

**Places for Child-Managed Bodily Play at an After-School Program  
School Programme**

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# Places for Child-Managed Bodily Play at an After-School Program

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## **Abstract**

*This article investigates how children play at different places in an outdoor area, and how the places influence child-managed bodily play. The study has a life-world approach, and the theoretical perspective is based on an interactional understanding of place. Qualitative material was gathered from interviews among children in a Norwegian after-school program and from close observations of their activities in the Climbing Area, at the Asphalt Place, and in the Sandpit. The findings show that bodily play that includes locomotory, stabilizing, and manipulative movements occurs in a relational process consisting of the affordances of the place and the abilities of the children. Initially, the Climbing Area offers opportunities for diverse bodily activities. At the Asphalt Place and in the Sandpit, it is the combination of the physical characteristics of each place and the equipment that stand out as affordances. Additionally, sociocultural factors play an important role in how the children play at the places.*

**Keywords:** children, after-school program, bodily play, outdoor area, place

## Introduction

In Norway, the after-school program (ASP) is a public programme available to children (6–10 years old) in the first four years of school. It is a voluntary program outside normal school hours but closely related to the public school. Despite the close connection between the two institutions, the contrast between the school and the ASP is noticeable. The school's focus is learning, and the ASP is intended to be leisure time characterized by child-managed play (Norwegian Ministry of Education and Research 2012). Results from previous research show that children's physical activity during their stay in the ASP is extensive and characterized by child-managed bodily play at self-chosen places (Løndal and Bergsjø 2005).

In this article, the concept of "bodily play" is used instead of "physical activity." In line with phenomenological theory, bodily play includes subjective and experienced aspects of movements (Morris 2004) and is understood as a typical form of activity in childhood as self-driven and autotelic-oriented activities (Gadamer 1989; Huizinga 1955). Bodily play includes bodily movements with a dimension of physical vigor expressed through locomotory movements, stabilizing postures, and/or manipulative movements (Gallahue and Ozmun 2006; Pellegrini and Smith 1998).

My previous research shows that bodily play has a considerable potential to contribute to children's understanding of their physical and social worlds (Løndal 2010a). It is thus of interest to clarify how different places might influence child-managed bodily play. This article aims to contribute to the knowledge about this topic. Such clarification is significant for how outdoor play areas should be designed in future ASPs.

Below I first offer a conceptualization of "place" that takes human-lived experience into consideration and a review of some previous studies on the relationship between place and children's play. The conceptualization is based on publications of James J. Gibson (1986) and publications of researchers who have elaborated on his accounts, and it highlights an interactional understanding of place. After the theoretical review, some research questions are formulated, and a qualitative study conducted in a Norwegian ASP is presented.

## The Theoretical Perspective

When thinking about what a place is, we often consider its geometric dimensions. We sketch it as an abstract geometric system with a specified number of objects at measured distances and of different sizes. Such a model does not consist of meaningful things and is problematic in order to understand the meaningfulness of children's actions at a place. Personally, I find it more informative to inquire into people's lived experiences. In his comprehensive analysis of visual perception in *The Ecological Approach to Visual Perception*, Gibson (1986, 33) states: "The world of physical reality does not consist of meaningful things. The world of ecological reality, as I have been trying to describe it, does." He emphasizes that meaningful conditions in an ecological world, which offer the individual possibilities for action, can be *discovered*. In their activities, people are attuned to these conditions as they interact as participants in the world they inhabit (Greeno 1994). Gibson (1986) uses the concept of "affordances" to discuss such meaningful conditions, and he

claims that they could be perceived in a direct manner. This means that he rejects the view that people understand their world only through individual constructions and that action is reproduced based on hypothetical representations in the mental system. In his view, the perception of affordances is a dynamic, relational process in which individuals participate and interact with other human beings and the physical environment. In order to grasp Gibson's account of how affordances can be experienced as meaningful, it is crucial to recognize the dynamic, relational process between the human being and her/his environment. However, the concept of affordances refers to *conditions of the environment* that contribute to the interaction. David Morris (2004, 13) puts it this way: "We do not, according to Gibson, perceive naked properties of the environment; rather we perceive what the environment affords to our bodies, what we can do with, or in, the environment." Gibson (1986) first and foremost focused on how characteristics of the physical environment encourage action. James G. Greeno (1994) highlights this point when he emphasizes the need for a concept that refers to the *conditions of the person* that contribute to the agent-environment interaction mentioned above. He proposes to use the term "ability" in regard to what a person can do related to an affordance. Thus, perception and action grow out of affordances and abilities that interact dynamically "in the moment" together (ibid.). Marketta Kyttä (2002; 2004) has explored the relationship between children and their physical environments and uses the concept of "potential affordances" with affordances that are possible for individuals, and the concept of "actualized affordances" with affordances that the individual perceives, utilizes, or shapes. Hence, the actual choice of the individual child is also relevant. This concurs with Gibson's account in rejecting the traditional, dualistic division between subject and object, between body and environment (Heft 1989). There are no sensations independent of the perceiver, and the interaction between the individual and the environment intrinsically orders itself (Morris 2004).

Gibson (1986) insists on using other terms in describing the layout of a *habitat* (a lived space) than terms used in geometry, e.g., "place" is used instead of "space." He claims that a habitat is made up of places. When he uses the concept of place, he refers to a more or less extended surface or layout in the environment, as opposed to a point in space. Places can be named, but they don't need to have sharp boundaries. Edward S. Casey (2001) has explored the concept of place further. He insists that the *lived body* is what links the self to the place, and he emphasizes the role of place in human inhabitation of the world. Place is described as an interaction between humans and their environment rather than a specific, delimited location. This account concurs with that of Gibson. Claiming that the human is a *moving being* in a place, Gibson (1986) ascribes *movement* a mediating role in human perception, as the interactional mediatrix of the human subject and the environment. The world is perceived "from" a lived body in movement, and the movement is the phenomenon that ties the individual and her close surroundings together to a place (Morris 2004).

