

Children's Gendered and Non-Gendered Play in Natural Spaces

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Abstract

This paper concerns gender aspects of children's play in nature environments. In an ethnographic study, children between 1½ and 6 years in a Swedish outdoor preschool were videotaped during time for free play. Four different play themes were particularly popular among the children: war and superhero play, family play, animal play and physical play. Each one of these themes has been analyzed from two perspectives: how nature resources are used and which gender positions they provide. Within the themes, nature's affordances are used in various ways. Similarly, a range of gender positions is evident across the themes. The superhero theme includes exclusively gender-stereotyped masculine play positions, while the family theme includes both traditional gender positions and possibilities for transgressions. Further, animal play as well as physical play provides non-gendered play positions. Natural environments are not gender-coded in themselves and they invite certain play activities where girls and boys play together. Thus, nature spaces seem to offer good opportunities to promote gender equity.

Keywords: gender, play, preschool, nature, outdoor play

Introduction

According to the Swedish preschool curriculum, it is an important task of the preschool to promote gender equity (Swedish National Agency for Education 2006). A Swedish Government Official Report (2006) entitled *Gender Equity in Preschool* indicates, however, that preschools have difficulties achieving equity goals. Instead of working to counter traditional gender patterns, preschools sometimes reinforce them. According to the report, adults working in preschools treat girls and boys in different ways and express gender-specific expectations of children. Furthermore, the children themselves actively reproduce gender stereotypes. One factor the report considers important from a gender perspective is the physical environment of the preschool. The equipment and the materials regulate what is possible—and not possible—to do in different spaces, as they are imbued with messages. These messages silently convey gender-specific codes (Swedish National Agency for Education 2006).

In the present paper, the focus is on preschool children's play activities in the special physical context of nature environments. The analysis is based on data from an ethnographic study in an outdoor preschool, where children spend a large part of their days in a forest. The study uses a gender perspective to analyze the play activities that take place in nature environments.

Literature Review

Gendered Play in Preschool

A large number of studies have shown that much of children's preschool play is gendered (Browne 2004; Davies 2003; Hellman 2005; Kampmann 2003; Löfdahl 2002; MacNaughton 1999; 2006; Nordberg 2005; Thorell 1998; Thorne 1993). Girls and boys in preschools choose different play themes. Boys choose themes concerning the struggle between good and evil, while girls' play themes are often closely tied to everyday experiences (Browne 2004; Davies 2003; Kampmann 2003; Löfdahl 2002). Furthermore, they prefer different toys (Browne 2004; Nelson and Nilsson 2002; MacNaughton 2006) and play in different rooms (Davies 2003; Paley 1984). They also play in different places when they are outdoors in the preschool yard (Davidsson 2006; Davies 2003; Thorne 1993).

From a post-structural perspective, children as well as adults actively take part in the production of gender identities in their everyday lives (Blaise 2005; Browne 2004; Davies 2003; MacNaughton 2006). Language and other forms of expression are imbued with gender discourses. These discourses are connected to different subject positions to which people relate when they take part in discursive practices. At the same time, subjectivities are produced. Gender is seen as constructed in local everyday practices, which implies that gender constructions differ from one setting to another. Settings can be more or less gender-stereotyped and allow few or many possibilities for girls and boys to position themselves (Davies 2003).

The construction of gender is not only a question of language—it is also a physical process. In the construction of gender, material resources like clothes and artifacts are important. They carry discursive meanings that are used when we position

ourselves as women/girls or men/boys (Davies 2003). In a similar way, Butler (1990) argues that gender is performed and that bodies are important in this process. She uses the concept of the heterosexual matrix (Butler 1990) to explain how gender is shaped in relation to normative heterosexuality. The concept of the heterosexual matrix has been used to analyze gender aspects in small children's everyday lives (e.g., Blaise 2005; Boldt 1996). Blaise (2005) describes episodes that reproduce heteronormativity as well as others that contradict the heterosexual matrix, e.g. when children assume roles of the opposite gender. She uses the term "gender bending" to describe those events (see also Boldt 1996).

Connell (2005) has introduced the concept of hegemonic masculinity, defined as the form of masculinity that at a given moment is put forward and constructed as superior to femininity and other forms of masculinity. Other forms of masculinity and femininity are seen as constructed in relation to hegemonic masculinity. The concept has been used to analyze children's play in early childhood research. Blaise considers that "hegemonic masculinity can be thought of as the most desirable and powerful way to be a boy" (2005, 21), and her analyses show that girls, boys and adults (including herself) act in ways that reinforce hegemonic masculinity.

Early childhood teachers who offer children a non-sexist curriculum often find that their strategies are ineffective. The children stick to stereotyped play even though adults try to create equity (Davies 2003; MacNaughton 2006). Preschool researchers have reported that it is difficult and sometimes painful for children to display behaviors associated with the opposite sex (Davies 2003; MacNaughton 1999; Walkerdine 1990). This can be seen as a result of the hegemonic matrix (Butler 1990) that makes such behavior unintelligible. Davies (2003) states that children born in our society become aware quite early in life that humanity is divided into two kinds of people: men and women. To be comprehended as acceptable members of society, children have to choose the "right" gender and behave in a way considered suitable for that gender. Boys particularly avoid what is considered feminine—for example, girls' toys, actions and places in preschool—while girls have more freedom to choose masculine-coded positions and activities (Browne 2004; Jordan 1995; Hellman 2005; Nordberg 2005; Änggård 2005).

Not all play activities in preschools are gendered. For example, many toys in Swedish preschools are gender-neutral (Nelson and Svensson 2005). In a study of children's play activities, Löfdahl (2002) reports that both girls and boys participated in 34 percent of her play observations. One problem highlighted by Thorne (1993) is that researchers in educational settings tend to notice gender-stereotyped games¹ and be blind to activities that deviate from typical gender patterns, and thus fail to notice the variation within the groups "girls" and "boys." Gender is presented as two categories that are uniform and opposite, instead of situated, temporary and flexible discursive constellations. Thus, research itself serves to confirm gender-stereotyped expectations.

