

What is going on out there?

What does it mean for children's experiences when the kindergarten is moving their everyday activities into the nature-landscapes and its places?

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Chapter 1 Introduction

The introduction reflects for why the topic of children's experiences is an agenda worth researching on in our modern society. It also presents central topics of the content and the structure of the thesis.

Background

The title of this thesis relates to a practice where kindergarten groups are spending most of their days outdoors. The Norwegian kindergartens are pedagogical institutions where this practice not only is possible, but where the use of the outdoors for play and learning is a part of the official curricula (Ministry of Education and Research, 2011). These activities occur in a time when there is international concern about children's decreasing loss of possibilities for experiencing nature (Kellert, 2005; Louv, 2009; Sobel, 1996). The emphasis of play and learning outdoors as beneficial for children's development is regarded as special for the Nordic early childhood education tradition (Hakkarainen, 2006; Halldén, 2009a). A motivation for taking children into nature is that this is a way they will learn to take care of nature (Bang, Braute, & Koen, 1989; Langholm, Hilmo, Holter, Lea, & Synnes, 2011; Loftesnes, 1998; UNESCO, 2012). In addition there are also international concerns for children's decreasing opportunities for nature-based experiences (Chawla, 2002; Louv, 2009; Sobel, 1996; Thomashow, 2002). By taking this concern seriously, there are good reasons to conduct research studies on pedagogical practices in which children are taken outdoors. However there is also a need to question what we know about the issue and to question the ideas of what we, as environmental and outdoor educators, believe will be the pedagogical implications of taking children out into nature. In making it a pedagogical practice it is of interest not only to know more about the intentions for taking the children outdoors, but also what the children experience in their encounters with landscapes and places outdoors is.

Through an ethnographic study following two kindergarten groups as a participating observer over a period of ten months, it was possible to get close

to what the children do and their creation of meaning in the encounters with the nature dominated environment.

The point of departure of this study was, and still remains, the headline, and the first question of two, as the second question gives a more specific direction towards the landscape and places the children are going into.

The main questions of the study are:

What is going on out there?

What does it mean for children's experiences when the kindergarten¹ is moving their everyday activities into nature-landscapes and places?

Framing concepts

This study is an ethnographic study, conducted in two nature departments in a Norwegian kindergarten.

There are two central concepts in the research question that I will elucidate in this paragraph. The first concept is 'nature' and the other concept is experience. Both are complex concepts because they can be understood through different cultural and theoretical lenses.

The groups of children I attended to in this study were both nature groups in a municipal kindergarten. But they did not spend their everyday life in the kindergarten institutions in areas that were untouched 'nature'. As a concept 'nature' seems to be used both with ease, but also with different meanings. In this study I will not give a fixed definition of 'nature'. In the geographical sense I do frame 'nature' as areas dominated with topography, vegetation, and other living organisms that have not been brought in by humans for a specific purpose. Both groups I followed mainly used uncultivated land. When I do use the preposition to go 'into' the nature dominated area instead of 'out' it relates to an approach to nature. The children in this study seemed to experience their places as the 'home' of their kindergarten. For that reason I find it natural to use 'going into' the nature, as it expresses the closeness and the belonging to the environment. I will go further into this discussion in the chapter related to experience of places and landscapes.

The concept of experience will be explored from different perspectives. There is no attempt to merge these ideas. On the contrary the different approaches are brought in because they do exist in parallel and they are

¹ Kindergarten is used in Norway for the pedagogical institutions for children age one to six years. In Sweden the term is pre-school and in other countries it is early childhood institutions.

significant for different discourses of how we understand the children's experiences.

Going out with the children does not mean that I have had the same experiences as the children. But I have had experiences in the same environment at the same time. Framed in within the phenomenological understanding of the 'lifeworld' as the concrete perceived world we live within (Bengtsson, 1998) the experienced world is a contemporarily shared world. Schütz in his phenomenology of the social world developed the theory of the contemporarily shared world. It is as a world of social interaction where we are able to communicate and have a shared understanding based on our experiences (Schütz, 1972). This does not mean that we experience the same, but it is a foundation for the possibilities I have to interpret shared experiences and the children's creation of meaning.

Elucidating the concept of experience the ontological understanding of the body as the core for how we experience and understand the world is taken from the philosophy of Merleau-Ponty (Merleau-Ponty, 1962). Observing children age one to six the body expressions and body in movement were important for how they explored and experienced

Children's experiences and creation of meaning are explored as the kindergartens are pedagogical institutions. The theories of experience and learning from John Dewey (Dewey, 1938, 1998) bring in a discourse related to the epistemology of how we learn. Learning is also a communicative process and about acting together. This is one aspect of Dewey's theories and also of Schütz's theories of phenomenology of the social world (Schütz, 1972).

Both the discourse of learning about nature and the discourse of existential encounters with nature are found within the ideas of environmental learning. These ideas can be questioned regarding their deterministic approach on what happens when we do bring the children into nature environments.

Narrative interpretation and critical approach

Narratives are a way we create and communicate meaning. When I in this thesis use narrative interpretation for the construction and interpretation of data I am inspired by ideas from the existential-phenomenological and hermeneutic traditions. The philosopher Paul Ricoeur described the way we structure time not only as chronologic time, but also as narrated time. The narratives, tells stories relates to historicity and to how we understand the

world and ourselves in relation to events and experiences in the past. According to Ricoeur the narrated time is not only individual but also embedded in our collective cultural narratives. The narrated time is not only stories related to events structures in time but also related to lived spatiality.(Ricoeur, Blamey, & Pellauer, 2010) This is of importance for this study as landscapes and places are main topics. I have used narrative inquiry and narrative presentation of my constructed data. Jerome Bruner and Donald Polkinghorne both inspired from Ricoeur advocated the narrative thinking and the use of narrative analyses as significant as scientific methods (Bruner, 1986, 1996; Polkinghorne, 1995). I do not go into the literary science in the classification of plots. When I use the term plots it is my use of Polkinghorns terms for the construction of the narrated meaning, which I describe in the method chapter.

I see Ricoeurs theories of importance because his philosophy of narrated time structures time according to experiences and interpretation connected to the meaning of events. He's structures of the three mimesis relates to different levels of this process; the first mimesis- the prefiguration refers to the pre-understanding we have in order of an action, the second is the configuration, which Ricoeur calls 'the realm of poetic composition' - the text written, and the third is the new configuration, the text read interpreted and understood in different ways(Ricoeur, 1984)

The pre understanding is both embedded in our own earlier experiences, the culture we live within and in existing research in the field. The configuration is presented as a text and in this study due to layers of interpretation from field-notes towards emplotted narratives of how I understand the discourses emerging from the study. The third mimesis, the new configuration takes place in the reader's interpretation with the text. One of my intentions is to bring forward discourses to highlight different interpretations. This is relevant because it is crucial for educational development to have ongoing discourses of our practices.

Paul Ricoeur describes the hermeneutic interpretation as a spiral bringing forward new interpretation and new ways of understanding. An important part of his thinking on interpretation is the critical distance or the hermeneutics of suspicion. This because he urges the need to take a step back and look at our own actions and interpretations with suspicion. In addition to have a 'critical distance' is important because it puts forward different interpretations and also conflicting interpretations. Ricoeur sees these

conflicts as positive because they are a fundament for communication and reflection. The way we understand, interpret and communicate in relation to narratives and historicity is a way to frame out narratives, the stories we believe in about ourselves and others (Kristensson Uggla, 1994; Ricoeur, 1984; Ricoeur et al., 2010). When I do bring in different perspectives on the children's experiences as play, learning, environmental awareness, environmental consciousness it is not to define a practice that will suite all purposes. But is a way to broaden the existing discourses.

Structure

The thesis is structured in two sections. In Part 1 this chapter, the introduction is followed by the Chapter 2 on the cultural contexts. There is a presentation of former studies of importance for my study in chapter 3 and chapter 4 is the main chapter for the theoretical framing of different perspectives on the concept of experiences. Chapter 5 is the method chapter both presenting the ethnographic fieldwork and the construction of data by using narrative inquiry. Chapter 6 contains a presentation of the four studies related to four different plots forms the narrative inquiry; the multi-sensory approach on the children's encounters with landscapes and places; didactic implications; environmental consciousness and social interaction and clan-building. The last chapter in part I is the discussion and conclusion chapter.

Part II Is the four studies two articles submitted and under review, one article ready for submission and one published book chapter.

Part II starts with a list of the studies. Than follows the texts from each of the studies; 1. A rock , a smile, a glimpse and a jump Children's experiences of places and landscapes in local nature environments in Norwegian kindergartens; 2. Bringing the jellyfish home. Developing environmental consciousness Children's encounters with landscapes and places in Norwegian kindergartens; 3. Body, movement and a rock and a jump, then we run without stopping, playing in motion 4. Ethnography and narrative inquiry: about clan building in nature groups in Norwegian early childhood institutions

Chapter 2 Cultural contexts

Cultural understanding

All cultures have their own narratives of whom they are and why they act as they do. Ricoeurs' hermeneutics 'Critical distance' is a concept that encompasses the direction of this study. The idea of 'critical distance' as to take a step backwards to get a distance to how interpret and understand what we study from different perspectives (Ricoeur et al., 2010). 'Critical distance' can reveal new perspectives and multiple views on different practises in outdoor education. It is also a way to reflect on what we teach about children and to nature in higher education for pre-school teacher students.

Education is always embedded in a cultural context and can be seen as a way of bringing cultural heritage to the next generation (Bruner, 1996; Dewey, 1938). Being a part of a culture makes it easy to take ideas and practises for granted.

Children do grow up within a culture, but children are also seen as own group that also can constitute their own cultures (Ariès, 1996; Oswell, 2013; Papatheodorou, Moyles, & Alin, 2012). Both the in presentation of the Norwegian context and in the presentation of the environmental learning context there are notions of a cultural and educational understandings of childhood.

A Norwegian context

The Norwegian context also relates to my cultural background. For that reason I do start this chapter with my own background before presenting a glimpse into the historical narrative of Norway, and the Norwegians relation to nature.

The study has emerged from an interest in the relationship between children and nature. I had been working in teacher training education under the department of education at a university college in Norway for fifteen years when I started this study. My affiliation was sport and physical education and most of my courses in those years were related to outdoor education and early

childhood education. I have an educational background in natural resources, biology, and physical-education and school teachers training.

I grew up in Norway in the 1960s spending my childhood in a small newly built settlement close to a town, but still in a rural area surrounded by farmland and woods. When I see photos of myself at two or three years old, most of them are taken outdoors. The outdoors was the most important arena for play with other children. We had no car, and that was also quite common in those days to move on foot, skiing, biking or using a 'kick-sledge' named a 'spark' in Norwegian.

When I look at even older albums with photos of my parents when they were young, most of the images are from Norway is out of doors; in the woods, on my father's family's cottage in a lake or as wanderers in a mountain area. On weekends my mother and I often went for walks, with a lunch packet and a thermos or out to the island where my grandparents lived with free access to sea-bathing, rowing, and fishing. The tours outdoors were often social events where we met other families with children. Every year we had at least one week in the mountains. The first years were at a cottage where they had cattle, but when I was five we went rambling in different areas sleeping in cabins owed by the Norwegian Trekking organisation. My background makes me culturally embedded in seeing the outdoors as a natural place to be. I do think that this is a background that nurtured my later interest for biology and outdoor recreation.

My own experiences can be an obstruction for my interpretations, but they can also be beneficial. Obstructive because they can make it easier to see positive rather than negative aspects by going outdoors, like romantic childhood memories. Positive because I have experiences that can be recalled and make me understand the outdoor settings better than if it was all new for me.

Spending much time in nature of course requires access, both geographically and legally. In Norway the 'right to ramble' in nature traditionally has been regarded as a positive value. Our legal right of access makes walking through and even camping on uncultivated land on other people's property possible (Ministry of Environment, 1996). These rights are traditional rights, and this means that the common use of uncultivated land is a part of the Norwegian culture.