Gibson (1986) admitted that factors other than the physical environment may also encourage action, e.g., objects, places, events, and other individuals. Edward S. Reed (1996) has deepened this account, particularly when he connects sociocultural development to ecological psychology. He claims that a culture "is not something

separate from individuals, nor can individuals be completely cut off from their cultures" (Reed 1996, 139), and he emphasizes that the individual human encounters the world as one among many mobile people. Throughout childhood and youth, humans "must learn to integrate their skills in regard to inanimate objects with their interaction skills to adapt to these increasingly complex social settings" (ibid. 138). In this way, Reed highlights that the ability to share environments with others within the framework established by the culture is among the interactional skills that have to be learned.

How different types of outdoor environments influence children's physical activity and play has been studied with various theoretical perspectives and with a variety of methodological approaches. In particular, studies have focused on characteristics of different types of playgrounds, e.g., the design of fixed installations and special places (Frost 1992, 2010; Lindholm 1995; Moore 1986; Rasmussen 2004; Titman 1994; Woolley and Lowe 2012), and how these characteristics influence the physical activity and social interaction of those who play there (Anderson 2003; Grahn et al. 1997; Gulløv 2003; Løndal 2010a; Løndal and Bergsjø 2005; Mårtensson 2004). It is emphasized that playgrounds should provide complex opportunities for children's play and should be designed for the group of children who are intended to use them. This applies to the children's cognitive and physical challenges, their opportunities to influence the area, their development and skill level, and their safety. In the developed criteria and checklists for designs of playgrounds (Frost et al. 2004; Moore, Goltsman and Iacofano 1992), researchers put different emphases on the requirements of fixed installations, equipment, and loose or movable parts, and of access to natural environments. The availability of appropriate equipment or loose/movable parts encourages children to manipulate the environment and create small places. This also increases the children's physical activity during play and adds challenging novelty to the playground (Dempsey and Strickland 1999; Hannon and Brown 2008; Hart 1979; Maxwell, Mitchell and Evans 2008; Moore 1986; Nicholson 1971). Other researchers have shown that children have a predilection for the availability of natural environments and suggest that play in such environments is beneficial for the children to express their social competences; to increase their physical activity, motor development, and skills; and to promote confidence and independence (Änggård 2009, 2011; Bixler, Floyd and Hammit 2002; Fjørtoft 2001, 2004; Floyd and Hammit 2002, Francis 1988; Rivkin 1990, 1995; Said 2011).

In Scandinavia, research has been conducted on children's institutionalized lives, including how outdoor environments influence their play. Among the research questions that have been explored previously is the relationship between environmental affordances and pre-school children's play at different types of playgrounds (Änggård 2009, 2011; Fjørtoft 2001, 2004; Storli and Hagen 2010). There has, however, been hardly any research on how outdoor environments influence children's bodily play in ASPs. With this article, I hope to contribute to filling this knowledge gap. In Norway, over 60 % of 6-to-10-year-old children attend ASPs and spend much of their time in such programs every week (Norwegian Directorate for Education and Training 2012). ASPs also stand out as one of the settings where children have significant time devoted to child-managed

play outdoors (Løndal and Bergsjø 2005; Løndal 2010). Therefore, it is essential to know how the environment influences such play in these settings.

### **Aim and Research Question**

The aim of the article is to investigate how places in an outdoor area influence child-managed bodily play in an ASP setting. Elsewhere, I have written about children's intentionality in the interactional process between body and place that occurs in bodily play (Løndal 2011) and about the role of interactions with other children in such play (Løndal 2010b). In this article, the main focus will be on the place's side of the interaction, particularly on the characteristics of places where children's bodily play occurs. The research questions that have guided the work for this article are: What play activities are typical for places in the outdoor area? What characteristics of the places influence child-managed bodily play?

### **Method**

This article is part of a larger study that, utilizing a life-world approach, investigates several research questions about how children's bodily play is related to their understanding of the world. The life-world approach includes being sensitive toward the children's lived experiences (van Manen 1990), and therefore I paid particular attention to developing a way of looking at children in concrete, real-life situations (Bengtsson 2006). I engaged in following the children in a single ASP during a four-month period, and I used the opportunity to gather qualitative material. In line with phenomenological theory, I consider bodily actions, gestures, and speech to be complementary forms of expression and communication (Merleau-Ponty 2002), and I wanted to capture these interlinked components. Therefore, two complementing methods were used: close observation (van Manen 1990) and qualitative research interviewing (Kvale and Brinkmann 2009).