¹ In this text, the words "game" and "play" are used as synonyms.

Interviews with children show that they often have clear opinions about what is appropriate for girls and boys, respectively, to play (Davies 2003; Browne 2004; MacNaughton 2006). Their verbal accounts of play activities in interviews are in fact often more gender stereotyped than their performed play activities (Browne 2004; Davies 2003; Hellman 2005; Nordberg 2005). This circumstance suggests that interviews are insufficient if the aim is to acquire knowledge about gender patterns in children's play. Evaldsson (2000) underlines the importance of conducting ethnographic studies in which girls' and boys' play activities are observed *in situ*. Such studies enable us to acquire more complex and varied knowledge and to challenge notions of static gender dichotomies.

Play in Nature Environments

Many studies of children's play in nature environments address the values and benefits of such play (Lester and Maudsley 2006). One of the areas that has been studied is physical motor development and associated health benefits as a result of play in natural spaces (Fjørtoft 2000; 2004). Also, mental health aspects of play in green spaces have been in focus (Kellert 2002; Taylor, Kuo and Sullivan 2001). Furthermore, the possibilities for active exploration and experimentation in natural spaces, and thus the promotion of cognitive development, have been investigated (Tranter and Mallone 2004). Imagination and creativity are other valuable abilities that researchers have studied in relation to play in nature environments (Grahn et al. 1997; Mårtensson 2004). Play in natural spaces is thought to engage children's senses and emotions, which makes it motivating (Mårtensson 2004; Sebba 1991) and which provides powerful memories (Chawla 2002).

In some studies the character of the physical environment is highlighted (Grahn et al. 1997; Fjørtoft 2000; 2004; Mårtensson 2004). Features in the landscape that stand out as stimulating for children's play are green structures (like trees and bushes), loose objects and a diversity of topography (Fjørtoft 2000; 2004). The concept of "affordances" (Gibson 1979; Heft 1988) is used to discuss the qualities of natural spaces (Fjørtoft 2000; 2004; Kernan 2010; Kyttä 2002; Ånggård 2009). Affordances can be seen as the range of functions provided by environmental objects; individuals apprehend those functions in relation to themselves (Gibson 1979; Gibson and Pick 2000; Reed 1996). Heft (1988) has constructed a taxonomy of affordances in outdoor environments. For example, flat surfaces afford running, climbable features like trees afford mastery and looking out from, shelters afford privacy and moldable materials afford construction.

Children's play in natural spaces has been categorized as functional play (physical play), construction play (for example building huts) and symbol or fantasy play² (Fjørtoft 2000; 2004; Årleman-Hagser 2006). Fjørtoft (2000; 2004) and Mårtensson (2004) conclude that physical play is predominant in their observations, which can be explained as a consequence of the affordances of the natural landscape (Fjørtoft 2000; 2004). Mårtensson (2004) considers that children who play in natural spaces are influenced by the physical aspects of the environment to a large extent since natural environments are flexible and changing. The possibility

² In the present paper, symbolic, fantasy and pretend play are used interchangeably.

to manipulate natural objects as well as changes related to weather and seasons catch children's attention. Mårtensson (2004) describes children's play in natural spaces as a relation between three factors: the physical environment, the social interaction between the children, and the play theme. Even if children are involved in a symbol play their attention often turns towards the physical environment.

Several researchers have reported that symbol or fantasy play is common in natural spaces (Grahn et al. 1997; Fjørtoft 2000; 2004; Mårtensson 2004; Årleman-Hagser 2006; Waller 2010) but there is a lack of studies analyzing this kind of play in detail. In an ethnographic study in an outdoor preschool, children's play activities in a forest were observed and videotaped (Änggård 2009). The analysis showed that the physical environment as well as cultural experiences was of importance to the play. The nature environment invited children to play special kinds of games like animal play, and inspired play themes with elements of excitement and adventure. Cultural influences on the play were also obvious; the nature environment was used to symbolize artifacts and places that the children knew from experiences outside the forest.

There is very little research on how gender is constructed when children play in nature environments. Fjørtoft (2000) and Mårtensson (2004) mention that they have observed gender differences, but neither of them has studied gender aspects in depth. In a multi-method study, Waller (2010) observed 3- and 4-year-old children who visited a country park every week. Girls and boys engaged mainly in similar activities, e.g. climbing, running on paths, splashing in mud and water and playing fantasy play. In one group out of six, however, the children played more often in gender-based subgroups and to some extent chose different activities. In an interview study, 106 children between 3 and 7 years of age were asked about their play activities in the forest (Årleman-Hagsér 2006). On a superficial level, no gender differences were visible, but when play themes and positions in the play activities were studied in more detail, gender patterns emerged.

Children's Play Activities Include Cultural *and* Natural Resources

The paragraphs above presented two different theoretical perspectives on children's play: the post-structural perspective highlights gender as socially constructed (Davies 2003), while ecological theory prioritizes children's play in natural spaces (Gibson 1979; Gibson and Pick 2000; Reed 1996). On a superficial level, the theories seem to be incompatible. However, I argue that they are complementary and that both are needed. The theories have some important similarities: they are both non-determinist and they both perceive humans as agents. Post-structural theory uses the concept of *positioning* to analyze how agency is carried out in everyday life. In ecological theory, the concept of *affordances* implies that individuals have the possibility to act—not that their actions are determined (Reed 1996). Within gender studies there has been a "turn to the material" (Alaimo and Hekman 2008). This shift does not mean that insights about gender construction are abandoned; it means only that pre-discursive factors are noticed as well (Lykke 2009). Scholars with scientific backgrounds like Haraway (1991) and Barad (2007) argue that the importance of the material world (including the body) has been underestimated and under-researched. Barad (2007) claims that the material world

possesses agency. She uses the concept of "intra-activity" (2007, 33) to discuss the interaction between organisms, the material world and discourses. From this perspective, nature, environment and matter are unpredictable agents. In this paper I analyze the intra-action between playing children, the nature environment and discursive factors.