Nature is also connected to a national narrative. In being a young nation, we got our own constitution in 1814 and were constituted as an independent

state in 1905. Historic narratives of Norway and the Norwegians relationship to nature were central the national-romantic period. Norwegian painters such as Tjiedemann and Gude, Flintoe and Fearnley all had great success with their national romantic paintings of the wilderness in Norway in Europe between 1840 and 1860 (Christensen, 2002; Tordsson, 2003). In the same period the collection of our folk-stories took place. They were written down by Asbjørnsen and Moe, illustrated by painters that aimed to make drawings connecting the stories to the Norwegian nature (Kittelsen, Moe, Asbjørnsen, & Borge, 2009).



Fig 1 Troldskab, illustration Theodor Kittilsen,

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These collected stories are read and well known by Norwegian children even today. The images of nature landscapes were used in the national movement of building Norway as an independent nation. The rough and demanding landscape was made something of which to be proud of. Our national heroes were not generals or aristocrats. They were skiers and sailors conquering the last unknown spots on earth, crossing Greenland, sailing the North West passage and reaching the South Pole before the Englishmen. Men like Fridtjof Nansen and Roald Amundsen still hold their position as national icons. Though none of these national heroes were concerned with kindergartens, they have had an impact on the Norwegian cultural identity. At his time Fridtjof Nansen had a strong public opinion on how the young generation

should be raised by outdoor activities like skiing, hunting, fishing and trekking. He viewed the lifestyle of modern urbanity created threats, like laziness and selfishness. He viewed the Norwegian Outdoor Life traditions, Friluftsliv², and the English sports as distinct different. He saw Friluftsliv the pleasure of being in nature, as having value in itself. Friluftsliv should build on competence and experience, not hazard and competition (Slagstad, 2008; Tordsson, 2003). There is also another cultural narrative on Norwegians and outdoor activities that relates to the traditions of living in rural areas close to nature and the use of local nature areas as a part of the everyday life. In the grand narrative of Norwegian Friluftsliv this is not highlighted. How it has been understood as a natural way of being also by women is described Gurholts study of women in Finnmark and their use of the local nature areas (Gurholt, 1999). Consequently, in Norway, there has been a generally positive attitude towards being outdoors. Still we do know that there are groups, which do not share this affection for being outdoors. There are, of course, also Norwegians who do not like the outdoor life. A new report from the Directorate of Nature resource management shows that children in Norway today are less out in nature specially in their local areas than just 10 years ago (Skar, 2014). This indicates that there is a change in both attitudes towards outdoor recreation activities and Friluftsliv and how active the population are outdoors.

The Norwegian and Nordic Kindergartens

Identifying education outdoors, not only on playgrounds but also in nature and uncultivated land is not new. In Norway the history of the kindergarten institutions can be traced back to two main lines. There is a social history, the kindergartens as institutions established to take care of children of poverty as their parents were working long days in industry. The other history is the pedagogical history with roots back to the times of the ‘enlightment’. In this tradition the children’s upbringing, learning in nature, the connection between children, nature and play has been of importance. Play both as independent activities and play in nature as pedagogical methods, (Balke, 1995).

² The idea of Norwegian ‘friluftsliv’ is also used in international literature and seen not just as outdoor recreation, but also concerning humans close relationship with nature, feeling at home in nature and take care of the nature (Henderson & Vikander, 2007)

These pedagogical ideas in Nordic kindergarten tradition and can be traced back to the pedagogical ideas of Fröbel and Rousseau. (Halldén, 2009).

The latest movement advocating the use of outdoor environments and nature in early childhood education in a Nordic context is the forest-school movement. In Sweden they are called 'Ur and Skur' and are closely linked to the Swedish Outdoor Association (Halldén, 2009b; Lysklett, 2013). In Denmark they are called Forest Kindergartens (Skovbørnehaver). These forest kindergartens were an inspiration for projects on outdoor kindergarten in Norway founded by the Ministry of Environment in the end of the 80's (Bang et al., 1989). In Denmark and Norway however these kindergartens are not cooperating with the trekking organisation. In Norway we have private run kindergartens and municipal run kindergartens which call themselves nature kindergartens. These kindergartens do spend most of the day outdoors. We do also have kindergartens where there are some departments located in and around the kindergarten building, and some departments located outdoors as nature groups. All Norwegian Kindergartens are regulated by common legacies and by common curricula (Ministry of Education and Research, 2011). The Forest Kindergarten movement has also spread outside the Nordic Countries. One example is the Forest-Schools in the UK, as presented by Sara Knight. This is a concept regulated by assessments and security rules to fit into the common regulations for early childhood institutions (Knight, 2013).

The Danish anthropologist Eva Gulløv has questioned the outdoor practice. Her question is why we living in a modern society should let the children spend the days outdoors in nature throughout the year. This when other people in these societies are living their daily life mostly indoors (Gulløv, 2006). I do find this question interesting and if we advocate for this practise we need to know why.

Formal curricula framing central aspects

In the Norwegian Kindergartens the children are between one to six years old and the use of outdoor areas and nature dominated areas is common (Lysklett, 2013; Moser & Martinsen, 2010).

There are formal acts and frameworks important for the topic of the study of the physical environment in the kindergartens and of children experiencing nature. The Norwegian kindergartens are seen as a part of our educational system; they pedagogical institutions. The content of the kindergarten

therefore is to be seen as a part of the pedagogical upbringing and learning. The two main documents Norwegian kindergartens are given by the Norwegian Ministry of Education and Research are; “The Act of the Norwegian Kindergarten 2005” and “The Framework of the Content and Tasks of Kindergartens 2011”, both included in the Framework plan.

In this plan there is also an aspect of the Norwegian culture in flux and that experience is individual and even for children in early age it will differ.

There are now many ways of being Norwegian. This cultural diversity shall be reflected in kindergartens (Ministry of Education and Research, 2011, p. 8).

One of the paragraphs in the Kindergarten Act, section 2 makes a statement about the environment, play and experiences:

“Kindergartens shall provide children with opportunities for play, self-expression, and meaningful experiences in safe and yet challenging environments.”

Further guidelines on the same page related to this paragraph:

“Kindergartens shall have sufficient space and equipment to allow play and varied activities that promote a love of exercise, and provide a wide range of motor and sensory experiences, as well as the opportunity to learn and master skills....Staff in kindergartens must look at the physical frameworks for children’s learning environments as an entity. The countryside and local neighbourhood also provide opportunities for experiences and challenges (Ministry of Education and Research, 2011, p. 19).”

The physical environment of the kindergarten is a part of the framework for children’s learning, and this learning is linked to the experiences.

Another intention given in the Frameworkplan is the one of children’s upbringing towards understanding of sustainable development. ‘The understanding of sustainable development shall be promoted in everyday life.’

Respect for life is central The outdoor environment is also mentioned explicitly in different contexts. Under the subject of nature, environment and technique, the rhetoric is strong towards an emotional relationship between children and nature: The children shall learn to love the nature and the subjects of movement and health (Ibid.).

The central authorities are being so explicit to develop good attitudes towards use of the outdoor environment both because it benefits children’s motor development and their relationship to nature.

CULTURAL CONTEXTS

The children shall be able to develop their creative zest, sense of wonder and need to investigate. They shall learn to take care of themselves, each other and nature (Ministry of Education and Research, 2011, p. 7).

Though nature is mentioned in twenty different places there is no explicit definition of nature. 'Outdoors' is mentioned ten times, and on one occasion as "the natural environment" (ibid. p.19). Environment is also used and connected to other descriptions such as the physical environment, the social environment and learning environments.

In the section above 'the sense of wonders' is also brought in. We find this expression used in different places, such as in the introduction of the learning areas, and explicit in the area of Nature, environment and technology. In the quotation below you see how it is related to play and transferred to wonderment

Playing is at the core of children's wellbeing and self-expression, and interaction with others whilst playing is important for a balanced development. Kindergartens must allow for the children's initiative, imagination and sense of wonderment (Ministry of Education and Research, 2011, p. 18).

Experience is also a concept much used in the framework-plan. It is also not defined and is found in different contexts. For example, it is mentioned as related to nature, to emotional experiences, to social settings, to language and to play. The experiences can be sensory and motoric, and contribute to learning. Under the paragraph on learning:

Learning takes place in everyday interaction with other people and with the community, and is closely related to play, care and formation. Children can learn from everything they experience in all areas of life.

And further on the same page:

Support and challenges through varied experiences, information and materials can promote learning (Ministry of Education and Research, 2011, p. 29).

As the text above connects experience and learning it is interesting to see that most of the issues from the learning areas are expressed by what the children shall experience and not learn.

In the general introduction of the learning areas it says that the content of kindergartens is divided into seven learning areas and that these are of central

importance to experience, exploration and learning. These areas should also largely be the same as the ones that children subsequently encounter in school (ibid. p.34). Instead of being specific on what the children *should learn* the aims are often expressed through what the children *should experience*, explore and learn or develop. This makes the content more open to interpret, and allows a freedom to consider the outcomes of activities. I suggest that it creates a need of explicit elucidation regarding the connection between experience, exploration and learning. There is a gap between the frequent use of the concepts of experience, learning and exploration and the lack of consistency in how they are used. As the curricula covers the tasks and content for a pedagogical institution for children age one to six years we know that this is a time in life when the children develop a lot of basic skills; motoric skills, language, identifying shapes and forms as a practical pre-understanding of mathematical concepts and they are participants in social settings. By observing the children outdoors their experiences are of interest also in relation to the concepts of learning and exploration.

The context of environmental learning

Environmental learning is often modelled on an instrumental development of skills and attitudes. There is a tendency in existing models for environmental learning towards an approach for ‘the child saving the world paradigm’ and what I would call environmental determinism.

As pedagogical ideas that has influenced the Nordic kindergartens can be traced back to the French philosopher Rousseau (Balke, 1995) it is important to understand that he developed his ideas of the upbringing of children in the time of the first French revolution, and the time of the enlightenment. His idea was to raise the child close to nature with one skilled person to guide him. From this upbringing in isolation from the rest of the society, he would develop a free spirit and be ready to enter the society as a responsible citizen at the age of 14-15 years (Rousseau, Bessesen, & Kolstad, 2010). Today the idea of the child the child’s right to participate in the society is quite the opposite from the ideas of Rousseau. From that point of view I question a deterministic model for children learning in nature a model with a content I see as closer to the ideas of Rousseau then to a the contemporary pedagogical ideas. The model as presented here has been repeated for decades in textbooks used in pre-school teacher education programs. This indicates that

the model easily becomes ‘taken for granted’ for practicing pre-school teachers. One model of these models is the one below the ‘Hierarchy of learning in nature’ model.



Fig. 1 Hierarchy of learning in nature (Bang et al., 1989; Loftesnes, 1998) My translation.

Here the model is presented as a pyramid. In other books it occurs as a staircase, but the content and the structure of the levels are the same (Bagøien, Storli, & Otnes, 2002; Bang et al., 1989; Langholm et al., 2011; Loftesnes, 1998; Osnes, Skaug, & Kaarby, 2010). Making a story, reading the model above as a narrative is a way to be aware of the essence of what it tells. It is the story of the child saving the planet.

One question from the lowest level of the model is: ‘What does learning in nature mean?’ This concerns the situated context and concepts used as both the concept of learning and the concept of nature can be understood in different ways. In the title of the figure and on the three lowest levels learning is a central act, but in the two upper levels the learning aspects are left out as they occur just as an effect of the lowest stages of learning.

There are no visible elements representing forces or elements that contribute to the development of the children in a positive or negative way. Making it a story elucidates the illusion of predicting one outcome of taking the children outdoors.

Another model developed by Louise Chawla is related to the impact of encounters with nature in early age based on eco-physiological theories and

theories of attachment in early years. The model is inspired by Kytta's research on children and their relation to the environment, which I will refer to in the next chapter. Chawla revisited her own research with interviews of environmentalists in Norway and USA. They had told their stories of what triggered their engagement with the environment by going back to their own childhood and adolescence. Chawla noticed that they particularly referred to the parents as an important inspiration, both by taking the children outdoors, and also by inspiring them to gain knowledge about the environment.