### **The ASP**

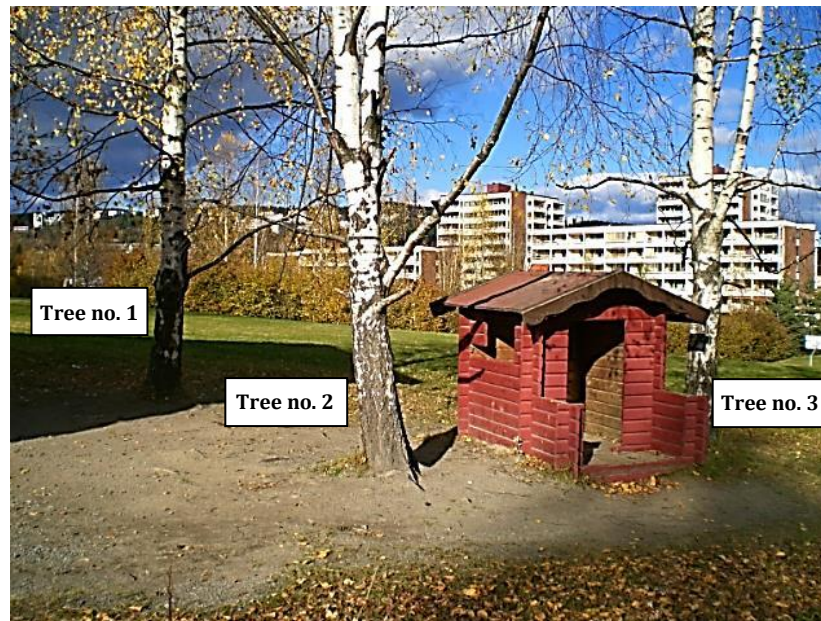
The aim of the project was to contribute to the understanding of children in bodily play rather than to compare institutions. For this reason, the investigation was limited to one single ASP that was related to a single public school in Oslo. The study concentrated on the upper two age groups who were permitted to attend the ASP: children in the 3<sup>rd</sup> and 4<sup>th</sup> grades in school. The children were 8- and 9-year-olds, and thus they had had several years' experience as ASP participants, which was why I chose this age group. Additionally, I expected that children at that age would be able to recall and articulate experiences. Therefore, the choice came down to an ASP where the upper two age groups are placed in a separate pavilion with its own outdoor area. In front of the ASP pavilion, there is an asphalt place and a big sandpit. Immediately to the side of the building is a small playhouse surrounded by three trees. Otherwise, a slope surrounds the building. Approximately half the area is comprised of grass; the rest is trees and rugged terrain. The outdoor area does not have traditional playground apparatus.

For this article, it was important that the observations and interviews generate information about the ASP children's bodily play related to lived space. To contribute to structure and variation, the observations and interviews were linked to three places where bodily play very often occurred during ASP time, and that

emerged as particularly interesting according to my research questions. The choice of places was based on a two-week observation during ASP hours (three hours each day) in August 2007 and field notes made during that period, and came down to the climbing area (the small playhouse surrounded by three trees), the asphalt place, and the sandpit.

The place that the children call the "Climbing Area" does not include a climbing apparatus. As shown in the picture below (Picture 1), it is a place at the ASP area consisting of a small playhouse surrounded by three trees. Two of the trees are located at each side of the playhouse, so close that it is possible to jump from these trees over to the roof of the playhouse and back again. The distance to the third tree is too far from the other trees and the playhouse to be jumped across.

### Picture 1. The Climbing Area

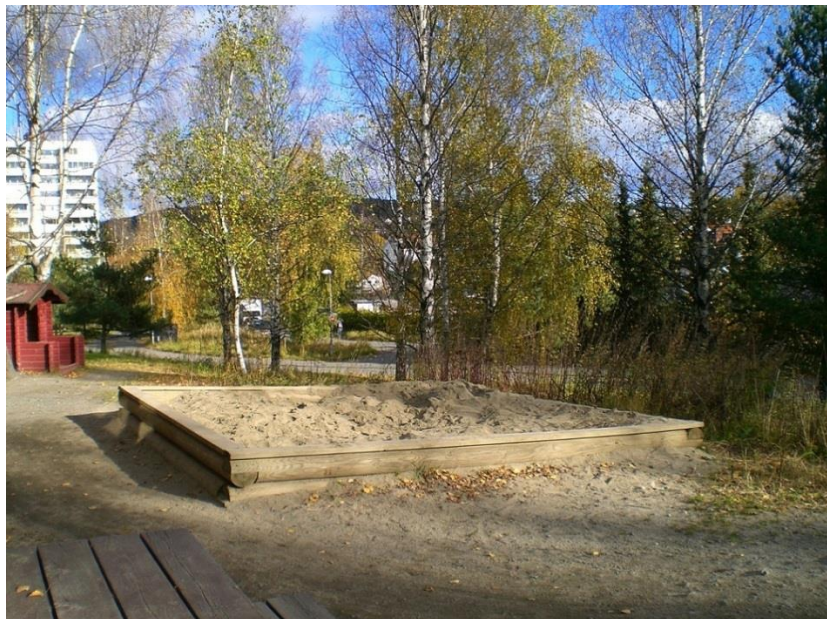


What the children call the "Asphalt Place" is the extended end of the road approaching the ASP building. The road is covered with asphalt, and it is the extent of this substrate that physically limits the activities at the Asphalt Place. The place is surrounded by the ASP building, the Sandpit, and grassy slopes leading down to and down from the place.

The picture below (Picture 2) shows the Asphalt Place devoid of equipment. During the ASP time, the children usually have access to different types of equipment for use at the place: scooters, tricycles, wagons, hula-hoops, balls of different sizes, elastic skipping ropes, jump ropes, stilts, large toy trucks, and chalk to draw hopscotch patterns.

**Picture 2. The Asphalt Place**

The Sandpit is located between the Asphalt Place and the Climbing Area and is just what the name implies, a square pit of approximately 270 square feet bordered with a wooden rim and filled with fine sand.

**Picture 3. The Sandpit**

The above picture (Picture 3) shows the Sandpit devoid of equipment. During the ASP time, plastic shovels, sieves, buckets, and other sand toys, bottles, play



vehicles such as different sizes of toy cars and toy trucks, toy tea sets, and toy cookware sets are usually available to the children.

### **The Participating Children**

During the period of the study, a total of 40 children attended the current ASP. Permission was sought from the parents and the children concerning participation in the study. Parents of four children had reservations about participation. Consequently, information was gathered from 36 children, of whom 19 were 9-year-olds and 17 were 8-year-olds; 22 were girls and 14 were boys. The children attended the ASP three hours each day.