The two theoretical perspectives differ in contribution to knowledge and complement each other as tools to understand gender aspects of children's play in natural environments. Post-structural theory provides tools for understanding how children's play activities are imbued with cultural ideas, although the theory lacks tools for understanding how children interact with the physical world. Ecological theory provides tools that are useful for the understanding of children's use of the material world, but its contribution to knowledge about how cultural factors influence children's play is weak. As humans we are physical creatures who relate to our physical context. In particular, small children experience the world with their perceptions and locomotions (Gibson and Pick 2000; Piaget 1968). At the same time, children are social and cultural beings from their birth. Corsaro (1997) describes how children appropriate cultural resources, first in their families and later on in peer groups.

As mentioned above, children's outdoor play has been categorized as functional play, constructive play and symbolic play. Piaget (1962) developed a similar classification in which the first two types of games are practice games and symbolic games. A practice game is essentially sensory-motor. It contains actions carried out for pleasure, e.g. jumping over a stream just for fun, not of necessity. Symbolic play implies representations of an absent object and make-believe. Symbol play often includes sensory-motor elements.

In practice play, the importance of the physical world is obvious; this play form implies that children experience and manipulate the world in various ways. The material world performs agency when it catches children's attention, makes them surprised, etc. In many of those play activities children's relations to nature are more or less pre-discursive.

In symbolic play (or pretend play), physical objects are used to represent other things. The surrounding physical environment is assimilated to fit into the child's symbolic world (Piaget 1962). According to Garvey (1990, 79), the principal resources of pretend play are "features of the social world, and socially learned and transmitted expectations of the way objects, actions and people are related." Play themes are connected to guidelines or implicit rules for the storyline and for the actions of the characters (Garvey 1990). Expressed in post-structuralist terms, play themes can be interpreted as belonging to different discursive play practices with agreements and rules for how the play should be carried out, which storylines they include and which play positions can occur. In relation to symbol play, the concept of affordances shifts slightly: because of their varying characters, natural spaces seem to afford special functions that can be used in different play themes. Further, in symbol play the environment serves as an agent since it invites certain discursive play practices.

Aims and Research Questions

The aim of this paper is to analyze play activities that take place in nature environments from a gender perspective. The research questions that have directed the paper are the following: Which play practices are typical for the studied preschool when the children play in natural spaces on their own? Which affordances in the nature environment are used in these play practices? Which gender positions are available in different forms of play?

Methods

Data

This paper is part of a larger study with several research questions about how staff and children in an outdoor preschool make use of nature and how nature and its benefits for children are conceived by parents and staff.³ Using an ethnographic approach, for the present study I carried out participant observations one day a week, on average, from August 2006 to June 2007. The data consist of field notes, video observations (38 hours), informal conversations with children, semi-structured interviews with staff members (10 hours) and parents (12 hours), photographs and local documents. In the present paper, mainly field notes, video observations from play situations in nature environments (10 hours) and informal conversations with children are used as the study material, as the aim of the article is to analyze children's play activities. Interviews with adults and other data sources are used only to obtain contextual information and are not accounted for in detail.

The Preschool

The studied preschool is one of around 185 preschools that are conducted in cooperation with Friluftsförbundet, an important national organization for outdoor life in Sweden. Preschools such as this have existed since the mid-1980s.⁴ These preschools carry out outdoor education, and a large part of the day is spent outdoors. The aim is to give children knowledge about nature and, at the same time, to make them aware of environmental issues and to help them achieve a feeling for nature. This knowledge is mediated through play and pedagogy characterized by exploration (Rantatalo 2000).

The preschool, here called the Rainbow, was deliberately chosen from a list of preschools with a similar pedagogy and it was the first preschool that was contacted. All children in the preschool, a total of 36 children, 18 girls and 18 boys, participated in the investigation.⁵ The children were between 1½ and 6 years old. The children were divided into two groups, one for children between 3 and 6 years and the other for children between 1 and 3 years. The preschool was located in an

³ The study, in turn, was part of a project called "Nature as a Symbol of Ideal Childhood" focused on preschool, since Swedish preschool has a strong tradition of using natural spaces for educational purposes. The project leader was Gunilla Halldén at the Department of Child Studies, Linköping University. The project was funded by the Swedish Research Council.

⁴ These preschools are called 'I Ur och Skur' which means approximately "All-weather."

⁵ During the year a few children left the preschool and some new children took their places.

ordinary residential building. The premises were adapted to preschool activities, and the school was as big and well equipped as a "regular" preschool. The preschool was located about 50 meters from the edge of the forest.

The preschool was situated in the outskirts of a larger Swedish city in an area with mixed housing types. Most of the children came from middle-class families. Many of the parents were committed to environmental issues. In interviews, a few parents with daughters mentioned that the outdoor profile of the school could promote gender equity, for example by providing girls good opportunities to develop strength and motor skills.

The staff in the studied preschool had previously been involved in a gender project along with other preschools in the area. After that project, the staff felt that they had become more reflective about how they treated girls and boys. In the present study, however, it is not the staff's work with gender issues that is in focus, but gender aspects of the children's play activities.

Ethical Considerations and the Researcher's Role

All the parents received written and oral information about the project and were asked to sign consent forms. All children were informed about the project.⁶ One ethical dilemma associated with using video observations is that children's integrity may be threatened. At the beginning of my fieldwork, I explained to the children that they could tell me any time they did not want to be observed. On a few occasions one boy told me that he did not want to be videotaped. I also tried to be sensitive to the children's body language to decide whether they felt embarrassed about being observed.

I participated in the preschool as a researcher. I explained to the children that I needed their support to gain knowledge about their play activities (cf. Mayall 2000). I tried to avoid being seen as a teacher by children, because it could have reduced my chances to observe play activities that the children felt were less favored by the staff.

By posing questions and paying attention to the children's play activities I participated in the production of data. My presence probably had an impact in that the children sometimes tried to catch my attention. On other occasions, they seemed to forget they were being observed through the videocamera, and I do not think their ways of playing were influenced.