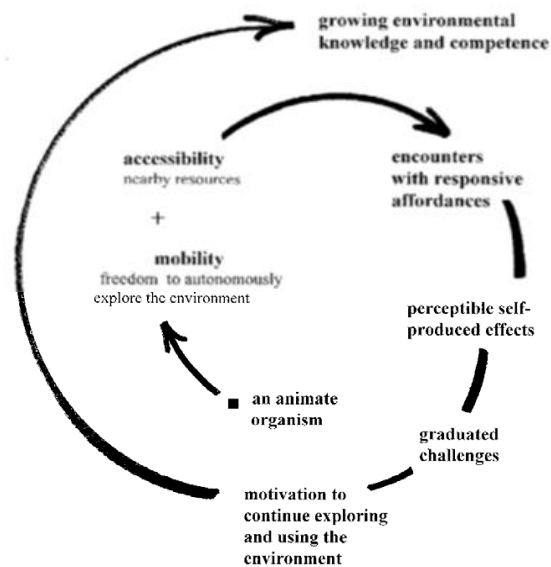


Fig.2 Model of: Positive interaction circle of accessibility, mobility on engagement with the environment (Chawla, 2007, p. 155).

As a model for empirical research I read that this model has a direction towards a given result. In this respect it has similarities with the 'learning in nature' model.

When it comes to research on children's experiences outdoors I see a model such as this can represent assumptions of the development of the child rather than be considered a tool for empirical research.

Regarding the model by Chawla a critical point is the mismatch between the text and the situated lived experiences of children as individuals who grow up in different cultural contexts. There is a need to bring in some of the different perspectives to broaden the ideas of the outcome of children's encounters with natural environments. Instead of a determination model we should rather develop a consciousness of our aims in outdoor and environmental education.

In questioning given truths in environmental education, Noel Gough (Gough 2002) claims that storytelling is an under-used method of environmental education research in the West. In his critical approach he makes links to the concepts of 'blank spots' and 'blind spots' in educational research. Ignorance of 'blank' spots is ignorance of new knowledge covered by questions already posed, ignorance for 'blind' spots are related to questions that have not been asked. By using Ricoeur's theory of critical reading the interpretation in distance and critical view create openings for new and different perspectives (Kristensson Uggla, 1994).

In using 'critical distance' perspectives I see two major problems with the model of children learning in nature; the first is the idea of the step by step causal development, and the second is the generalization. The search for blind and blank spots starts with questioning the existing model of 'Children learn in nature' and the search for identifying other outcomes and possibilities for educating in nature.

Summary

The idea of 'Children learning in nature can' be understood in the light of the cultural history. One of these cultural historical contexts is the Norwegian national history which is rich on narratives of the importance of nature both as a national symbol and as a good place for children to grow up in. In the Norwegian and also the Nordic Kindergarten tradition the use of the outdoors and children's play is highly regarded. In the curricula for the Norwegian Kindertagens ideas of experience, learning and nature are words that are used throughout the document. Still however there is no consistent structure in the curricula of how to see the outdoor experiences as a part of the children's learning process.

I interpret the two models for learning in nature in the context for the environmental learning as deterministic in the sense that they that both describes and predicts a certain outcome from bringing children into nature. I see it of importance to question these models. This as they make us take it for granted what happens when we do bring take the children outdoor , and there may be 'blind' and 'blank' spots of importance to develop the outdoor practice that we might not see if we do not go further towards the children's experiences and what is going on out there.

Chapter 3 Studies on children and outdoor environments

There are many studies on children and nature (Anggård, 2009; Arlemalm-Hagser & Sandberg, 2011; Fjørtoft, 2000; Grahn, 1997; Kahn & Kellert, 2002; Kernan & Devine, 2010; Kyttä, 2002, 2003, 2004; Malon, 2003; Mårtensson, 2004; Niklasson & Sandberg, 2010; Sandseter, 2010; Waller, 2010; Wals, 2007). The studies presented here are mainly related to children experiencing or learning in nature. The theme is broad the sources has been found in different fields of research. The main source for this review is ERIC. I got many hits on different combinations. The result is a selection of studies I found specifically relevant for my focus on children's experiences in encounters with nature-landscapes and places outdoors. Another criterion for relevance was early childhood studies and outdoor experiences.

Diverse topography and children's play

One study that can be said to set an agenda for focusing on the physical environment of the pre-schools in a Nordic context was conducted by the Swedish landscape architect Patrik Grahn. In his study Grahn compared two different pre-school outdoor areas. His study of the children's play and their motor development showed differences that were significant using the EUROFIT test of physical fitness, for measuring the motor skills. The children being outdoors all day, and with the more diversely designed playground had a significantly better score. This was particularly the case with balance and strength in hands, arms and trunk (Grahn, 1997).

This is supported by another comparative study from Australia of children's play in early childhood centers on two different playgrounds, one with green areas and the other one with a new designed playground with elements in steel and concrete. This study showed that the green playground was the one that inspired the most to imaginative play (Dowdell 2011).

Gunilla Mårtensson's thesis on 'The landscape in the children's play', had the aim to gain knowledge about what the physical environment means for children's play in limited places such as pre-school playgrounds Mårtensson

was looking for dynamic areas, and on a smaller scale, dynamic places. Her definition of dynamic areas is a pragmatic marked area/place on the playground with many observations of play that can be called 'challenging' (Mårtensson, 2004). Representing observations of children's movements on a map showed how the dynamic places were interrelated by the way the children used them in their play. The dynamics of the play was used to describe the relationship between children's play and their physical and social environment. In Mårtensson's study, the children were creators of places, and both the dynamic places and the connections between the places were vital to the possibilities for play. Movements and the direction of movements were more limited when there were difficulties in access from one dynamic area to another. This thesis is also interesting because of the wide range of methods used. Mårtensson used field notes, video observations, interviews, conversations and photos. She also developed a system for mapping the dynamic areas, and in this way, made a visual representation of where the places were and how they were or were not connected. This meant that it was not only the size of the playground that was important, but also how it could be used as a landscape (Mårtensson, 2004).

Affordance and children's play

Interesting studies related to children's use of the outdoor environment are studies using the theory of affordance (Fjørtoft, 2000; Kyttä, 2003; Sandseter, 2009). The theory of affordance is the theory developed by Anthony Gibsons on the functional aspect of the environment.

Gibson's definition of affordance is that:

An affordance of anything is a specific combination of the properties of its substance and its surfaces taken with reference to an animal (J. Gibson, James, 1977, p. 67).

An affordance is the function of a landscape according to individual preferences and it relates to how we perceive the landscape. The landscapes offer different things for all individuals. An affordance can be both positive and negative.

In Heft's study on affordances of children's environment: A functional approach to environment descriptions (Heft, 1988), he used a functional approach of affordances to describe the resources of children's outdoor

environment. His taxonomy is based on studies of descriptions of a boy's day from morning till he went to bed, on studies involving interviews with children and children's drawing maps of their favorite places. The taxonomy identified the relations between the form of the physical environment and the immediate experiences. It makes visible the relationship between the physical form of the place and the affordances these places have for children's play. From the park Heft identified sublevels of affordances from ten different places.

Hefts taxonomy. A preliminary functional taxonomy of children's outdoor environment (Heft, 1988, p. 36).

1. Flat relatively smooth surface.
 - Affords walking
 - Affords cycling, skating and skateboarding
2. Smooth surface
 - Affords coasting down (e.g. on bike, wagon)
 - Affords rolling, sliding, running down
 - Affords rolling objects down
3. Graspable/detached object
 - Affords drawing, scratching
 - Affords throwing
 - Affords hammering, batting
 - Affords spearing, skewering, digging, cutting
 - Affords crumpling, squashing
 - Affords building structures (e.g. raw material of forts)
4. Attached objects
 - Affords sitting on
 - Affords jumping-on/over/down from
5. Non-rigid, attached objects
 - Affords swinging –on (e.g. tree branch)
6. Climbable features
 - Affords exercise/mastery
 - Affords looking out from
 - Affords passage from one place to another (e.g. stairs, ladder)
7. Aperture
 - Affords locomotion from one place to another
 - Affords looking and listening into advent place
8. Shelter

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- Affords microclimate
- Affords perspect/refugee
- Affords privacy
- 9. Mouldable material (eg. dirt, sand)
 - Affords construction of objects (e.g. pottery)
 - Affords pouring
 - Affords modification of its surface features (e.g. sculpturing)
- 10. Water
 - Affords splashing
 - Affords pouring
 - Affords floating objects
 - Affords swimming, diving, boating, fishing
 - Affords mixing with other material or modify their consistency

Heft's taxonomy is used to describe and give an overview over landscape categories and their affordances on different places (Fjørtoft, 2000; Kyttä, 2003; Sandseter, 2009).

Ingunn Fjørtoft made the first study on children in early education outdoor play in Norway using the theory of affordance. These studies have their point of departure grounded in Gibson's theory of affordances (J. Gibson, James, 1977). It is a theory relating to what the environment offers to the individual child. Fjørtoft made a map system from her observations showing what the places offer for possibilities for play. The landscapes with many affordances for play she called 'playscapes' (Fjørtoft, 2000). The affordance for play was related to a diverse vegetation and topography. The children liked places to hide, places to climb up and slide down, and they liked places with the possibilities of fast movements. The thesis called "Landscape as Playscape" was a comparative study of two pre-schools: one using the woods as playgrounds every day and the other one using their traditional playground in the territory of the kindergarten. She also did the EUROFIT test. She saw significant differences in balance and coordinative skills between the out-door children and the playground children (Fjørtoft, 2000).

Kytä, a Finnish researcher, has made research studies inspired by Heft's taxonomy. In her comparative study on children's abilities for free activities and abilities to move freely around in their neighbourhood in different neighborhoods in Finland and Belarus she interviewed children and their parents. Kyttä identified different environmental features of importance for

children's play and exploration. In this study Kyttä identified connections between children's access, ability and allowance to move and the possibilities to play in environment with many affordances. As Heft she described the affordances of play related to the environmental features and she also defined a category of social affordances (Kyttä, 2004).

A study on children's risky play points at the importance of children being allowed to play in environments with an affordance for risky play because it develops the children's ability for calculating risks later in life. Following on from Heft's work (Heft, 1988) Sandseter (Sandseter, 2009) looks at features of potential affordances. In her study these were; climbable features; jump-down-able features; balance-on-able features; flat, relatively smooth surfaces; slopes and slides; swing-on-able features; graspable/detached objects; dangerous tools; dangerous elements; enclosures/restrictions. Using these affordances of possibilities for risky play in an ordinary pre-school and in a nature pre-school there were possibilities in both places, but there were also more constraints for the children's mobility in the ordinary pre-school. One of these constraints was the fence, as the children in the nature kindergarten had the possibility to move around more freely (Sandseter, 2009).

Focusing on the lack of challenge and overprotection the Australian researcher names the generation of children born after 1991 the "bubble-wrap generation. Malone was concerned about middle class parents and their over protective attitude and upbringing. She lists the implications this restricted independent mobility and environmental play and learning can have for children; lack of environmental competence, lack in sense of purpose and by that also lack in self-confidence, lack of self-worth and efficacy, lack in social competence because of restricted access to other people and to build social capital outside home and school, lack of resilience (Malone, 2007). Assumptions like this are explored in other studies using the affordance concept (Sandseter, 2010).

Niklasson and Sandberg (Niklasson & Sandberg, 2010) identified small differences in preferences in use of what they call public and private spaces. A public space has free access for all, and is a place where many children gather, as private spaces are in use by smaller groups. Niklasson and Sandberg used taxonomy of affordances and made a quantitative study measuring how many of the children had preference for the different categories of environments also outdoor environments. They found that the private places, as shelters, were regarded as more social places than the open public places on the

playground or in the schoolyard. On the private places the children gathered in smaller groups, and the researchers describes how they could hear and observe the activities on these places from places nearby.