### **Gathering Qualitative Material**

Using close observation to gather qualitative material, one attempts to break through the researcher-informant distance (van Manen 1990). Instead of observing the informant from the outside, I wanted to enter the children's life-world through direct participation.

Field notes and video recordings were used to register play situations and events at the selected places. Focus was concentrated on one place each day, and the observations were filmed or written down when one or more of the 36 children were present at that place. A main camera could be zoomed and the focus varied; a supplementary camera was used to record the general situation of the place under observation. The two cameras had attached microphones. Up to one hour of activity was recorded each day. Parallel to the recording, field notes were made.

After the observations were concluded, nine children (five girls and four boys) were selected for one individual qualitative research interview. The interviews were intended to provide depth to situations and events that had emerged during the observations. Prior to a detailed planning of the interview and selection of the children to be interviewed, the field notes and video recordings were closely examined. Specific themes to be followed up were identified. These themes were related to the research questions and linked to the children's bodily play at the specific places under observation. The children selected for interview had been involved in particularly interesting situations related to these themes. Both girls and boys from the two relevant age groups were selected. Against this background, the expectation was to obtain valuable supplementary information. In line with Kvale and Brinkmann's (2009) recommendations, the interview was given the character of a one-to-one conversation where the child could relate his/her own experiences to relevant themes. Prior to the interviews, an interview guide was prepared with a list of themes to be covered, together with proposals for introducing and follow-up questions. During the interviews there were opportunities to change the sequence and structure of questions.

The interviews were conducted with one child at a time in a room with which they were well acquainted. The interview commenced with situations in which the child had participated and been video recorded. These were edited to form a four-minute film for each individual. This was shown during the course of the interview and provided a basis for the conversation. During the interviews the children were

asked about my interpretations of specific situations from the observations. Several times I also pronounced interpretations of a child's statements and asked if I had understood correctly. The interviews were video recorded.

The gathered information relevant for this article was comprised of the video recordings from 10 hours of observations spread over 10 days (four hours/four days from the Asphalt Place, three hours/three days from the Climbing Area, and three hours/three days from the Sandpit), 5 hours of video recordings from the interviews, and 63 pages of handwritten field notes.

### **Transcription and Analysis**

In line with van Manen (1990), a distinction is made between *gathering* and *analyzing* qualitative material from the children's lived experiences: The two acts are not considered as fully separable processes. Since gathering involved choices and reflections, an analyzing process was begun in the field. After the material had been gathered, a further qualitative analysis was conducted. This analysis included a systematic reading of the transcript by focusing on the phenomena studied, followed by a description of recurrent themes. To ensure that the material was suitable for further analysis, it was transcribed.

The transcriptions of the interviews were written down in note form so that the significance of the conversation emerged. The interview recordings showed that there was supplementary information in the form of non-verbal gestures. To include these gestures in the analysis, the transcript notes were made in the following two columns: 1) spoken words and 2) non-verbal signals. The recordings from the observation period were also transcribed and prepared for analysis.

The further analysis is based on the theoretical perspective introduced earlier in this article; I acknowledge movement as a mediating phenomenon that, in an interactional process, ties the human being and a shared environment together. Harry Heft presented in 1988 a functional approach to the study of children's outdoor environments as a contrast to the form-based classification (Heft 1988). He based the approach on Gibson's concept of affordance and suggested a functional taxonomy related to various objects and places that offer children activities. In the analysis, I draw on Heft's taxonomy. During the analyzing process, I used a method inspired by the structure of descriptive phenomenological analysis (Giorgi 1985). The interview transcriptions, the transcribed situations from the video recordings, and the field notes were included in the process. Through a stepwise analysis comprised of four chronological sets of written notes, I moved from 1) a basic description via 2) localization of the meaning units, and 3) incorporation into a theoretical perspective with relevant professional terminology, and 4) to a synthesis of the meaning units to a consistent text where the phenomena studied emerged. It is important to note that I do not consider my writings to be pure description. Each stage included interpretations, and in that sense, the process can be seen as interpretive (van Manen 1990).

During the process of transcription and analysis, I focused on finding cases that did not conform to preconceptions. The analysis was also discussed with academic

colleagues during the process, who challenged me to provide solid evidence for any interpretations.

### **Findings and Discussion**

The results of the study will be introduced with selected situations from the observations at the three selected places and with the voices of the interviewed children. As a result of the analysis of the qualitative material and based on their significance in relation to the entirety of the material, I introduce specific situations that show the characteristics and significance of how the places influence the children's play. Examples include boys and girls in both age groups. The children mentioned in the examples are anonymized.

#### **An Outdoor Area with Specific Places for Bodily Play**

The first time I visited the current ASP, I took a look at the area that surrounds the ASP building when there were no children present. I saw a flat asphalt place, a large sandpit, and a small playhouse surrounded by several trees. Based on my preconceptions of play units and schoolyards, I did not see a typical playground for children of elementary school age. In fact, I evaluated the area as relatively barren. Perhaps I reduced the area into which I was peering to an objective model, and I sketched it as a system with a specified number of objects, to what Gibson (1986, 33) calls "the world of physical reality." When I later observed the children spending time in this area, I realized that it offered them rich opportunities for many actions and activities. The ASP area deserved the designation of "playscape," a concept that Frost (1992) uses about environments that offer children opportunities for play. The children were playing in this area, and they gave the different places special names. They spoke about the Climbing Area, the Asphalt Place, and the Sandpit as places with capitalized first letters. During my preliminary two-week observation in the beginning of the ASP season, these three places appeared to be where most of the children's self-chosen bodily play during ASP time occurred. Based on the observations and on the interviews with the children, I will offer a description and a discussion of typical play activities at the three places and of how the places influence child-managed bodily play.