Analysis

The children's play activities were documented in different ways. The first weeks in the preschool I observed and wrote field notes. After two weeks I introduced the video camera. The play observations were made in various ways. Sometimes I moved around and registered all play activities that were going on, and on other occasions I followed one play episode from the moment I recognized it until it dissolved (cf. Corsaro 1985). The field notes were typed out immediately after the

⁶ The Swedish Research Council's ethical guidelines were followed: <http://www.codex.vr.se>

field work and video observations were transcribed roughly. These transcriptions were used in different ways. In ethnographic research, the analysis process starts from the first day of the investigation and has impact on the choices made for data gathering (Hammersley and Atkinson 1995). During the ongoing field work I used the transcriptions to check that different kinds of play activities in a variety of spaces were observed. I made decisions on how to get a representative sample of play observations. Furthermore, I based my overall analysis of the children's play activities on those transcriptions.

All episodes that were about the children's free play in nature environments were marked and coded in relation to the following questions: (1) Which play forms are observed? I used Piaget's (1962) categories of practice game and symbol game. (2) Which play themes and play roles (Garvey 1990) are observed? (3) Which meaning does the play activity seem to have to the children themselves (Corsaro 1997)? (4) How is the nature environment, including nature materials, used as a resource in the play activities? The last questions were guided by the concept of affordances (Gibson 1979; Heft 1988). In a second reading, I analyzed the episodes from a gender perspective. (5) Which activities included both boys and girls and which were single-sex activities? (6) Which gender positions (Davies 2003) were available in different forms of play?

In the interpretation of the data, all the observations were used but some episodes have been transcribed and analyzed in more detail.⁷ The examples presented below represent typical play activities during the observation period. My interpretations were cross-checked in workshops and seminars where I shared the material with members of the project group and other research colleagues.

Results

The Base Places

Three or four days a week the groups headed for the forest. Each of the two groups had its own "base place" near the preschool. The base places were carefully chosen to provide environments that were considered appropriately challenging in relation to the children's ages. The 3- to 6-year-olds' place covered approximately 2000 square meters. It contained a hill, trees, a ditch that sometimes was filled with water, and areas where children could play out of sight of adults and other children. The 1- to 3-year-olds' base place was about half as large as the older children's. It consisted of an open plateau with minor differences in ground level, surrounded by trees and bushes and a marsh. There were also stones and two big pits that sometimes were filled with water.

Four Play Themes

The analysis process generated four play themes: *war and superhero play*, *family play*, *animal play* and *physical play*. The play themes were empirically constructed

⁷ In the transcripts, brackets are used to mark non-verbal actions. Italics mark emphatic words. Three dots indicate that a part of a turn in a transcription has been left out. All names are fictional.

in relation to the meaning they seemed to have for the playing children, the actions that were carried out, the storylines that they included and the way nature resources were used. They are partly overlapping, e.g., all play themes include physical activity, animal play can include family members, etc. All the themes included both practice play and symbol play but they differ in the extent to which a storyline is central. In the last play theme, physical play, a certain kind of activity (e.g., to jump or to climb trees) is of importance rather than a storyline.

Each of the themes is described and analyzed below. I use the concept of affordances (Gibson 1979; Reed 1996) to display how natural resources are used in the special play theme. Each play theme is analyzed from the perspective of the possibilities it provides for girls and boys, respectively, to participate and which gender positions (Davies 2003) they can take within the theme.

War and Superhero Play

The hero theme is common in boys' games (Carlsson-Paige and Levin 1987; Davies 2003; Jordan 1995; Levin 2003; Marsh 2000; Paley 1984). In superhero play children use media figures and the storylines connected to them (Dyson 1997; Jordan 1995; Marsh 2000). Over the years a range of characters like Superman, Batman and X-Men have been used in children's play. Marsh (2000) points out that the need for superheroes is not a new thing for the human race. Superheroes may respond to a need in the human psyche for control over nature and evil (Marsh 2000). It also seems that children need to explore the world in terms of opposed extremes like good/evil or male/female. Superhero stories provide good opportunities for such exploration (Marsh 2000). The superhero theme particularly attracts boys. Jordan (1995) discusses the warrior discourse, where masculinity is described in terms of "the warrior, the knight errant, the superhero" (Jordan 1995, 76). This discourse, according to Jordan, has power over boys and is manifested in the stories they tell, pictures they paint and play they engage in. In the superhero games, there is no place for girls or female positions. Boys' choice to use exclusively male positions and to exclude girls can be interpreted as a way to create a distance to girls and everything that is female, thereby constructing masculinity by marking distance (Connell 2005; Hirdmann 2003; Jordan 1995). In superhero play only one version of masculinity is allowed, the strong, aggressive and powerful personhood (Marsh 2000). This masculinity corresponds to the concept of hegemonic masculinity (Connell 2005).

In my observations, five of the boys in the 3- to 6-year-old group often chose to play superhero themes. Girls did not take part in these play activities. One of the boys who participated in the superhero play did not want me to videotape their games so the observations were made from a distance. These boys moved a great deal over the area pretending they were shooting and chasing. Their play was lively and noisy. During the observation period, these boys were very fond of superhero figures from LEGO called Bionicles.⁸ These figures and other media figures inspired their play. In one play episode one of the boys pretended to throw bombs on a bridge, a plank where a girl and a boy balanced, unaware of the bombs. In another

⁸ <http://bionicle.lego.com/en-us/default.aspx>

episode they pretended to be dinosaurs that threw fire balls and opened the ground from which lava flowed.

In these activities the affordances of the nature spaces were important. The wild character of the outdoor environment was suitable for war- and superhero play. The 3- to 6-year olds' base place afforded running over vast surfaces in varied terrain, and a hill that served as a vantage point over "enemies." Trees were used in many ways. In one episode a tree was used as a boat with an underwater gun, claws and knives that were used to fight sharks. The boat then was transformed to a house and after that to a spaceship that took off into space. The ground invited the boys to fantasize about underground caves and lava flows. Thickets of bushes afforded places to hide. Loose parts were also important. Logs were used to make bridges over dangerous gaps and sticks and roots were used as weapons like bows, light sabers, machine guns and pistols.