Teacher's and children's perspectives on outdoor learning

There are studies that are based on perspectives of the teachers or the children on outdoor learning. From a study of outdoor education practices project in a Norwegian primary school, Arne Jorde, relates his study to the pedagogical ideas of John Dewey. The outdoor education as practiced in the outdoor education project of this school also included use of institutions and companies in the local community so it was not limited to outdoors and nature dominated environments. One of his main findings was that students with learning and motivation problems in classroom settings benefitted from outdoor experiences. The project also challenged the teachers to think differently about their teaching methods, as this project involved all the school subjects (Jordet, 2007).

From a project initiating the use of outdoors in education, two researchers from the University of Swansea made a study of the teacher's intentions and of the practical outcome. The results in this study are based on teacher reports on how they used outdoor areas in school in this project. The children were ages three to six years. Even when outdoor teaching was uncommon the teachers were positive about using more time for lecturing outdoors. Most of the outdoor education was located outdoors in the schoolyards. One school had made parent supported excursions to the local beach. However, it was surprising that despite the teachers' positive attitudes the use of the outdoors had been limited. Factors for limitations were reported as weather conditions, lack of proper clothes and risk assessment. The researchers concluded the use of the outdoors might be a missed opportunity due to these limitations (Maynard, 2007). Maynard's study shows that how we assess the possibilities for going outdoors can be related to a cultural context of the schools including practical issues such as consideration for how the children are dressed and also to the attitudes of adults and formal restrictions regarding risk assessment.

"Don't Come To Close To My Octopus Tree" is a paper about another project in which children three to four years were taken out to a local park to

interact with natural surroundings and develop their own learning paths and dispositions. The main purpose was to elicit the children's perspectives of their outdoor experiences and to investigate the children's dispositions within the outdoor environment. One way the children's perspective is presented in this study is through narratives from their imaginative play related to places in the outdoor area (Waller, 2006). Waller's study goes beyond the functional aspect of the environment. Through narratives he captures the construction of knowledge as a perspective on children's production of meaning with imaginative play.

From an ethnographic study in a nature-kindergarten in Norway, Melhuus describes the children's free play as a democratic practice, and emphasises this as an interesting issue for further exploration (Melhuus, 2012). As Jorde, Maynard and Waller her studies also are focused on the children towards both the children and the adults.

Nature-science and environmental learning

Going outdoors creates a unique possibility for situated learning about nature, plants and animals. Focusing on conversations between pre-school children and their teachers Thulin, a Swedish researcher, urged the importance of the answers given by the adults. On some occasions the adults seemed to have an attitude to the small animals, talking about them as if they were humans (Thulin, 2011). Thulin's study points towards a difference between being in nature and learning about nature in nature. If we do see bringing children outdoors as a way to education for sustainable development then it follows that just being outdoors may not be sufficient. For outdoor educators, it is of interest to see how we can bring the children's questions further towards reflection and knowledge.

A study of Aerleman –Hagser was conducted with pre-school teachers who were awarded with excellence for work in sustainable development. She questioned the teacher's communication with children and how they worked on sustainable development. The teachers were teaching natural science and respect for life and to care for nature. Still little of sustainable development issues were reflected in the actual planning for the programs in the pre-schools. As a conclusion Aerleman–Hagser suggested we need more knowledge about practise and ideas of how to work in sustainable development in pre-schools (Aerlemalm–Hagser, 2013).

Chawla also argues that there is a need for further descriptions on what triggers the development of the environmental engagement. Using questionnaires and interviews with environmentalists and teachers in environmental education in USA she provided data that lead her to conclude the importance for children to be taken into nature (Chawla, 2007).

A critical approach to the idea of Education for Sustainable Development (ESD) in early childhood education is presented in a paper by Duhn based on a study of ten Early Childhood Institutions in New Zealand (Duhn, 2012). This study was conducted over a period of three years. Duhn argued that bringing complex global issues into local culture and place-based learning can be beneficial. Maori people did not have any division for local and global issues, and they did not see any division between nature and culture. By using topics from local practises they engaged both the children and their parents in recycling plastics. Duhn registered that this practice also was associated with an increased understanding of global issues. The Maori people came to understand that the production of waste not only influenced their local environment but also global environments. Duhn argues the need to rethink the division of nature and culture, and advocates place-based learning as a way of teaching ESD in early childhood settings (Duhn, 2012). In doing so Duhn brings into account different cultural perspectives and how new ways of understanding can develop from local practices and relevant local issues.

Carol Brandt , anthropologist and educator presented how we understand landscapes by describing different perspectives from landscape-based education. Transitioning towards landscape-based environmental learning Brandt has the following view on the concept landscape:

Landscape is not static, but a concept shifting and that affords a location of critical reflection. Landscape-based education is the study of developmental spatial patterns through time that allows us to assess the impact of particular human practices on the natural and physical environment (C. B. Brandt, 2010, p. 277).

Against this background she urges that landscape, as context for learning demands a continual process of repositioning the perspective on how we understand our place in the world. This theme will be further explored in the chapter 4 on experience. The themes Brandt identified in the selected studies were: 'Childhood Perceptions and Lifelong Connections to Landscapes', 'Landscapes for Critical Reflections', 'Fieldtrips, Guides and Mobility to engage in learning experience', 'Shifting Levels of Analyses'. The shifting

levels were used to identify the micro and the macro levels of environmental changes over time, as well as components of ecosystems, socio-ecological learning and landscapes. This brought in the link between nature and culture as well as the historical context. The last theme was 'Landscape, Citizenship, and Public engagement' (C. Brandt, 2013). Elements of these topics can be recognised in the models for learning in nature. In Brandt's conclusion she points at the dynamics of landscapes shaped by nature and cultural processes and the way the natural and cultural processes shape the landscape. This approach on culture - nature processes is interesting because this connection can be overseen by only focusing on nature landscapes as such. She also claims the need for multimodal teaching strategies and trans-disciplinary insights in landscape-based environmental learning.

The nature groups of the kindergartens I followed had a framework that emphasised a trans-disciplinarily approach learning. Teaching towards public engagement using a landscape- culture approach can as I see it also be connected to the trans-disciplinary curricula in outdoor education. These are aspects to be considered and elucidated when conducting a study in the nature kindergarten groups.

Summary

The research in the area of children's experiences of nature is connects to a wide range of research; such as early childhood and outdoor play and learning, nature-science, environmental education and also trans-disciplinary learning. Studies conducted in Swedish pre-schools has shown differences in activity levels of play and how children use the landscapes an places by moving in and between them. There are different research-studies using the theories of affordance on the functional relationship between the environment and the children's experiences. These have contributed to knowledge of the environmental features. These studies are considered to be important when planning landscapes promoting children's play. These studies have also set an agenda for the connection between the topography and children's risky play.

Research-based knowledge on children's experiences and learning about nature in the outdoors in early childhood education questions the pre-school teachers' attitudes and knowledge due to the lack of implementation of the topic of ESD in written curriculum plans. The discourse of ESD can also be linked to the idea of place-based learning and landscape-based environmental

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learning. There are studies involving teachers and children in outdoor learning that reveals the opportunities and obstructions in using the local environment and that point at the outdoor learning remains a lost opportunity

One of the studies, an ethnographic study in a nature kindergarten brings forward the discourse of learning democratic practice in outdoor play.

As a conclusion of this chapter I see a need for further research focusing on the children's own experiences.

Chapter 4 Experience

Experience is a key concept in this study as it takes its point of departure in children's experiences. Experience is also a contested concept, as it is used and understood in different ways. For this study the concept will be elucidated from several approaches; Experience and learning when seeing experience as a part of the learning process, experience of places and landscapes; embodied and emplaced, experience and play, experience and environmental learning and experience and wonder.

Bringing in aspects of how we understand experience can contribute to developing the ways in which we understand children's experiences and learning outdoors.

Experience and learning

The kindergartens in Norway are the initial entry point into the educational system with its own curricula with a content related to experiences and learning (Ministry of Education and Research, 2011). The pedagogical theorist John Dewey's ideas of experience and reflective thinking relates to the discourse of experience and learning. One of the notions that make his ideas relevant is his general assumptions on how we experience and how we learn to think in connection to the process of being educated (Dewey, 1938, 1956, 1997, 1998). As the concepts are weakly or not at all defined in the Framework Plan, see discussion chapter 2, I see a need for theories that takes into account children's experiences and the pedagogical aims for children's learning. From Dewey's perspective three aspects of experience are required if experience is part of the learning process. These are: *Continuity*; for the experiences being educative Dewey claims there has to be a continuum, meaning that the experiences need to be linked to each other in a cumulative way. *Situation*; the experiences are framed by a situation. In this Situation we find the third aspect; the *Interaction* between the child and its environments, the external conditions. In this respect the experiences are a contribution to personal growth, growing as developing physically, intellectual and morally (Dewey, 1938). This development is not determined, but related to how we

reflect on and create meaning from our experiences. Using the concept of experiences and learning in the curricula will then according to Dewey, not only be a matter of experiences, but also how the experiences are structured, the situations they occur in and how they are understood within the interactions both with the environment and with other persons.

Dewey made a critique of the school system in his time. According to Dewey, experience is a part of an educational process and to be so it is linked to action and to reflective thinking. (Dewey, 1938; Løvlie, 2013).

Dewey described this process of experience and thinking starting at an early age with following example:

Thinking begins as soon as the baby who has lost the ball that he is playing with begins to foresee the possibility of something not yet existing- its recovery- and begins to forecast steps toward the realization of this possibility, and by experimentation, to guide his acts by his ideas and thereby also test ideas. Only by making the most of the thought factor already active in the experiences of childhood, is there any promise of warrant for the emergence of superior reflective power at adolescence or at any later period (Dewey, 1998, p. 89).

The experience and the reflective thinking are not separated, but are a unity in the process of learning and connected to activity.

In his book on 'How we think' Dewey (Dewey, 1998) brought in the importance of uncertainty and of inquiry; the state of doubt and the act of searching. Two examples from common life; one on experiencing the change of clouds and by looking up and thereby reflection on these observations one can conclude with the coming change of weather ;the other on finding ones way, being a wayfarer in a unfamiliar landscape, using memory and exploration to find the right road exemplified the process form uncertainty and inquiry. The examples can be transferred to how children learn to interpret signs of weather, of how to determine which jellyfishes to touch or not. By experiencing challenges of uncertainty and making an inquiry and coming to a conclusion there is reflective thinking in everyday experiences.

About the small child before starting school:

'Abandon the notion of subject-matter being something fixed and ready-made in itself, outside the child's experiences; cease thinking about the child's experience also as something hard and fast ;see it as something fluent; embryonic, vital; and we realize that the child and the curriculum are simply two limits which define a single process (Dewey, 1956, p. 11).'

The belief that all genuine education comes about through experiences does not mean that all experiences are genuinely or equally educative. Experience and education cannot be directly equated to each other. Dewey describes the transition from children's holistic way of learning in early years. In the school the children meet a fragmentation of the subjects for learning and a way of learning that is disconnected from their own experiences. The classification of facts in school does not necessarily correspond with the child's own experiences and the knowledge they already have is easily ignored (Dewey, 1956).

Dewey saw the experiences as a part of the learning process. This is an epistemological question. His ideas are criticised for being instrumental and they were developed as closely connected to the growth of technical development and to the methods of nature science. He made a distinction between experiences in early years versus the more systematic use of subject-matter in connection later in the school experiences (Dale, 2001; Dewey, 1997). With his trust in a future built on education making the students capable of reflective thinking and at developing new ideas for the modern world, he saw his theories as a contribution and as a recipe for how to build an education based on science (Løvlie, 2013). I see his theories to be of relevance for a discourse on how we can understand the concepts of experience and learning in early childhood education. If we just understand experiences as independent occasions, we may end up not being able to see the potential of learning based on the children's own reflections. By this we also ignore the potential of growth and development experiences leads to.