Based on the analysis of the qualitative material, both similarities and differences among the places appeared. The similarities are first and foremost about the activity-promoting and contact-creating characters of the three places. The physical characteristics of the places and access to equipment seem to be crucial for whether the children choose to play at the places and how the places influence their play. In this respect, it is the Climbing Area that differs from the other two places.

#### **Bodily Play in the Climbing Area**

The first time I visited this ASP, I noticed the small playhouse between the trees, and I thought it was a suitable place for calm role-playing and hide-and-seek games. But I was wrong; for the ASP children, this place was simply a "Climbing Area," a name that clearly illustrates their preferred activity at the place. During the interviews I showed a picture of this area, devoid of children and activity, and asked the children to comment on it. All the children interviewed knew the place well, and they started spontaneously to tell about the play activities they do there.

Climbing was by far the most mentioned and appreciated activity. Hence, climbing seems to be the most obvious play activity that this place can afford these 8- and 9-year-old ASP children. How could this be? To answer this question, I have analyzed the interviews and the observations from the children's play at the place.

Initially, the Climbing Area has what is required to offer activity, which 8-year-old Ida sums up in the interview: *"In order to play in the Climbing Area, I just have to use my hands and my fingers – and my body, together with the branches and such things."* Despite the fact that children had access to the same equipment as at the other places in the ASP area, I never observed activities that included use of equipment in the Climbing Area. Because the trees' branches are "climb-on-able" and "swing-on-able" for children in this particular age group, the possibilities for climbing and swinging are immediately present (Heft 1988). This supports Greeno's (1994) argument for bringing in the *conditions of the person* that contribute to the agent–environment interaction; the individual child's *ability* related to the affordance is crucial for the choice of activity. It seems to be particularly important that the children can reach the lowest branches of the trees (van Herrewegen, Molenbroek and Goossens 2004). If the lowest branches of tree no. 1 and tree no. 2 (see Picture 1) had been cut, it would be considerably more difficult to climb up into the trees, perhaps impossible, with the abilities of 8- and 9-year-old children.

Based on the children's activities, the Climbing Area appears to consist of two separate "activity units." One unit consists of the tree that cannot be jumped to from the other trees or from the playhouse. The second unit consists of the other two trees and the small playhouse. The difference between the activity types that occur within the two units is worth noting. In the freestanding tree, there are three common types of activity, as follows: careful balancing that includes stabilizing bodily postures at the lowest braches; hanging and swinging in some specific branches (high or low according to experience, skill, and bravery); and advanced locomotory movement higher up in the tree. The latter seems to be reserved for a few skilled climbers. Below I introduce an example from the observed play activity at this unit:

*The close friends Toni, Ellen, and Jane come straight to the freestanding tree (tree no. 1) in the Climbing Area. Jane remains on the ground while Toni and Ellen climb up using an advanced technique that is common in this peer group. They use arms and legs and swing up on the lowest branch located well above the head height of the girls. Toni and Ellen perform well-known climbing activities in the tree, balancing on the lower branches and hanging and swinging freely from a branch that is about eight feet above the ground. Jane seems to be with the group for social reasons; she stays on the ground under the tree and talks to the other girls while they are climbing. On some occasions she grasps the lowest branch with both hands and swings freely for some seconds. After a few minutes, Karen joins the climbing girls, and she is far more autonomous and challenging in her climbing activity than the others. She goes beyond the usual balancing on the lower branches and is testing challenging movements farther up in the tree.*

In the above example, we can see that the girls' climbing skills have distinct differences, and this influences their activities. Jane is content with swinging from the lowest branch, Toni and Ellen dare to try out balancing, climbing, and swinging in the branches up to about eight feet above the ground, and Karen takes on the challenge of difficult and daring climbing high up in the tree. During the five-week-long observation period, I observed and video-recorded the majority of the 36 ASP children playing in this tree, and all the skill levels mentioned are frequently seen. It is somewhat high up to the lowest branch, and some of the children are unable to climb up in the tree. Thus, the most inexperienced climbers are only swinging in the lowest branch. Gradually they try to get one leg up around the branch and then swing up on it. The next step is to test climbing on the lower branches and so on. The different levels seem to have their typical challenges, and the playing children seem to seek skills that push the limits of what they manage or dare to do. In this way, the individual climbing skills are gradually developed along a continuum ranging from basic movements through adaptive movements, skills, and styles to idiosyncratic adjusted movements (Morris 2004). Movements somewhere along the continuum toward habituation might be called "barrier-breaking movements" (Løndal 2010c). This single tree in the Climbing Area is a typical place where barrier-breaking movements are frequently observed among a majority of the ASP children. It is the appropriate shape and size of the tree that seems to create this success (van Herrewegen, Molenbroek and Goossens 2004; Wilson 2004). The height to the lower branches, the distance between the branches, and the thickness of the branches provide appropriate challenges to all levels of abilities present in the current group of children.

In the other activity unit, consisting of the playhouse and the two close-standing trees, locomotory activities that include movement between the three different objects are definitively the most common activities at this place. The following description from the transcripts may serve as an example:

*Some children gather under the trees that surround the small playhouse. At first they move around while talking, but it does not take long before someone starts climbing. May, an 8-year-old, is the first, and Ida follows quickly behind. With a creative technique tailored to their skill level, they manage getting up into tree no. 2 by grabbing the branch with both arms, taking one leg up and around a branch stub, and swinging up on the lowest branch in a fast, synchronized movement. Their climbing is "contagious"; Cecilia and Toni climb directly onto the roof from the rail in front of the playhouse. Elaine swings up into tree no. 2 via the broken branch and jumps elegantly over to the roof. The girls then move over to tree no. 3. They swing down to the ground via the long, thin branch on the right side. This is repeated several times as a challenging obstacle course – up into tree no. 2, over to the roof of the playhouse, farther on to tree no. 3, and down to the ground.*