Figure 1. Boys playing superheroes



Figure 2. Pistol



The example of superhero play below is from the 1-to 3-year-old group where the three oldest boys played superhero themes during the spring. In the following episode they were playing in a dried-up marsh. A girl, Jenny, (3:1)⁹ who wanted to join in was refused entry.

War and Superhero Play Example: Pirates in the Marsh

Mikael (3:8), Fredrik (3:1) and Niclas (3:2) decide to play in the marsh. There is a loading pallet, planks and logs. Niclas suggests that the marsh is pretend water.

Fredrik: (play voice) Load the guns!

Researcher: What are you playing?

Unidentified child: Pirates.

Niclas: This is a pirate boat.

(Jenny approaches the marsh)

Jenny: Can I join in?

Fredrik: No, because this is our Lucky's play.

Mikael: This is our Lucky play.

Fredrik: Yes it is, we are pirates and you are no pirate.

(Jenny leaves.)

This episode included elements that can be associated with a fighting theme, pirates and guns. Pirates can also be interpreted as heroes, and the same is true of "Lucky," which may refer to Lucky Luke, a lonely cowboy cartoon character who travels around in the Wild West. One trait of this character is that he is fast with his guns, something that helps him get risky commissions (Morris 2004). When Jenny asked if she could join in, she was refused. My interpretation is that Fredrik did not think girls could take part in this kind of play because it was a superhero play. His arguments to deny Jenny entry were related to the superhero theme; first he said that she could not join in "because it is a Lucky's play." He also said that "we are pirates and you are no pirate."

The superhero play carried out by the boys in the 3- to 6-year-olds group as well as in the example above followed the script of superhero play described by other researchers (Jordan 1995; Paley 1984). Superheroes were included. The stories and characters were fetched from media and the storylines included dangers, fights and weapons. No girl participated in the games and when a girl (Jenny) wanted to join in she was refused, something that can be interpreted as the boys' effort to create a distance from girls and femininity, constructing masculinity by marking distance (Connell 2005; Hirdmann 2003; Jordan 1995). As theorized, the superhero theme did only provide one kind of masculinity, the strong and powerful character corresponding to hegemonic masculinity (Connell 2005).

⁹ The numbers refer to the children's age, in this case three years end one month.

Family Play

Family play is a well-known theme among preschool children. This theme includes reproductive enactments inspired by the home sphere like cooking or taking care of babies. The roles typically come in pairs like mommy and daddy or mommy and baby (Garvey 1990). In homes, women typically have power in certain areas that concern housekeeping and children. By acting as mothers in games, girls can exercise power over other children (Walkerdine 1990). On the whole it seems that girls have the power to rule in these kinds of play themes (Löfdahl 2002). Boys who participate in family role play assume subordinate roles (Davies 2005). In preschools family play often is located in the "doll corner," equipped with dolls and other toys connected to housework. The doll corner is generally a place where girls reside (Davies 2003; Paley 1984). Many boys avoid objects and places connected to femininity including the doll corner (Blaise 2005; Davies 2003).

In both age groups some of the girls chose to play family themes frequently. In those play episodes they pretended to cook, sleep, go to the supermarket, go and see the neighbors and so on. In family play, nature resources were used to symbolize houses. The space between some bushes, stones or trees were used as natural huts. Branches and stones were used to mark walls, furniture, etc. The small children's "home" was located at a stump that was used to symbolize a stove. Those places were frequently used as homes but the play was also significantly nomadic. The children moved around the area while playing, picking flowers, collecting materials or pretending to go shopping. They used nature materials in various ways. Trees with raindrops were shaken and used to take a shower. Branches were used as clothes hangers where the children hung up their caps before going to bed. Sticks were gathered in piles and used as pretend fires. Sticks were also used as all kinds of household utensils. Moss was used as beds, to sleep on. Leaves, cones, berries and needles were pretend food. A bent pine was used as a car, motorcycle or bus when the children pretended to go to Ikea or McDonald's.

Figure 3. Girls playing house



Figure 4. The motorcycle-pine

Sometimes only girls played together and sometimes one or two boys participated. Among the family theme episodes, several practices were traditional and expected in the sense that there were family members, mostly a mother and some children, and that the play actions concerned home and family life, activities such as cooking, eating, sleeping and shopping. However, the observed family play episodes also contain non-traditional elements, as illustrated in the following episode in the 3- to 6-year-old group.

Family Play Example: Grilling Fish under the Tree

Two girls, Ester (4:2) and Filippa (4:2), and one boy, Jonas (4:2), are sitting under a tree. They have been playing by the ditch, fishing up leaves from it for a long while. They pretend that they have a fire where they are grilling fishes, which are represented by the leaves.

Ester: Now we stop fishing and sit in front of the fire.

Jonas: (with play voice) Ok, now we are going to eat all of it.

Ester: Now the food is ready ... then I feed you.

Jonas: No I don't need that.

Filippa: Wait mother, this can be salad (she picks up a green leaf).

Jonas: (takes a green leaf and pretends to eat) Finished!

Ester: Now we have eaten all of it!

Ester was the leader in this episode. She suggested that they should stop fishing and sit in front of the fire, and she decided that the food was ready. She took the position as mother when she initiated the meal and suggested that she would feed

Jonas. As mentioned above the mother role is connected to power (Walkerdine 1990). However, it did not seem to be crucial to Ester's influence that she had the mother position. In another episode, she had the father position, and that time as well she was the one who stayed in the home and decided things. In that episode she stayed in the "house," a hut built from branches, pretending to carve, while the "children" were "outdoors" pretending to ride bicycles. Still, it is probably important that she is a girl since girls often rule family play (Löfdahl 2002).