But experiences are not only related to the individual learner. Experiences occur in social environments. The learning process is social based on the development of common understanding and communication. This was for Dewey the foundation for the learning process and also for education for a democratic society. (Dewey, 1997). A similar view on common understanding and communication comes from the theories of Alfred Schütz. In his book; "Phenomenology of the Social World" Schütz emphasises the importance of direct face to face communication in a common shared 'lifeworld'. He makes a distinction between four different modes of the social world. It is the 'Vorwelt', the world of the predecessors, two contemporary worlds; the 'Umwelt', the contemporarily shared world is the world where we meet and

act together face-to-face; and the *Mitwelt*, a contemporary more distant world. The last mode is the *Folgewelt*, the world of the successors. The shared

experiences of the contemporary world we act and communicate together in is for Schütz crucial to how we create meaning through social interaction (Schütz, 1972). For the study of the children's experiences I see the direct social interaction where the children commonly experience in and act together in the same *'Umwelt'* of importance both for their own experiences and for how they through reflections brings it forward towards learning.

Jerome Bruner developed ideas from Dewey further. As Dewey he also saw the importance of the child's experiences and reflective thinking. In addition he brought forward the impact of the culture in which the child grows up, and the importance of dialogue and social interaction. By this Bruner saw experience and learning also connected to narrative representation (Bruner, 1986). Bruner just as Dewey, was concerned with the ideas of how we think. He described what he saw as two modes of thought:

The two modes are the *paradigmatic*, related to logic-sciences and the *cognitive-narrative* mode. The *paradigmatic* mode is connected to mathematics, logics and nature science, and the *cognitive-narrative* mode to narratives and stories. The importance of Bruner's contribution is that he gives both a broader perspective on experience and reflection, and also that he accepts the two forms of cognitive modes as different, equally existing side by side as he writes:

There are two modes of cognitive functioning, two modes of thought, each providing distinctive ways of ordering experience, of constructing reality. The two (though complementary) are irreducible to another. Efforts to reduce one mode to the other or to ignore one at the expense of the other inevitably fail to capture the rich diversity of thought (Bruner, 1986, p. 11).

The practise of the Kindergartens is framed by a content that emphasises experiences and learning. The mode of cognitive functioning used in this study is the *mode cognitive-narrative* mode.

Bruner's contribution to understand cognition as *cognitive-narrative* modes includes both individual and collective experiences and about communication. In this respect Bruner is inspired by Ricoeur's theories of meaning created through stories and narratives. Another aspect here connects to Ricoeur's idea of bringing in in different perspectives of how we understand the meaning of an issue, here thinking. Not to exclude one or the other, but as

an acceptance and awareness of different interpretations and ways of understanding. (Bruner, 1996; Ricoeur et al., 2010).

The lenses of Ricoeur are used to bring children's experiences and different connections between experiences and learning forward to form an awareness of both aspects existing and fitting different functions for our knowledge construction.

Experience of nature, places and landscapes embodied and emplaced

Even practical activities, where experiences through the senses are central the theories of Dewey left out the ontological questions of how we learn or how we create meaning. In advocating experience and the use of the senses, as a part of the learning process, Dewey made no explicit notion of the body, and neither did Bruner. This does not mean that the body is not accounted for, but moving forward to the experience of nature, places and landscapes, I see the ontological approach on the body as important, and that this needs to be made explicit.

Bridging this gap I frame experiences in relation to the environment, and the multisensory and embodied dimensions of these experiences. In his book "Phenomenology of perception" the philosopher Merleau Ponty brings forwards the notion of the body claiming that we do not only have a body we are our bodies, and it is through our bodies we understand the world (Merleau-Ponty, 1962). Merleau Ponty's theory is used by people from different academic disciplines; those that are engaged in aspects of man's relationship to their environments. They come from disciplines such as geography, architecture, anthropology and educational science (Bachelard, 2000; Bengtsson, 1994; Bollnow, 1971; Casey, 1993; Norberg-Schulz, 1996; Pallasmaa, 2012). The geographer Casey described the body both as body - being- in – the world, and also as the 'body- being – in the place'. Tracing experience in its original etymological meaning, as 'trying out' Casey connects this to bodies moving and exploring. The experience of landscapes and places is related to our 'body –being –in the world' a world of nature and culture. How children in a nature-group in a Norwegian kindergarten today experience landscapes of place is in this way linked to the cultural context, and by that is social. As a concept for how we are situated in place Casey use the concept of *emplacement*, described as: An ongoing cultural process on an experimental

edge (Casey, 1993, p. 31). We partake of our places in our common and we shape them in common. It is living-moving bodies that structure and configure places. The antagonist to being implaced is displacement, the feeling of not 'being- in -place', and a sort of disconnection to place. (Casey, 1993). These concepts are useful concerning the debate about children being disconnected to nature. What is brought in by Pallasma is the multi-sensorial aspect of how we experience the world. He makes a critique of modern architecture claiming that is just engaging with our visual perception (Pallasmaa, 2012). I question if this can be the case when we judge natural landscapes and places for educational purposes. If we see the child exploring and moving in the environment the sensory aspect is evident as she or he touches, using the tactile senses, tastes and challenges both the vestibular and kinaesthetic senses in the movements, and in the constructions of knowledge. When he was describing walking on a path through a forest Bachelard used the expression of 'the polyphony of senses'. This to describe the touch, the smell, the sound, the kinaesthetic awareness of how to move and the vestibular orientation in and towards the environment including balance (Bachelard, 1994). In this way he brought in the richness of the sensory aspects which have to be accounted for.

Bollnow wrote in his book, 'Mensch und Raum' (Bollnow, 1971) about the difference between 'mathematical space' and 'experienced space'. The 'mathematical space' is the geometric and measured abstraction of space, places and landscapes as they occur on a geometrical map. 'Experienced space' is connected to the individual experience, with the body as the centre there are shifts in perspectives and in atmosphere (Bollnow, 1971). To get a deeper insight in the children's experiences it is the 'experienced space' that is in focus. There is a difference in the concept of space and the concepts of landscapes and places. In the original text of Bollnow, the concept used is the German 'Raum' which can be directly translated to the English word 'room'. Space as such is not necessarily linked to a certain place. You can be out in space or there can be little or much space between objects. I use landscapes and places in this thesis because gives a localisation to real landscapes and places and to the situated context of the observations. The notion of body in place, place as something we always are a part of and experience is advocated for in geography (Casey, 1993, 1997), anthropology (Basso, 1996; Ingold, 2002) and related to place-based education (Relph, 1976; Wattchow & Brown, 2011),

and makes a point of the importance of using the concept place instead of space.

Paul Ricoeur refers to Casey's understanding of place and the body – in – place, as significant to how we experience and creates meaning of the world. Instead of seeing the experienced and the geometrical place as contradictions he claims them to be two dimensions of landscape and place that are related to each other (Ricoeur et al., 2010) With a view on interpretations of and research on children experiencing places and landscapes, there are studies using mapping to show how and where the children move (Fjørtoft, 2000; Mårtensson, 2004). These are relevant as descriptions of where the children move and dwell, and there are studies also where children are drawing their own maps with an intention to tell what they see as important places for their play and how they are using the landscapes and places (Clark, 2005; Waller, 2006). As maps are abstract images they can still contain signs that tell the reader what experiences can be found within them. If we see the experienced and geometrical landscapes as related it allows for the construct of maps in telling stories of the experiential dimensions.

Nature is a concept often used. We know it as a nature of something, meaning the essence, the core of the subject. But nature used in relation to outdoor environments is also related to the untouched; ecosystems following a development that over time let the organisms live in balance. Using the concept of landscape and places there is a way to relate nature to certain environments. How we understand the concept is highly contextualized, and yet the term is often used as if it is obvious what is meant by nature. One approach is to see nature as green areas of uncultivated land. They may be shaped by human activities, but the elements of earth, air, water, growing things and wildlife exist independent of human intervention. This also includes parks and urban areas (Chawla, 2002) This view of what nature is includes both the cultural dimension and the dimension of other living organisms, both plants and animals. Even how and what we consider green areas is related to our experiences and the cultural context. As Chawla includes parks and urban areas, the definition adapts to urban settings. This is an adaptation to the modern world. I see it a necessity to do so to include green spaces in densely populated areas and by that also count for these areas as important places for biodiversity and for children to encounter other organisms. It connects nature to places people are within, close to where they live. To be more accurate I will take the concept of nature further connecting

to landscape and places. A critique of natural landscapes presented as landscapes disconnected with people, as we find in the romantic painting tradition, is that it makes nature a scenery not places we connect to and live within (Ellison, 2013). When I observed the children go outdoors I saw them going into nature landscapes, they are there physically with their body, and this is the environment they experience within. The anthropologist Tim Ingold who has studied different cultures use of nature including nomadic Sami tribes and people in urban environments, emphasises that the landscape is not something we look upon, but it is the world we stand in as the point of view for our surroundings (Ingold, 2002). This is an approach the geographer Carol Brandt (C. Brandt, 2013) emphasises as important for how we think about landscapes in environmental education.

In his philosophy of 'ecosophy' Arne Næss describes relationship between humans and the natural environment to be a relationship of identification. To develop this human – nature identification the encounters with other organisms are essential. This also includes plants, animals and even landscapes and places within a natural environment. Doing so, we will develop emotional connections not only to other humans or animals, but also to plants, landscapes and the places within (Næss, 1989). He himself exemplified this with his lifelong relationship to the mountain Hallingskarvet. (Næss & Brun, 1995). This was relationship of importance both for Næss personally and also for his engagement and development of environmental philosophy.

Seeing landscapes from the perspective that we live within them, the places are created within these landscape environments and when we encounter these places we also encounter the landscapes.

But there are certain characteristics of places and landscapes that give opportunities for rich experiences. These are the wild landscapes and places.

This is a description from Casey:

'Beyond the cared for garden lies the wilderness; beyond the open field there is a dark forest ;beyond the flat floor of the desert distant mountains rise shimmering at the horizon; and beyond the halcyon harbour there is the savage sea(Casey, 1993, p. 186).'

The wild places for Casey are places of the unknown, places to get lost in, and places of the unexpected. From the quote above we see that Casey also places the wilderness in the horizon, the outer zone. But how we experience wilderness and wild places, Casey sees as culture-bound. If we live in urban

areas and have no experiences of wild landscapes or places we will consider them different then if we have had a childhood in a rural area playing in the woods as a child.

I see the experience connects to the notion of the ‘thickness of the body’ Casey quotes Merleau Ponty’s understanding of ‘thickness of the body’, from Merleau Ponty’s book the ‘Visible and the Invisible’(Merleau-Ponty & Lefort, 1968):

The thickness of the body, far from rivalling that of the world, is on the contrary the sole means I have to go unto the heart of things, by making myself a world, by making them flesh. Merleau Ponty, quoted in (Casey, 1993, p. 252)

For Casey this intertwinement of the body and the environment are exemplified by Thoreau’s “Walden” (Thoreau, 2001). “Walden” is a book about Thoreau’s experiences when he was living in the wilderness for one year. This is a classic work presenting a nature-romantic perspective on nature. I see this as an image of being the *implaced* in, and to do so in the wilderness requires that you go into it and experience it in the flesh. The places the children encounter are not isolated from the rest of civilisation, but still the uncultivated land represents wilderness in the sense that is not fenced in, the vegetation is uncultivated and the topography is not a result of a designed landscape. From this study just walking through the gate from the designed play-ground area into the wood represented a change of landscape from built and cultivated to the wild. Even though the path followed the border towards housing areas the way the children moved and the places they visited were dominated with a topography and vegetation that were more in flux and more unpredictable than the built or cultivated land. The ‘wild’ atmospheres of landscapes, places and the paths within are connected to the surroundings. The landscape made it possible to get lost; it opened possibilities for hidings, for different ways to move including quite challenging climbs for the children and for getting up on high points to get a view. Just choosing to move some inches sideways could reveal new ways to go or for finding new places to dwell in. Also the edges between the wood and the campsite and the wood and the built areas were much used for play and exploration. Taking a cultural perspective on what counts as nature and as wild places in England today, edgelands, is brought into the discourse. Within the edgelands there are places with the character of being wild, uncultivated

ecosystems developing, these places often have a rich biodiversity (Farley & Roberts, 2012). These edgeland places develop on abandoned land, between roads and on old filling areas. They are new places for experiences of mystery, excitement and exploration. These places do not necessarily offer nature-romantic views, but are often found in urban areas. They can be interesting landscapes to explore for children and to be seen as a resource not just as wasteland. These are nature-culture bound, and in our modern society these areas can be of importance both for children's play and for environmental education purposes.