Since the activity described in the above example includes jumping through the air from the trees to the roof and back again, a relatively high level of skill and considerable courage is required. Therefore, fewer children are observed in this

activity unit than in the single, freestanding tree. Many of the children do not yet have the necessary abilities for such airy jumps through space, and this limits the activity at the place. Among the children who are often seen in this activity unit, habituated movements and a creatively incorporated obstacle course are repeated over and over again. The movements are strikingly similar from child to child, and they involve the same starting branch and the same technique to get up into tree no. 2, the same obstacle course, the same starting point for jumping over to the roof, the same branch to swing down to the ground, etc. This tells us something about what this particular activity unit may offer children with the appropriate abilities, and it may indicate that the place affords specific activities for children of this age and size. As such, the development of climbing skills observed at the two activity units in the Climbing Area may support the view of movement acquisition that Gibson (1986) advocates. He considers affordances to be real and ready to be discovered as the children are ready for them. He argues that human beings are attuned to much information from birth, and that learning occurs when we discover affordances associated with this information. This is considered to be an important part of the child's adaptation to a habitat (ibid.). Studies of children's play show that play in a natural environment is highly appreciated by children, and that such play contributes to a positive perception of outdoor recreation activity, to a genuine understanding of reality, and to motor development and fitness (Änggård 2009, 2011; Bixler, Floyd and Hammit 2002; Fjørtoft 2001, 2004; Floyd and Hammit 2002; Francis 1988; Hart 1979; Said 2011). In the particular examples from the Climbing Area, the habituating process can refer to each child's discovery of the trees as "climb-on-able" and the branches as "swing-on-able." Given that the vast majority of the children seem to be drawn to climbing activity adapted to their individual skill levels, this may seem like a plausible explanation. Climbing trees seems to be a specific form of activity that fits children's maturation and development particularly well at the ages of 8 and 9 years (Frost et al. 2004).

There is, however, reason to highlight the differences in skill level and personal style in children's climbing. When exploring why children play in the Climbing Area, it is not enough to point solely to the physical environment and the *affordances*. The examples from the observations show that the affordances can be grasped and actualized first when the children have acquired the necessary abilities through growth, maturation, and development (Greeno 1994; Heft 1988; Kyttä 2002). Thus, it is essential to focus also on the conditions of the human subject in the agent-environment interaction. In addition, most of the ASP children's activity in the Climbing Area occurs in situations where the children interact with others. The activity arises out of play situations where children spontaneously seek interaction with other children. Such bodily interaction occurs largely in small groups of best friends or in larger groups that come together as the participants enjoy undertaking the same activity. In these situations, special climbing activities and elements are also created. Activities and techniques seem to "spread" among the ASP children. It is, for example, interesting to see the similarity between individuals when it comes to techniques used when climbing "the obstacle course" from tree no. 2 via the roof of the playhouse to tree no. 3. There appears to be an imitation process happening in the child-managed bodily play in the Climbing Area. During such play, tips are picked up from other children's movements, and their techniques are modeled in

some way. This acquisition process does not, however, imply direct copying of others' movements. It is rather a creative and innovative process where the individual child integrates his or her personal style to an observed movement (Jespersen 1997).

The bodily play in the "obstacle course" may also serve as an example of how children who meet on a daily basis create peer cultures. In the ASP setting, the children's bodily play seems to play an important role in the creation of peer cultures. Elsewhere I have written about children's interactions with others through bodily play at the Climbing Area and other outdoor places in the ASP area, and I conclude that such play can be interpreted as fulfillment of their search for interaction with peers (Løndal 2010a). Following the work of William A. Corsaro (2005, 223), such situated activities in preadolescence influence the children's awareness "of themselves as actors in the collective production of their peer cultures." This is consistent with Reed's (1996) claim that the ability to share environments with others within an established culture is among the interactional skills that are learned in situated activities among children. Maybe the special climbing elements seen in the mentioned "obstacle course" are picked up from former ASP children, and they will also be passed on to the next generation of ASP children. In this way, sociocultural and historical footsteps may also be reflected in the children's play in the Climbing Area (Casey 2001).

As described, the Climbing Area has what is required to afford activity without any play equipment available. According to the ASP children, the situation is different regarding the Asphalt Place and the Sandpit. At both these places, there was a need for the appropriate equipment or "loose parts" for play to occur (Nicholson 1971). In the following, I will introduce the results and analyses of situations from the Asphalt Place and the Sandpit respectively.

### **Bodily Play at the Asphalt Place**

Bodily play at the Asphalt Place also appears to be a social activity, and it occurs both in small groups of best friends and in groups of children who enjoy undertaking the same activity. In the following, a typical example from the observation of the Asphalt Place is introduced:

*The first few minutes of the outdoor time are characterized by children waiting for the equipment shed to be opened. Some children rush off to other places. After the shed is opened, there is play activity on the Asphalt Place at all times of the observation period. All the activity is related to equipment collected from the shed such as scooters, tricycles, large toy trucks, and a cart.*

During most of the observation periods, there was lively activity at the Asphalt Place expressed through locomotory and manipulative movements – predominantly activities with rolling equipment as described in the situation above. This is consistent with Heft's (1988) functional taxonomy of a flat, smooth surface. When the equipment shed was locked and there was no access to such equipment, there was almost no bodily play observed at the place. Before the equipment shed is unlocked by one of the ASP staff, only waiting and passing children are observed.