The family play example above was traditional in terms of its care theme (cooking and eating) and the play positions that were available (mother and children). In other ways, however, it was non-traditional in senses that can be related to the nature environment and the pedagogical practice in which the children were involved: the food that was cooked consisted of "fishes" that had been caught in the creek and cooked over an open fire. The play episode was enacted in a pretend world that transcended the home environment with which feminine activities are associated. In Sweden fishing is an activity performed by men more often than by women (Statistics Sweden 2004). The fact that the game was played outdoors, in nature environments (and not in a doll corner), and that activities like fishing were included enabled Jonas to participate in this activity without appearing to be a boy who took part in typical girls' play. Similar factors seem to have contributed to making it possible for Ester to take the father's role in the other episode mentioned above.

Animal Play

Preschool children often engage in symbolic play where they pretend to be animals. Corsaro (1985; 1997) and Kalliala (2002) noticed a decrease in traditional family role play and an increase in role play involving animal families starting in the mid-1990s. When assuming animal family roles children seem to have more freedom than when they enact traditional family roles. They do not have to enact a set of scripts connected to traditional family play; instead they are allowed to move in directions in line with the peer culture in the group (Corsaro and Ewaldsson 1998; Kane 1996). Both Corsaro (1985) and Kane (1996) observed that children pretending to be baby animals were more free to move and were more aggressive than pretend-babies in human families (Corsaro 1985; Ewaldsson and Corsaro 1998; Kane 1996).

Myers (1998) is critical of the tendency to reduce the function of play where children pretend to be animals to represent human roles. Instead he wants to study such play as a way to understand what animals mean to children. He points out that children who pretend to be animals do it on a preverbal level—they imitate animals postures, gestures and noises and they seldom use verbal language.

Animal roles give children possibilities to resist heteronormative positions. Blaise (2005) recounts an episode where a girl, Madison, is gender bending, e.g. performs masculinity, when she pretends to be a male dog. In the play episode she saves a family member from a fire. In the role of (male) dog, Madison has the power of being a rescuer without having to position herself as a hegemonic male. She can assume an alternative masculine position that does not include marginalizing

others. As a dog she can also have warm and friendly relations with the other family members.

In the studied preschool, play episodes that included animals were common. The animals were both "ordinary" animals, such as dogs, cats, birds, spiders and snails, and exotic or dangerous animals, like sharks, crocodiles, wolves, tigers and snakes. There were also media figures like Bambi and Thumper from Disneyworld. The animals were represented in various ways: Sometimes real animals (mostly snails) were used. Animals were also represented by nature material, such as stones or sticks. At other occasions they were "invisible" and represented merely by gestures and talk. Finally, the children often pretended that they were animals such as cats and dogs themselves. In some episodes the children pretended to be zookeepers. When dead animals were found they arranged funerals. The children mentioned that some animals were dangerous, e.g. a tiger and a watchdog—but they were never dangerous to the children: they were their friends.

Natural spaces include many affordances for animal play. Special features of the landscape that reminded children of animals associated with natural habitats were used as resources. A dead tree, for example, was considered to be the place where the vultures lived and a marsh was the place for the crocodiles. Loose parts were used to build houses for animals. In one episode a girl and a boy pretended to take care of an invisible injured baby bird and build a nest for it. The water-filled ditch afforded fishing and pretending that there were a seal and a duckling in it. As mentioned, living animals like snails were used as toys, representing family members. Holes in the ground and in trees were used as pretend nests for various animals. Traces of dog paws in the snow led to a play episode where some children tracked elks and lizards. In play activities where children pretended to be animals themselves, they used the terrain to act like wild animals—e.g., to run on paths, hide in bushes and climb trees.

Figure 5. Boy and girl playing with snail family



Figure 6. The vultures' home

In the following sequence where the children pretended to be leopards, both girls and boys participated.

Animal Play Example: Leopards and Monsters

Stina (5:8), Hanna (5:5) and Felix (4:9) pretend that they are leopard kids. They are hunted by Linus (4:7), Kristoffer (4:6) and Frej (4:4). Stina, Hanna and Felix run up onto the hill. Linus, Kristoffer and Frej talk to each other. Kristoffer says that the leopard "is the fastest animal in the world." The boys decide that they also want to be leopards. They walk up the hill.

Frej: Can I join in?

Hanna: Yes, do you want to be a leopard or a monster?

Frej: Leopard.

Hanna: (to Linus) Do you want to be adult or mommy or daddy or kid?

Linus: Daddy (with emphasis).

Kristoffer: I want to join in too.

Hanna: Ok, what do you want to be?

Kristoffer: Daddy (with emphasis).

Hanna: (turns to Linus again) What do you want to be, Linus?

Linus: Daddy.

(Kristoffer and Linus look at each other and laugh.)

Linus: Daddy and daddy.

Hanna: (to Felix) What do you want to be?

Felix: Kid.

Hanna: Ok.

Stina: I am also a kid.

Hanna: I want to be a kid too, 0 then one of you has to be a mommy (points at Frej, Linus and Kristoffer).

Stina: But wait—

Frej: (overlapping Stina) I want to be mommy.

(Stina looks surprised but pleased. Linus and Kristoffer laugh loudly, Frej smiles towards them.)

Linus: And we are two daddies, there are two daddies (laughs).

(Several children start to growl.)

Hanna: Hurry, a monster!

(All the children run away down the hill.)

Here Linus, Frej and Kristoffer—the boys who in most of my observations played superhero themes—asked for permission to join a game in which two girls were involved. Hanna was leading; she was the one who gave Linus, Kristoffer and Frej permission to join the game, and she assigned the play positions. Both Linus and Kristoffer chose to be daddies. The girls and Felix chose gender-neutral roles; they wanted to be kids. Although the girls were older than the boys, they did not choose adult positions. One interpretation of this choice is that a kid position gives more freedom to be playful and mischievous than an adult position does (Corsaro 1985; Evaldsson and Corsaro 1998). When Stina, Hanna and Felix had chosen their roles as kids, Hanna said that one of the three boys who wanted to join the play had to be mommy. Frej, who was the last one to choose a role in the game, said that he wanted to be a mommy and in that way was gender bending. In this case it may not have been the wish to play a female role that was his motive, rather a wish to compromise and thereby solve a problem, that a mommy was needed in the game. Directly after Frej accepted being mommy the negotiation about roles was over and the play started—the children went into their roles, growling and running down the hill. Besides the kid position, there were two other gender-neutral positions in the play: “adult” and “monster.” None of the children chose these positions.