Experience and play

Being a part of the curricula and highly regarded in the Nordic kindergarten tradition play is also to be explored in relation to experiences and learning:

In the kindergartens children must be able to experience play as both an intrinsic value and as a basis for learning and a well-rounded development (Ministry of Education and Research, 2011, p. 13).

It is interesting to see how play is seen both as an intrinsic value and as a basis for learning and development. These intentions can be seen as contradictions. When advocating for the value of free play the argument of play as an intrinsic value comes up (Steinsholt, 1999). The notion of free play is play with no adult intervention, ruled and initiated by the children themselves. This allows the children to develop their own play-themes and their own social relations. This play has a counterpart in play organised and controlled by adults often within pedagogical situations. The play initiated and regulated by the children themselves is not that easy accessible for adults, and it is more difficult to understand the meaning of the play. In a pedagogical context the organised play are easier controlled and can be framed within the goals of the pedagogical institution. The play I observed was play where the children at a great extent were in charge themselves. As an observer this play often seems chaotic and the meaning of the play difficult to understand. I do see both these kinds of play as useful. For me it became important to explore the children's play in their encounters with the landscapes and places outdoors. In his classical work about play, Huizinga, writes about 'Homo Ludens', meaning; 'The playing human', he describes play as existential for human actions throughout life. Play is an element embedded in all cultures (Huizinga,

2000). For me this existential playful attitude was connected to engagement and inspiration and may be seen as playfulness. As an adult observing children's play this attitude is crucial for how you experience the meaning of the play.

One aspect often found in free play is a fictional story. The psychologist Edith Cobb was concerned about the neglect of the value of what she called 'imaginary play', and this play was linked to outdoor environmental settings, and to children using the environment to play in and with. The imaginative play was also a way of socialising by negotiating rules and developing common ideas and stories (Cobb, 1993). Playing in unpredictable environments allows the children to use their own imagination. The lack of imaginary play is one of the concerns of Louv in his book "The Last Child in the Woods". He considers the indoor activities as passive, children being more consumers of data-games and TV than inventory players in charge of their own play agenda (Louv, 2009).

Dewey also related experiences to play and learning. He emphasised that experiences took place through action. One form for action of great relevance in the early years was the act of playing. Dewey about the significance of play transformation of things through play:

When things become signs, when they gain a representative capacity as standing for other things, play is transformed from mere physical exuberance into an activity involving a mental factor (Dewey, 1998, p. 209).

By manipulating toys and other materials the children do not live with physical things, but in large worlds of meanings, natural and social evoked by these things. This is a way that a world of meaning is built up for these children. This play is also a foundation for intellectual achievement (*ibid*).

Dewey also brought in playfulness as a state of mind, an attitude he considered as important. Playfulness is a driving force and an attitude that are present both in play and what Dewey calls work. By his exploration of the concepts of 'work' and 'play' Dewey makes a critique of the idea of play belonging to the kindergarten and the work to school, advocating that the idea of work can be brought in earlier and that play also can be a way of creating meaning. The process of work is enriched by the sense that it leads somewhere, and that it amounts something. (Dewey, 1998). Changing the concept of work with the concept of learning can make the distinction between play and work relevant for the discourse of play or learning in the

kindergarten. When the children experience to have achieved a skill or knowledge they have also learned something. For that reason it is interesting to observe and describe imaginative play connected to the experiences of the environment in which the children are playing. Imaginative play in outdoor natural landscapes is not much described, and therefore an interesting topic to elucidate.

Experience and wonder

'If facts are the seeds that later promote knowledge and wisdom, then the emotions and the impressions of the senses are the fertile soil in which the seeds must grow(Carson & Pratt, 1965, p. 5).'

The environmentalist Rachel Carson wrote this about the importance of letting young children experience nature in the book; "The Sense of Wonder" (Carson & Pratt, 1965). She advocates not just learning about nature, but about the emotional involvement nature experiences promote in children involving what she calls wonders. Her texts in this book are related to a fascination of encounters with nature phenomena and with living plants and animals. This book was printed after her death and the photos illustrating her texts are taken of a photographer, Pratt. Placing the photos with consciousness they are juxtaposing Carson's texts. The perspectives of the images shift from micro to macro level and leave the reader with a glimpse into this world of 'wonders'. The 'wonders' can be related to strong experiences such as when she brought her nephew out to the sea to experience stormy weather or the green moss in the woods close to her cottage.

Rachel Carson was a highly regarded marine-biologist, famous for setting the agenda for environmental issues. Her book "The Silent Spring"(Carson, 1962) was a book based on scientific knowledge of how human activities influenced the environment. In the book she described how pollution in local areas also influences the ecology globally. This book contains both ecological descriptions of the consequences of pollution of modern agriculture and fishing, and also refers to imaginative stories of local societies. Carson described how people experienced the environmental changes in their own life-worlds as one 'sense of wonder' that disappears due to pollution is the birds and their singing.

I see these ‘sense of wonder’ moments also as a state of being – in – the world, an experience not necessarily spoken. These encounters can leave memories of smells, wind striking the skin or the feeling of walking barefoot in sand.

When Bachelard writes about the ‘polyphony of senses’ (Bachelard, 2000) there is also the notion of the richness of the multi-sensory impressions. And these impressions are not merely visual. Merleau-Ponty sees the body as intertwined with sensuous experiences and cognitions, there is embodied meaning given in these experiences that are there before we can speak of it (Merleau-Ponty, 1962). These are the experiences making us remember smells, sounds and shifts in atmosphere.

To wonder can be understood as a first step towards reflective thinking and learning, as a kind of curiosity in encounters with problems or challenges. These wonders can also be shared; the shared adults and children’s exploration of nature is one way to do so (Dunlop, 2012). I do agree on the mutual senses of wonder. Used in this text I understand wonder as more than exploration of nature, but in the acts of exploration there can be experiences of wonders.

It is a challenge to bring the observations from moments of wonders into text. They are more likely to be found in photos, in artwork, in poems and in narrative texts. I see these moments of wonder as one important aspect of the children’s experiences in encounters with nature dominated landscapes and places. As a consequence of that the constructed narratives are important as these texts may be constituted on more than descriptions the actions and also include atmospheres and moments of wonders.

Summary

Experience is a key concept in this chapter explored from different perspectives that is relevant for children’s experiences in encounters with landscapes and places. The discourse of experience relates both to existential experiences expressed as ‘sense of wonder’, and to experience, reflection and learning as presented in the theories of Dewey. Bringing in Dewey’s theories of experience and learning is a contribution to how we understand experience and learning in early childhood education. Using situation, continuity and interaction to develop experience and learning can be used as a didactic tool. The aspect of shared experience and communication is a central aspect of

how experiences can be commonly understood. This connects to Schütz and his theories of our shared social world. Bruner brings in the aspect of learning as a part of our culture, and the two modes of how we can get knowledge of the world, the paradigmatic – logic and the narrative mode. Both modes are present and therefore equally important to be aware of.

Experience of nature, places and landscapes are understood as embodied and emplaced. This is with background in ontological understanding of the body as the core for how we make sense of the world. To understand the children's experiences I see the notion of the body in relationship to nature-landscapes and places to be important. The theoretical approaches presented relates to a phenomenological perspective on place and human connection to nature. These aspects are central for the discourse of experienced place and landscapes. How we understand the concept of nature is discussed and the pragmatic approach I have chosen gives the direction for how I understand the concept in this thesis.

Regarding experience and play the imaginary play is given a prominent place. There are historical lines to theories of play in nature and imaginative development. The discourse of play also relates to the learning discourse. I argue that we highlight playfulness as important not only in play but also for the process of experience and learning.

I understand wonder as an existential dimension of our experiences. It connects to the multi-sensory experiences. As used by Carson I see it also present as important for how we experience and for our relationship to the natural environment.

Chapter 5 Methods

The methods used in this study are related to the research questions of the study:

- What is going on out there?
- What does it mean for children's experiences when the kindergarten is moving their everyday activities into nature landscapes and places?

These questions are descriptive and the children's experiences are framed in an outdoor setting of natural landscapes and places.

When starting this study I was clear that I wanted to focus on were the children. In research I found a gap in the knowledge of children's experiences of nature-landscapes and places. To gain the necessary knowledge I had to turn to the children themselves.

Interacting with the children gave me access to participate in their everyday lives. Through observations, informal conversations and participation in their activities when invited, I was given an unique opportunity to gain both broad and deep insight into what happened out there.

Using the three mimesis of Ricoeur (Ricoeur, 1984), the narrated time of our pre-understanding, of our actions as they happen and the transformation from action to text, this chapter represents this transformation.

The interpretation can be identified both in what I chose and was able to observe and how I interpreted and understood the data collected. Developing the hermeneutics of suspicion and a critical interpretation Ricoeur refers to Freud and his interpretations of dreams. One aspect is to look for meanings that otherwise might be hidden (Kristensson Uggla, 1994; Ricoeur et al., 2010). My aim was not to delve into the children's dreams, but to look for meanings that were not obvious and that were closely connected to the children's actions.

Samples

The sampling of this study is strategic (Perakyla, 2011). This means that the groups were chosen due to the purpose of the research. Because these groups

were spending their days outdoors every day they represented the topics I wanted to study.

The two groups I followed were both nature groups in a municipal kindergarten, which also consisted of groups located in the Kindergarten building. These were not private kindergartens run by parents or ideal organisations promoting outdoor education. Even though the parents did have some influence on which group their children attended. I assumed that choosing nature groups in a municipal institution the social background and attitudes towards being in nature would be more mixed than in a private nature kindergarten. The ages of the children varied from one to six years. Those who were six in the spring started school that year.

The two groups used different locations, which are described in the maps and the studies. The island group met on a boat every morning from 7:00 until 9:00 am. Then the boat went out to an island. The island was one of many in the archipelagos of the fjord and stayed there until around 14:30-15:00 p.m. when it returned to the pier on the mainland. The children spent most of the day on this unpopulated island. There was a large storehouse where they could keep their equipment, such as the lifejackets when they were ashore. For use on the island there were small buckets and items for biological exploration such as lenses, guidebooks, knives and fishingrods.

No one live on the island, however in the summertime there were quite a few leisure boats passing and also visiting. The children followed the fishing seasons and they participated in small-scale fishery, going out with a smaller boat that belonged to the group.

This island had tunnels and buildings that were erected during a military lasting for about 70 years until 2006. Although there are some boat and tourist traffic in the summer the dominant landscape surrounding the island was seascape, and on the island it is a natural landscape, with rock, stone and sandy shores and meadows where there used to be settlement. The inner island was all woodlands.

The forest group assembled every day in the kindergarten building and walked into the woods at about 8:00 am. If some children arrived later, they were left by their parents at the campsite. Following a path from the kindergarten building to the campsite took the children through the woods, not more than 3-400 meters away .The woodland group's area was located around a campsite with a one-room wooden shelter, a 'gamme', some rope arrangements made by the staff and an old dilapidated-shelter probably built

by older children. On one side there is a newly built area of houses and the other side is surrounded with woods, mainly spruce. Even though the area was close to buildings, the children were deeply attached to the woods, trees, rocks, and caves. The diversity of nature and the variation presented throughout the year were elements that made their lives in the kindergarten differ from one day to another, and appeared to challenge them to cope with the unexpected.

The rhythm of the days differed. The island group spent less time outdoors, as they arrived at the island later. Both groups had lunch time outdoors every day. But the forest- group also had a longer break inside the 'gamme' every day after lunch. There they lay down, resting and sleeping for about an hour. The break always started with one of the staff reading aloud from a book or telling oral stories such as folktales, legends or sagas.