In the interviews the children told me that the Asphalt Place is “useless” and “no fun” without rolling equipment. When 8-year-old Eric was shown a picture of the Asphalt Place devoid of equipment and asked to comment on it, he replied:

*Eric: Sometimes we play on the scooters there, and then we scoot around on the Asphalt Place (points at the picture). It's fun. The scooters are good (smiles slightly).*

*Interviewer: If it had been like it is in the picture, without any equipment, what would it have been like then?*

*Eric: I don't know (seems a bit hesitant). It would not have been fun. You have to have something there.*

As Eric emphasizes: “You have to have something there”; the place does not provide these particular ASP children with opportunities for bodily play if there is no rolling equipment. Implicitly, without such equipment, the Asphalt Place is not a place for child-managed bodily play. These findings are consistent with other studies of children’s outdoor play (Hart 1979; Moore 1986); when manipulative equipment and loose parts are present, children are more physically active (Hannon and Brown 2008; Maxwell, Mitchell and Evans 2008). The playground designers Dempsey and Strickland (1999) state that loose parts have the potential to make the play environment complete. In agreement with Gibson’s findings (1986), the empty Asphalt Place, devoid of any equipment, does not afford bodily play activities to the ASP children. Furthermore, a child’s immediate understanding of a place includes others who normally take part in the bodily play there and the equipment usually used in such play (Løndal 2011). The play activities seem to be spontaneously chosen in a field influenced by the place’s physical properties and the sociocultural factors in the particular ASP group. The Asphalt Place’s physical properties, for example, the hard, smooth asphalt surface combined with accessible easy-rolling scooters, tricycles, and toy trucks, afford vigorous and experimental bodily play to the children in this particular peer culture. As mentioned earlier, Gibson (1986) first and foremost focuses on how characteristics of the physical environment encourage action, but he recognizes that objects might also function as affordances. When it comes to bodily play observed at the current place, it seems to be the *combination* of the physical characteristics of the place and different loose parts that function as affordances. At the Asphalt Place, it is the combination of a hard and smooth surface and rolling equipment that functions as an affordance for play activity for these particular children. Given such a combination, a great variety of bodily play activities occur. The following passage from the transcripts may serve as an example.

*The activities at the Asphalt Place include individual activity alongside other children and experimentation with the scooters in terms of balance, speed, and change of direction. Some kids kick the scooters vigorously up the shallow slope and roll down again while performing various balance exercises. Others run their scooters at high speeds, passing other children and equipment on their way, and they take gentle and sharp turns. Edward*



*is experimenting with two scooters; he stands with one foot on each of them while trying to maintain control down the shallow slope.*

The exercises described in this example show advanced personal skills in scooting ability together with friends. The rolling equipment is rotating among the children. The children are keeping up with the activity for a while, and then they go on to other activities at other places. This allows others to play with the scooters and the tricycles. The children are at different skill levels, and they learn from each other. All of the observed children have sufficient skills to use the rolling equipment on the hard, smooth asphalt surface, and movement tips are picked up from each other's performances. The most capable kids take quick trips around the ASP building, and they drive the uneven grassy slope down to the Asphalt Place. In this way the kids choose activities related to their abilities. Each child seems to perceive what the environment, including the surface and the rolling equipment, affords to her or his bodily ability (Heft 1989; Kyttä 2002, 2004; Morris 2004). This supports Greeno's (1994) argument about the importance of the individual child's *ability* related to the affordance. When it comes to play at the Asphalt Place, a minimum skill in scooting and cycling seems to be necessary for bodily play activity to occur. This does not mean that the children only attend to activities involving skills that they have already acquired. In their bodily play at the Asphalt Place, much barrier-breaking activity with the rolling equipment is observed. This is what is happening when the kids are performing various balance exercises with the rolling scooters, such as Edward experimenting with using two scooters in the example mentioned above. This is how skills are acquired and developed in child-managed bodily play among children at the Asphalt Place. In order to enter the activity, however, there seems to be a fine balance between the surface of the place, the equipment available, and the ability level of the individual child. Additionally, other children at the place and their play activities play an important role in the choice of activity. Affordances are associated with the activity place, but they are also associated with the children becoming aware of activities in which other children are involved, and they engage themselves in these. In this way also social ability is needed for entering the play (Reed, 1996). Taking into account the actual level of play activity, movement abilities, and social abilities needed for interaction with the rolling equipment together with peers at the Asphalt Place seems to fit well with the abilities of the age group attending this ASP base.

Bodily play at the Asphalt Place is also closely related to how the place is designed; the surface plays a major role. The affordances that children seem to grasp have certainly emerged in a human culture. The area that constitutes the Asphalt Place, consisting of a hard, smooth surface and rolling equipment, affords the children exciting, joyful, social, and challenging bodily activities. The play activities that are adapted to the current surface and equipment might be regarded as socioculturally acquired activities. This highlights Gibson's (1986) view of how individual acquisition of sociocultural movements happens. They occur as an extension of the species' learning history. The manipulative movements with rolling equipment seen at the Asphalt Place are acquired movements that we are not so "attuned to" from birth. Nevertheless, these movement patterns merge into the children's sedimented repertoire, and are used when appropriate affordances are present (Morris 2004).

Through their activities with the rolling equipment at the surface at the Asphalt Place, habits are acquired. In this way, the individual child and the place are tied together. As I have described elsewhere, this process of habituation of new movements in the ASP most often occurs during joint participation in bodily play together with other children (Løndal 2010c). The process includes both modeling of some "experts'" techniques and joint try-out of new movements.

### **Bodily Play in the Sandpit**

Also in the Sandpit, bodily play appears to be a typical social activity, and occurs mainly in small groups of best-friends. As described above: In this particular peer culture, bodily play at the Asphalt Place is dependent on availability of equipment that the children usually use there. The same is true when it comes to the Sandpit. Oscar's statement represents a clear example of how the children understand this:

*This is the Sandpit. We have to bring shovels and buckets, and we also need cars – small toy-cars. Yes, that's what we need. If we don't have any equipment, there is nothing to do in the Sandpit. Then I would rather go over to the trees and climb.*

According to Oscar's statement, the Sandpit devoid of equipment does not afford bodily play to the ASP children. In fact, in the interview Willie states that *"it is possible to dig and to build something in the sand only with our hands and fingers too."* That is right, but such situations were never seen during the observation periods. The observations show that among these ASP children, it is the fine sand in the Sandpit combined with equipment such as shovels and buckets that afford bodily play that includes molding of landscapes and sand cakes. This pattern also concurs with Heft's (1988) taxonomy.