The episode was in some respects reminiscent of traditional family play—there were daddies, a mother and kids. The children seemed to have the idea that there ought to be a daddy, a mommy and kids in the play. In other respects, however, it was different from typical family play. The storyline was not about care and reproduction, but about excitement: being very quick animals that were chased by a monster. Furthermore, there were two daddies, not one. Thus, the rule system regulating traditional family play was in that way transcended. These aspects together made the game more interesting to those boys, who according to my observations generally did not take part in family play, play with girls or assume female roles. These aspects also made it possible for Frej to accept the mother role.

Physical Play

A large part of children's play is physical or related to sensory-motor activity. According to Piaget (1962) practice play is the first and most primordial form of play, also played by animal kids. As a part of practice play children spend a lot of time exploring and manipulating objects in the physical world around them, both toys and other objects. In doing so, they discover the objects' affordances, or how they can be used (Gibson and Pick 2000). As mentioned above, physical play seems

to be prevalent when children play in natural environments (Fjørtoft 2000; 2004; Mårtensson 2004; Waller 2010; Ärleman-Hagsér 2006), something that agrees well with my observations. The theme "physical play" includes activities where the play forms Piaget (1962) classified as practice games and symbolic games are mixed. The sensory-motor aspect is always central, but there are often symbolic elements involved as well. The theme is different from the other three in the sense that a storyline is not central to the children's play activity.

Many of the play activities observed in the forest were organized around some kind of physical activity (such as climbing trees), or material exploration (such as peeling twigs). Some of these activities included tests of strength, e.g., carrying heavy things. In such activities age seemed to be more important than gender. In one episode the three oldest children in the group, two girls (Stina 5:8 and Hanna 5:5) and one boy (Daniel 5:1), were carrying stones. They all agreed that Stina should carry the biggest stone since she was oldest. On another occasion, on a cold winter day when there was ice on the ditch, Hanna, who was a bold girl, jumped until the ice was broken so that her shoes became wet, and she was reprimanded by a teacher.

Figure 7. Girl and boy climbing a tree



The nature environment included many affordances for physical play. The children could run, jump, roll, crawl and dig. Puddles afforded play with water and the soil afforded digging and making goo. In autumn, fallen leaves were gathered in piles. In winter, snow was used in different ways, eg. to build snowmen, snow caves or just to scoop.

The following episode has elements of family play, but the central meaning to the children seemed to be the joint action of jumping into a pit. The episode illustrates that girls and boys can play together in this kind of play activity.

Figure 8. Girl and boy jumping into the bathtub**Physical Play Example: Jump into the Bath**

Mikael (3:8), Fredrik (3:1) and Niclas (3:2) stop playing pirates and decide to go to the "bath," a place where they can jump down into a pit from a rocky side.

*Niclas: We can go to the bath ... there we can jump.
(They walk away to the rocky side.)*

Niclas: (jumps down) Now the mother jumped ... I am the mother.

Mikael: And I am the father.

Fredrik: And I am ...

Niclas: Two mothers there can be!

Fredrik: Yees, splash (jumps).

Mikael: And one daddy.

Niclas: We are jumping in this tub.

(Jenny comes and jumps.)

Niclas: Now it is my turn (jumps).

(Mikael jumps.)

Unidentified child: This is ours.

Niclas: Yes, it is ours, everybody's.

Jenny: Yes.

(Jenny jumps again.)

(Niclas jumps.)

Niclas: Jenny it's your turn, you can jump.

(Jenny jumps.)

Here, the boys who were playing pirates in the superhero play example above left the marsh and the pirate play and moved to another place where they pretended to jump into a bathtub. Jenny, the girl who was refused participation in the pirate play, came up to the boys and started jumping without asking for permission.

Someone, probably Fredrik or Mikael, said "this is ours," perhaps in order to exclude Jenny. In the next turn, Niclas said that it is "everybody's" and he thereby included Jenny. Niclas even invited Jenny explicitly when he said that it was her turn to jump, something that indicates that he considered this game suitable for both girls and boys.

Jenny could join in this game. One explanation for this is that this activity had elements of family play, there was a bathtub, something that belongs to the home area, and it included father and mother positions. The character of family play, contrary to the superhero theme, is considered appropriate for girls engagement. Another and non-contradictory interpretation is that she could join the play because it was about physical activity. As mentioned above, the physical activity of jumping seemed to be the most important element, the meaning of the play. Even if the play had a family theme, the play actions were not those typically enacted in family play such as cooking, eating and sleeping, and the play roles did not seem to have much importance for the play. The "mothers" and the "father" all performed the same thing (to jump) and Jenny could participate without playing a role. The physical character of the game also explains why two boys could choose positions that contradicted heteronormativity when they pretended to be mothers. Niclas, who initiated the play and could have chosen any position, chose to be the mommy. Mikael chose to be a father but Fredrik, the third boy, also chose to be a mother and not a second father.

In this episode, hegemonic masculinity did not seem to have an impact. Here, it was not important to separate the genders and produce difference (Hirdmann 2003; Jordan 1995). Gender borders were transcended, and the boys tried out female positions. In addition to the physical character of the play, the boys' ages may have contributed to this non-gender stereotype choice. They were all under four years of age, and can be considered to be less influenced by ideas about what constitutes appropriate masculine play actions than are somewhat older boys (cf. Davies 2003).

Concluding Discussion

Above, I have presented four play themes that were typical for the studied preschool. I have analyzed those play themes in relation to how nature resources are used and to the play positions they offer to girls and boys. In the play activities the natural environments as well as the children's cultural experiences are used as resources. In accordance with Barad's thoughts (2007), play activities can be understood as intra-action between the playing children, the nature environment and discursive factors. In the four themes those agents differ in influence, which is discussed below.

