliminate apparent immediate hazards to the subject." Please be advised that as the principal investigator, you are required to report local adverse (unanticipated) events to the Office of Research Administration; Regulatory Services within 24 hours of the occurrence or upon acknowledgement of the occurrence. All investigators and key personnel identified in the protocol must have documented Human Subject Protection (HSP) Training on file with this office. Completion certificates are valid for 2 years from completion date.

The UT Arlington Office of Research Administration; Regulatory Services appreciates your continuing commitment to the protection of human subjects in research. Should you have questions, or need to report completion of study procedures, please contact Robin Dickey at 817-272-9329 or robind@uta.edu. You may also contact Regulatory Services at 817-272-3723 or regulatoryservices@uta.edu.

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Biographical Information

Karen has a bachelor's degree in horticulture from Texas A&M University. Her interest grew to landscape design when she was hired at a landscape firm and produced smaller residential landscape plans. She continued perusing residential landscape design while she raised her children. Her interests of continuing education to add to her former education came into play after taking some landscape design courses at a community college. Following her passion and love of the field of landscape design, she enrolled for classes at the University of Texas at Arlington to peruse her masters in landscape architecture. While attending the University of Texas at Arlington, she was recognized with her team mate for the Ed Bacon Student Design Competition as an honorable mention. At the present time she is working at a landscape architecture planning firm in Dallas, Texas.