It is worth noting the calm and confident atmosphere that characterizes the play in the Sandpit. This mood stands in sharp contrast to the vigorously passing activity from/to the Asphalt Place, and the noisy climbing activity nearby. It is apparent that the play is characterized by a mutual relationship between a few friends. In the interview 9-year-old Elaine tells about the relationship between best-friends: *"It's like when you like being together with someone, you sort of understand each other. Then you play with them a lot as well."* When she wants to do something active together with her best-friends, demands are made on reciprocity; they have to *understand* each other. Best-friends like to play together simply because there is a mutual and spontaneous understanding between them. This view concurs well with Reed's (1996) writings about how actions in regard to inanimate objects are integrated in social settings. Among close friends playing in the Sandpit, the interactional ability to share environments with others in bodily play seems to be embodied (Casey, 2001).

The activity in the Sandpit does not seem to require particularly advanced physical skills, and calm role- and pretend play dominates. Other studies have made similar findings about children's play with sand; for example, a study of Cosco, Moore, and Islam (2010) shows that there is very little vigorous physical activity during such play. The following example shows a typical situation in the Sandpit:

*Ida brings typical sandpit equipment and installs herself in a corner of the Sandpit. Melissa, Ellen and Elaine bring two large bottles of water and join her. With gentle movements they strain sand through sieves, and shovel it into buckets and mix it with water. The girls talk calm and friendly to each other about cakes. Ida and Melissa put finished sand cakes on the rim. Five boys are sitting in another corner of the Sandpit, and they are digging with plastic shovels and buckets. Together they shape the surface of the sand into hills, mountains and valleys. When the landscape is completed, they drive with small boats and cars in the landscape while they are speaking with low voices. In this way, roads, rivers and lakes are created in the sand.*

In the Sandpit, the substance of the sand seems to be most essential. If the children have access to appropriate equipment, the fine sand is molded and shaped into objects and landscapes that are used in imaginary role-playing in small groups. Such types of activity are often seen in children's play with sand (Jarrett, 2011), and were thus in line with my expectations. Play in sandpits has a long history in institutions such as preschools, child-care centers, schools and after-school programs, and has long been associated with learning of sensory-motor, cognitive and social skills (see e.g. Hill 1977; Montessori 1967; Piaget 1971). The children's play in the Sandpit occurs surely because the substance of the sand combined with the available equipment affords molding and shaping, but there is also reason to believe that their play is influenced by the historical and cultural roots that such play have in institutions for children, and the expectations these roots give rise to. This supports Reed's (1996) statement that the ability to share environments with others within the framework established by the culture is among the interactional skills that influences the children's actions in an environment.

### **Concluding Remarks**

This article investigates how children are playing at three different places in an outdoor ASP area, and how these places influence their bodily play. As I pointed out early in this article: Based on my preconceptions of play units and schoolyards, I did not initially consider the current ASP area as a typical, stimulating playground for children in elementary school age. If we evaluate the places described and analyzed in this article in relation to playground research and checklists for design of playgrounds (see e.g. Frost et al, 2004), we can affirm that there certainly are significantly more stimulating playgrounds for children's creative bodily activities. Despite my initial evaluation of the area as relatively barren, we have seen children in a wealth of bodily movements in interaction with the physical characteristics of the places and in interaction with the children with whom they share the environment. I realized that the 8- and 9-year-old children were very resourceful in using what they were afforded at these places. In the Climbing Area climbing activities that include locomotory movements and stabilizing postures are the most common. The Asphalt Place is characterized by vigorous locomotory movements that include manipulative movements with rolling equipment. In the Sandpit calm play that includes manipulative movements with digging and molding equipment dominates. The bodily play occurs in a relational process consisting of both affordances and abilities. When the children grasp these affordances in play, bodily activities that are experienced as exciting, joyful, social and challenging occur. The

play activities in the Climbing Area, at the Asphalt Place and in the Sandpit are generally collective and contact-creating; most often, the children play in pairs or in groups, and peer culture is created in this interactional process. Thus, sociocultural factors play an important role for how the children in this particular ASP play at the three places. The Climbing Area has initially what it takes to promote bodily play among the ASP children; the area offers diverse bodily activities that are adapted to the abilities of almost all the children in the group. The Asphalt Place and the Sandpit need loose equipment to be interesting playgrounds for these children. It seems to be the combination of the physical characteristics of the place and the equipment that stand out as affordances, and it seems important that children are allowed to choose for themselves what equipment to use at the two places. This requires access to equipment that fits each individual child's abilities and personal preferences.

The findings in this study contribute to the knowledge about how outdoor environments influence 8- and 9-year-old children's bodily play in the ASP, and should be taken into consideration when outdoor places for children's play are planned and adapted to a particular age group. The developers should ask themselves whether the outdoor area has places with suitable affordances for promoting diverse bodily play in children in the relevant group. The area should include places that offer the children opportunities for locomotory, stabilizing and manipulative movements in social interaction with other children. Furthermore, the area should include places that facilitate movements and activities related to the cultural and historical context in which the relevant children live in. It seems especially important with suitable balance between affordances and abilities for a wide range of children in relevant age. The places should also be adapted even more by access to loose equipment, preferably in collaboration with the children who are supposed to play there.

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