Sensory Ethnography

This is an ethnographic study. As ethnography is considered to have been developed to be used in different ways, there are disagreements regarding the definition of ethnography. Due to the expanded ways in which ethnography is used, Silverman states the need for a new definition. One of the characteristics of ethnography, he writes, is that it is a methodology based on direct observations. Silverman also gives directions for the characteristics of participating observations in ethnographic research:

1. The researcher establishes a direct relationship with the social actors
2. Staying in their natural environment
3. With the purpose of observing and describing their social actions
4. By interacting with them and participating in their everyday ceremonies and rituals and
5. Learning their code (or at least parts of it) in order to understand the meaning of their actions.

(Silverman, 2011, p. 17)

In my research I accompanied the children in their everyday environment. To establish a relationship with the children was crucial gaining insight to understand more of what happened out there, what was actually taking place. The interactions with the children were both direct, as in face-to-face communication and shared actions as when I was invited to participate in their play. I also made more distant observations when not participating in

their activities. Even if I focused on the children, the interaction also included the adults. They not only accepted my presence but also included me in the daily rituals of the kindergarten groups. These were such rituals as the lunch-breaks, the resting-hour in the 'gamme', and annual events like Lucia-celebration, preparations for Thanksgiving and the United Nations day. The inclusion in the daily rituals such as lunch when all were sitting together was also important. These were moments in which I could communicate with the whole group. When I started my study, I presented myself and spoke of my purpose of being with them when they were all assembled. Also after a few weeks I brought photographs I had taken of places I saw they used often and that I wanted the children to tell me more about. I first asked about these when they were all present. Having these common conversation often made the children come back to me to tell me more about the places or take me into the landscapes and the pictured places. This was how I was introduced to all the different places within the 'hidingwood' and around the 'troll cave' in the forest.

In regard to learning their code in order to understand their actions, I was inspired by the writings of Sarah Pink on sensory ethnography. Developing the idea of sensory ethnography Sarah Pink (Pink, 2009) aimed at investigating the possibilities focusing on the senses in ethnographic research and representation. The use of senses is apparent in the shared world of experiences that we as researchers participate in together with the children. Still it can be difficult to bring this into the text. The sensory approach in ethnography gives a direction for the observations and the descriptions from the field. Pink brings forward the concept of sensory ethnography as she claims that it is not a prescription for the design of the research, but it is a process where the awareness of the sensory aspect is taken into account for how we understand a phenomenon (Pink, 2009).

Following the children outdoors and trying to grasp what happens can be overwhelming at times. To understand and interpret requires attention to more than what they say. Movements, expressions and sounds are all rich with meaning, and the hands-on experiences are multi-sensory.

Pink argues for sensory ethnography itself, not as a fragmentation of ethnographic research, but as an approach that should be included in ethnographic studies.

Pink's definition on ethnography is as follows:

Ethnography is a process of creating and representing knowledge (about society, culture and individuals) that is based on ethnographers own experiences. It does not claim to produce an objective or truthful account of reality, but should aim to offer versions of ethnographers' experiences of reality, that is as loyal as possible to the context, negotiations and intersubjectivities through which knowledge is produced (Pink, 2007, p. 22; 2009, p. 8).

Pink does not argue for any particular method or data, but for presenting different ways of knowing in order to explore of and reflect on new routes to knowledge. Similar to other ethnographic researchers she does not claim the data to be objective but a result of communication and interpretation.

Embodiment, as used in social science, is constructed as a concept trying to deconstruct the mind/body divide and understanding the body as a source of knowledge. From different interpretations of the concept *embodiment*, and though its usage beyond the body-mind relation, including the environment, Pink argues that the concept can be superseded by the concept of *emplacement*. She proposes an emplaced ethnography that attends to the question of experience by accounting for the relationships between bodies, minds and the materiality and sensoriality of the environment. These concepts were of interest both in the awareness of my role as a scholar, being situated in the kindergarten as an observer, participating in activities and when standing outside observing through a lens using video or still photos.

It is also important for my understanding of the children, to determine how they are emplaced. Their bodies are giving other perspectives of the environment than mine, their experiences and ways of communicating are different from mine. These are aspects of sensory ethnography I wanted to elucidate.

Field-work

My research contains notes, drawings and photos from the fieldwork. It was conducted over a period of ten months, starting in May 2012 with the island group and in August with the forest group. I visited them for total 30 days and of these days two were just observation days. On these days I simply followed the children .but took no notes or photos. Most of the observations are from May to December in one year. I also had one last day with each of

the groups in February 2014. These were days with much snow, which made it possible to observe winter activities and also conduct an interview with the teachers on their approach on the concept of formations and outdoor education in early childhood education.

During my first days in the field I made up my mind not to use videotaping. Regarding the sensory approach the use of video could seem a good option as it could record sound and movements. Also for the analyses to replay situations videotapes constitutes detailed and accurate information. But using video would also be an obstruction in following the children's movements and finding different places for play and exploration. It would also limit my first-hand experiences, as I would focus the on world through a lens. For the children's expression and ability to communicate with me the use of a video camera would also be a limitation.

The photos were taken mainly by me, but the children were allowed take pictures if they asked. The children in these groups were used to being photographed, and they mostly seemed to be quite indifferent with my use of the camera. They had, as I will discuss further in the paragraph on ethics, a right to say no and I always asked the ones involved if I took a photo of the children. I also had restrictions on what kind of photos I was allowed to take, not showing the children's faces. For me this turned out to be a restriction that made me more aware of the sensory approach, the bodies in movement and the bodies' sensorial relation to the environment, especially towards the use of tactile senses.

The photos were systematically stored as files from each day. Going through this material day by day and revisiting it several times made me aware of the dimensions of the flux in weather and time of the year and how much it influenced the atmosphere of the environments, and highlighted the variation in activities.

On four occasions I also chose photos from significant places in which I had observed many activities; I laminated these photographs and showed to the children. This gave me the children's stories of their approaches on these places and also encouraged them invite me to places like 'Hidingwood', the 'Trolls Cave', the 'Fortress' and 'The Dentist's Office'. They showed me around and took me into their shared fictional world constructed through their imaginative play. I always brought a notebook with me. The notes made in the field were short; descriptions of the places and the activities. The notes were developed as related to the function of the places influenced by the

affordance approach with more detailed and shorter narratives describing both sensory approaches and the content of the children's activities and play. The imaginative play emerged from the first day of my observations important for children's experiences. I also drew sketches and added some short notes. After each day I rewrote the notes into a more coherent text and filed the notes in order of days.

The sketch below is from a miniature garden developed by the children initiated by one of the boys (age 5) who found a bonsai plant that a neighbour had thrown away outside his garden, towards the wood. Initiated by one boy the children communally constructed a miniature garden and fenced it in. Their teacher brought them a hammer, and this was used to make the fence from small sticks hammered into the ground.

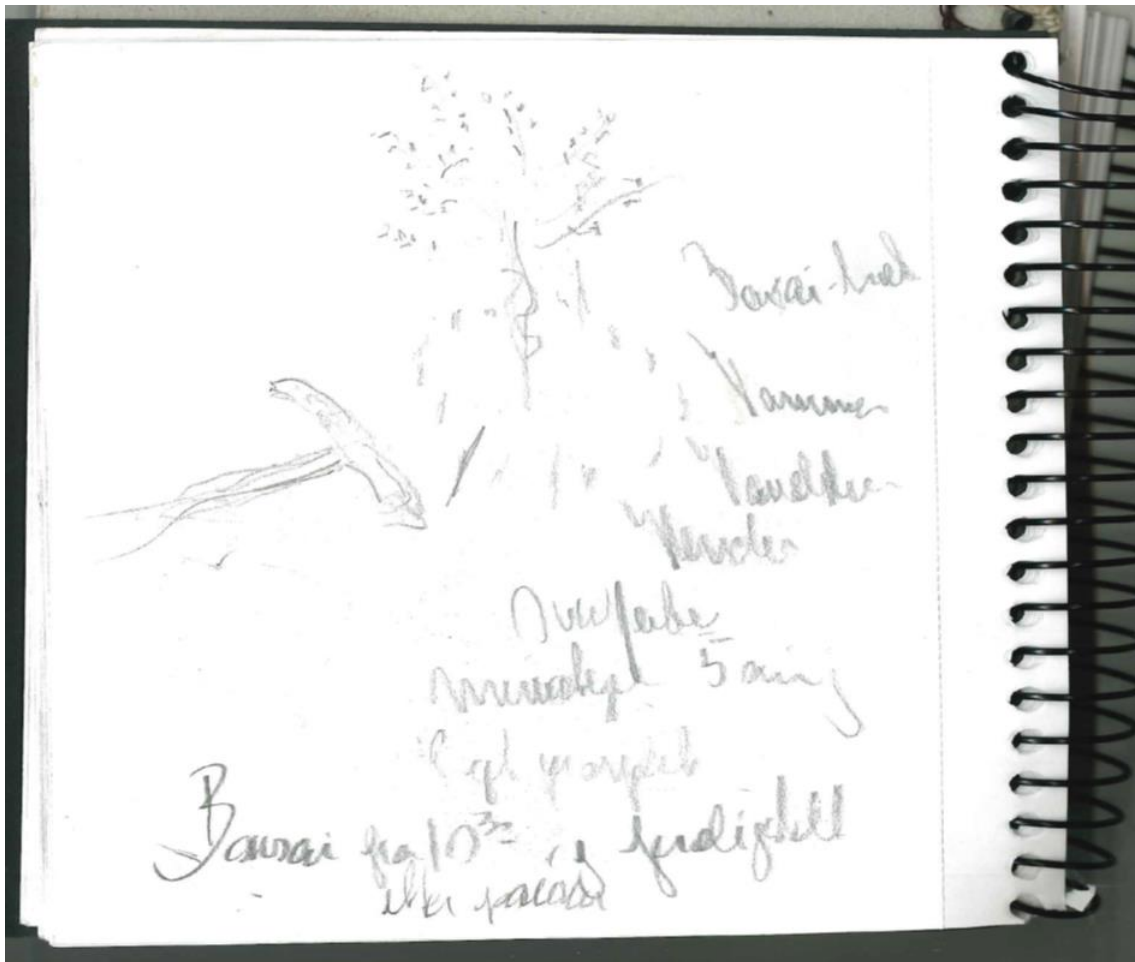


Fig.3 Sketch of a 'New Garden'

The notes read; bonsai-tree, hammer, gloves, hands, surface, miniature, children's own project, and that it lasted from 10:30 am till after the break.

The sensory approach in my fieldwork evoked an awareness of the multi-sensory aspect of the children's experiences and how they created meaning.

Narrative inquiry and emplotted narratives

The narrative inquiry was the next step in the process of creating data. I filed all photos in files labelled with the date of the observations. I also filed my text rewritten from the field-notes every day after I had been out with the children. These were labelled with the date, as being my diaries and remained important texts in the further analyses. The next step was to incorporate photos into the text, to contextualize it and to be able to make a more coherent and broad data-construction. I collected and constructed narratives of topics as a way to present the emerging research findings.

Jerome Bruner defines narratives, as a way to make sense of and to represent the world, as well as a way of thinking (Bruner, 1996). In ethnographic research the use of narratives has developed different variation of representation of data. The narrative inquiry as used here begins in experiences as expressed in lived or told stories (Clandinin & Connelly, 2000). Field-notes, collected through participant observation in a shared practical setting, are examples of the primary tools of narrative inquiry work. Participating observation of a group of children outdoors created complex information. Narrative inquiry opened for a presentation of the data material in a storied form, which also involved multi-sensorial dimensions of the experiences. My texts are a result of my observations and my interpretations, of the lived experiences of the children. Connelley and Clandinin describes challenges by using narrative inquiry and transferring fieldnotes to written stories and the importance of structuring the process (Clandinin & Connelly, 2000). As guidelines for my inquiry I have used the suggestions from Polkinghorne on how to structure a narrative.