One play theme more than the others encouraged gender-stereotyped positions, namely, the war and superhero theme, which represents a typical way of constructing masculinity among boys (Jordan 1995). In these activities, hegemonic masculinity (Connell 2005) was practiced and there was no room for girls or feminine positions. Here, the superhero discourse was strong. The superhero play in the forest was similar to superhero play in other settings (Blaise 2005; Davies

2003; Paley 1984). Media figures like Bionicles were included in special stories that in analogy with toys affected the children's play and restricted their freedom to control the content of the games (Levin 2003). The nature environment fitted well into this play theme but it did not change the play scripts; rather it was assimilated into the superhero discourse.

The family play theme on the one hand offered opportunities to produce femininity and to reproduce heteronormativity, as the family play discourse regulated actions and roles. On the other hand, the family play practices in the studied preschool allowed transgression of gender borders and gave both girls and boys opportunities to test positions and actions that are connected to the opposite gender. The impact of outdoor life on family play opened the field for boys to join in. Pretending to fish and to cook over an open fire are actions that are suitable in family play, and at the same time they are acceptable to boys because they are connected to masculinity or at least they are not feminine-coded. In family play, the nature environment represented an agent with affordances that the children used to perform non-stereotyped play actions. Furthermore, the fact that there were no outdoor places designed for family play and no dolls or other toys connected to femininity made it easier for boys to participate without taking the risk of being teased for playing in girls' places or with girls' things.

Animal play provided good possibilities for girls and boys to play together. Both girls and boys are interested in animals, and animal themes do not seem to be connected to any particular gender. In animal play, there is freedom to be dangerous and wild, but also to be kind, cute and funny. Taking care of animals is less connected to femininity than is taking care of babies. Even in animal play where the children take family member positions, there is more freedom to make the play exciting and adventurous than in traditional family play, where reproduction of home life has a predominant place. In the animal play scenario excerpted above, it did not seem that the children felt obliged to follow scripts connected to family play roles. Both girls and boys had freedom to choose roles and actions that they found interesting and attractive. In this play theme, discourse had little influence; instead the children were free to change the scripts. Nature had agency since it inspired the children to engage in animal play.

The physical play theme also provided good opportunities for girls and boys to play together. Nature elements invited the children to get involved in sensory-motor play. The children balanced, climbed trees, jumped over ditches, slid, and so on (cf. Fjørtoft 2000, 2004; Mårtensson 2004; Waller 2010; Ärleman-Hagsér 2006). In these activities, gender did not seem to be of importance. According to MacNaughton (2006) and Ärleman-Hagsér (2006), children themselves consider such activities as sliding and climbing trees to be appropriate for both girls and boys. In motor activities the children's interaction with the physical environment became more important, while play actions and play roles were less important. The nature environment was to a large extent an agent affording children to explore different functions, using their bodies in various ways. Discursive aspects seemed to be absent when the children were absorbed by the physical environment (cf. Mårtensson 2004).

The examples above indicate that the character of the nature environment can make it easier for girls and boys to play together and to break free from traditional gender patterns in many (but not all) play practices. The physical environment contributes to this in two important ways. First, it works as a powerful agent (Barad 2007) when children play, through the affordances (Gibson 1979) it offers. It invites children to sensory-motor activities and to explore and manipulate the environment. Secondly, it is relatively "neutral" in relation to (gender) discourses. Nature material and places can indeed be loaded with cultural meanings, among them gender-related ones, something that is illustrated in some of the play episodes above, but they are not gender-coded in the same way as places and artifacts created by human beings. The physical environment in a preschool, including toys and other artifacts, mediates cultural meanings. These are often gender coded and stimulate particular gendered actions (Nelson and Nilsson 2002; Nelson and Svensson 2005; Nordin-Hultman 2004; Paley 1984; Seiter 1993). That is particularly the case for toys that represent something else such as cars or utensils, while toys with their own function, such as balls, are more gender-neutral (Nelson and Svensson 2005). Some toys are more extremely gendered; a Barbie and an Action Man, for example, invite different kinds of play actions and are connected to girls and boys, respectively (Berg and Nelson 2006). Furthermore, children themselves claim that it is impossible for children to play with toys that are seen as meant for the opposite sex (Berg and Nelson 2006; MacNaughton 2006). In the places used by the studied preschool, there were no such physical environments or toys that were reserved for girls or boys. Because nature material does not have specified meanings, it can be used to represent different things and the opportunities for transformation are great (Änggård 2009). This means that the children are not "forced" into gender-stereotyped play actions. Play in nature thus has an opportunity to avoid being shaped by the gender discourses often embedded in manufactured artifacts.

To summarize, some of the play activities in the studied preschool provided gender-stereotyped positions, especially the superhero play. To a certain degree the family play provided gender-stereotyped positions, but it also contained possibilities of transgression related to the nature environment. The last two play themes, animal play and physical play, provided good possibilities for girls and boys to play together and to try a variety of gendered and non-gendered play positions including gender bending. In those play themes, gender did not seem to be an important category for differentiation. In the last theme nature was an especially powerful agent.

Gender construction is a complicated process in which many factors are involved. In the studied preschool, some special conditions beyond the nature environment may have been of importance for counteracting stereotyped gender positions in the children's gender construction. As mentioned above, the teachers had previously been involved in a gender project that they believe had led them to a higher level of reflexivity in pedagogical work. This in turn can have had an impact upon the children's play. Furthermore, some of the children's parents hoped the outdoor

education would promote equity. With these factors in mind, I argue that the nature environment made it possible to play in various non-gendered ways.

In conclusion, we cannot take for granted that play in a nature environment will counteract stereotyped gender patterns, but for several reasons, such play does seem to offer good opportunities to promote gender equity:

- Nature materials and environments are not gender-coded. They have to be interpreted, and meanings can easily be transformed. This implies that material and places are not connected to one of the genders and that they can be used for several purposes.
- Nature is a powerful agent; it plays with children when they are invited to sensory-motor activities.
- The forest affords play themes such as animal play and physical play that are not exclusively for one of the genders. These play themes make it easier for girls and boys to play together and probe different positions.

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