Donald Polkinghorne introduced different ways to use and interpret narratives in research by making a distinction between analyses of a narrative, and narrative analyses. In narrative analyses the data consists of actions, events and happenings, but through analysing them the researcher produces stories (Polkinghorne, 1995). Thus the analyses in this study are within the frame of narrative analyses. In this text narrative analyses are used analogue to narrative inquiry. According to Polkinghorne the narrative analyses synthesise

or configure events into an explanation or a plot, which relates what the story is about. Emplotting the narratives was for me the process of developing stories that connected to topics from my texts written in my diaries'

Polkinghorne referred to criteria for how to develop an emplotted narrative as a guide for generating storied history or cases developed from data. The criteria were developed to judge a life story and Polkinghorne made his own statement, which I to some extent used for my analyses (Polkinghorne, 1995, pp. 16-18)

1. The researcher must include descriptions of the cultural context in which the storied case or study takes place
2. In gathering and configuring the data into a story, the researcher also needs to attend to the embodied nature of the protagonist³.
3. In developing the story's setting, the researcher needs to be mindful not only to the general cultural environment and the person as embodied, but also other people affecting the actions and goals of the protagonist
4. Although the cultural setting, the body, the other people provide the context and limits in which the protagonist acts.
5. In constructing the story, the researcher needs to consider the historical continuity of the characters.
6. The outcome of a narrative analysis is the generation of a story.
7. The final guideline for judging the adequacy of narrative analyses is whether it makes the generation of the researches occur plausible and understandable

I see the list above as a reminder of narrative analyses as a method with restrictions as to how I should conduct narrative analyses as a researcher.

The narratives are contextualized and situated in the outdoor settings of the nature kindergarten groups. A context I experienced within as when I was invited to the 'hairstylist' under spruces or to go the tricky path to the 'trolls' cave having to make myself small, climbing and entering hollow ways surrounded by bushes and big rocks. By accompanying the children I saw and felt the shift in light and temperature. I observed how the children found grips to enter the high pinnacles and I felt the bumps and the changes of the tactile and kinaesthetic challenges due to variations in the topography of the ground. We were trotting on moss, stone and earth ground, in snow and barefoot in

³ A protagonist is the ones who make something happen.

the water, through bushes and over rocks. This close relationship with the children was crucial to how I understood their creation of meaning. Experiencing the same environment does not mean that you have the same experiences or that you know what others experience. However still it is a co-experience. Being there made it evident to me that I had to use a language in my descriptions, my short stories from episodes during the days that embraced the multi-sensory dimensions. These moments of co-experiences were the first step of the narrative inquiry.

My construction of data was, first-hand related to the landscape, landscape elements and places used by the children. The emplotted narratives from the fieldwork are presented as short episodes from places used, every week in imaginative play, in themes for wondering and exploration of other living creatures. The outcomes of the analyses are stories. From my eventful data they are presented as cases related to different plots.

First I labelled the places according to the functions, such as climbing, hiding, running, like sorting out the affordances of the landscape and places. Then I related to the play-themes and the content of the play. Other themes also emerged and developed over time. I used colour coding of the places and then I labelled themes with numbers. I also labelled material used in play, such as sticks, stones and cones with colours in the text. As I developed the system further I saw there were some types of activities and play that occurred several times in my texts. This was also the case with the places that were used. Some of them as the troll cave or the hiding wood were repeatedly found in my text naming the places. For some of the emplotted narratives I used as many as four or five episodes from the same place in the story, as when I describe the Bakuga-play, I write about in my 2.article. A play where the children created their play inspired by a fictional world they knew from computer-games and TV.

I made all the analyses manually. To construct the narratives I also cut and pasted texts labelled with numbers for clan-building or for episodes with animals, using the content of these episodes. Doing so forced me to visit and revisit the text many times. I see this process as important in bringing out the characteristics of the landscape and places, and seeing the development in the narratives of the play over time. I considered using a programme to sort out and label themes. One important reason for doing so is that there is a large amount of material, and a part of the material that contains information that contributes to developing knowledge is overseen. Another issue is the

transparency of the process. It is easier to go into the analyses for people from outside when they can use data material. On the other hand is the data constructions, the interpretations based on my participation in the field and this will always be even when using digital programmes to structure topics from the text.

Narrative maps

One step of the analyses was the construction of what I call narrative maps. The purpose of the maps was to describe the landscapes and places with visual presentation of significant places and name them according to plots constructed from my observations. The drawings are sketches that go beyond the abstract and mathematical image of a landscape, the distances are not accurate and the elements that are marked are elements of importance in the narratives. The strength of constructing such a map is that it gives an overview of the places related to the children's play and activities. The drawings and the names given are related to names of fictional stories, landscape elements used in the children's play and activities. This means that the maps are constructed from real observations from a shared experiences world.

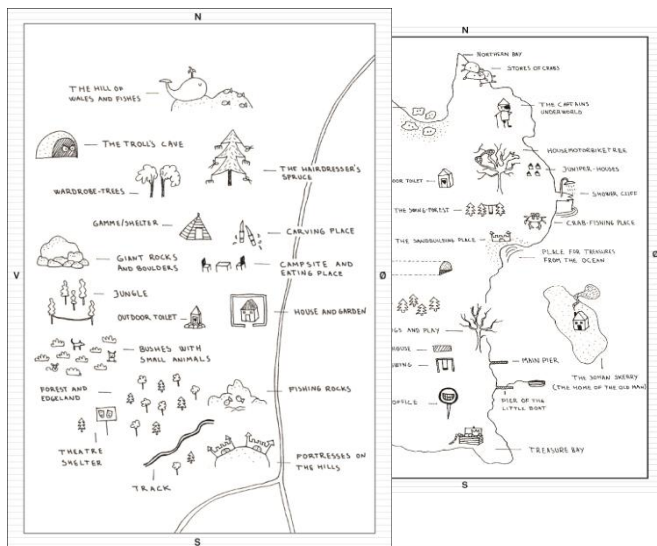


Fig 4 Narrative maps

Drawing: Linn Alexandra Lerdal Reier Idea : Kari.-Anne Jørgensen

Some of the elements such as the 'Johans Skerrie' is a traditional name related to a man who actually lived in the place hundreds of years ago. Others like the 'Dentists Office' or the 'Treasure Bay' are related to the children's imaginative play. There are also significant buildings; construction of the piers and the outdoor toilet included.

Making a map like this made me aware of both the landscape as such and also the places within and the meaning of the places related to the children's experiences.

The first idea of the maps was to find a way of presenting the places in relation to play and activities. They were developed late in the process so I did not have time to develop them further with the children.

I had one revisit with the forest group one year after I had finished my field-work. While visiting I showed the map to some of the children. I did not say anything about it just asked if they saw what it was. One three years old girl started immediately to identify the places and could tell me where they were and that they still used them in their play. I also asked if there were other places where they now played. She told me there were also different places to play on and that they also had other play-themes. She had ideas for changes and specifically missed the camp-fire. This dialogue is as I see it a hint of how these maps can be developed as tools for dialogue with the children.

Ethics

The study was approved by the National Committee for Ethics in Social Science (NSD, 2014) with a written informed consent signed by all parents of the children. In addition, the children were informed as to why I was attending to their groups and what I was interested in learning about. They were also informed that they could withdraw and say no if they did not want to answer my questions or if I should take photos. There were times they said no, and I accepted that. However I was also often invited in to see their places and to follow them around. A common trust and the informal conversations with the children were important for my construction of data.

There were restrictions on taking photos showing children's faces, and I had a deadline for deleting all pictures with children. If I want to use them further I need to apply for a new approval. As the restriction from taking images showing the children's faces may be seen as a constraint it was also a way to be more attentive to the movements of hands and feet and to the

places themselves. All the children remain anonymous, with names that also may differ between the different narratives presented.

The topic of ethics is of importance and is a part of the discourse related to early childhood education (Dockett, 2012; Farrell, 2005; James, 2010). The case of informal consent is difficult in research among young children in that they do not understand what it means. To be more specific and more attentive to the children Dockett(2012) suggests a differentiation of the concept, adding assent and dissent as two approaches that can strengthen the children's voices towards their participation in research studies. Whether they give their assent or consent or dissent and to what extent researchers are aware of when they want to attend or not relates to our communication with, and ability to listen, to the children. By going into a group with participating observations the children could not avoid my being there. But they could withdraw from questions or choose not to have me follow them to places they wanted to in private. My interpretation was that the possibility for the children to choose to what extent they wanted to be observed or to be involved me with was also the reason why I was given access to their 'private' places and into their play as I was.

McNaughton and Smith (MacNaughton, 2010) propose the following three questions when going into research with children:

- Have the children agreed willingly to participate in this research? How do we know this?
- What do they understand of what I am doing and why I am doing it?
- Have I created private and individual spaces for the children to discuss and agree to participate in this project so that other children don't influence their choices?

I informed the children when they were together in a group. This meant that they knew why I was there. By letting them know that they could dissent they also did so, while in groups and alone. If they actually understood what I did, and why, I cannot say. I can say that they knew they were special in going out every day, and I also experienced them as very informative and often eager to show their special places. When it comes to producing a text like this I do not think the children understood this. They were familiar with reading about themselves in newspaper articles, but when it comes to research, I do not think they knew the breadth of that. They expressed that they liked the idea of others knowing about their places. Judging assent and dissent to participation is not just listening to what the children say, but being aware of

gestures, moods and bodily expressions, which can reveal just as much as words.

I do see the challenges of conducting research with children. But from my experiences in this study I also see the point made by the ethnographer, Birgitta Quarsell(2003), when she claims that children even small children have an ability to express their meanings, and that they are directed towards the subjects they observe or the situation they act within. In this respect there are very good reasons to take their perspectives into account (Quarsell, 2003) in their encounters with nature-landscapes and places. The children in this study had much to tell and their expressions were shown both by the expressions of their bodies and in what and how they spoke.

Summary

This is an ethnographic study, and the sampling was strategic. I choose the kindergarten because they represented outdoor practise I wanted to study.

As an ethnographic study the main methods used in my fieldwork were participating observations, informal conversations and photographs. Focusing on the embodiment and emplacement of the children and of me as a researcher I was inspired by the sensory ethnography.

I used the text, the drawings and the photos for each day to write a more coherent text in a diary

For further development of the analyses I used narrative analyses and developed two different ways of presenting data. One was narrative maps, where the content of the maps drawings represented places connected to play themes and significant places such as campsites or the storehouse.

The other presentation was the texts of emplotted narratives which constitutes the themes of my four articles.

Ethical considerations were framed both by legislation for conducting research studies on humans, and on ethical conduct and considerations for research on children in early years.

Chapter 6 Studies – the articles

In this chapter I will give a résumé of the articles and their contributions to the topic of the study.

The studies are written in different stages of the study. The first article was sent for review in May 2013, and the article about ethnography and clan-building is first ready for submission now.

I see the four articles related to four main topics. The storied episodes from the observations are contextualised in a way that they connect to four different plots.

Study 1 Sensory experiences

The title of the article:

-“A rock, a smile, a glimpse and a jump. Children’s experiences of places and landscapes in local natural environments in Norwegian kindergartens.”

This was the first paper I wrote and as written in the article, it includes the first steps of the process of contracting and analysing the data. The research question was connected to children in motion: ‘In what ways do children experience place when dwelling in and moving around different landscapes in nature kindergartens?’

As in later papers this paper takes a point of departure in the environmental agenda from Rachel Carson on experience of place and ‘sense of wonder’(Carson, 1962; Carson & Pratt, 1965), and in Richard Louv’s writings on the ‘nature-deficit syndrome’ in “The Last Child in the Woods”(Louv, 2009) The contribution of this paper was the focus on the multi-sensory aspects and ontological understanding of the body as the core for how we understand the world. The phenomenological theories of Merleau-Ponty and the lived body in place was a theoretical resource(Merleau-Ponty, 1962). This theory connected well with the methodological approach of sensory –ethnography (Pink, 2009).

This paper also responds to the first sequence of the research process as I also go into the concept of affordances. The affordance theory (J. J. Gibson, 1986) had been used by other researchers to describe the functional aspects of

how children use places (Fjørtoft, 2000; Heft, 1988; Kyttä, 2002; Sandseter, 2009). In the first weeks in the field together with the children I drew sketches and made notes about observation of places I considered as offering specific affordances for the children. These were such items as a rock with affordance for climbing or a branch of a tree with affordance to be used as a swing. It was interesting to notice how the activities and play changed as the children moved from the constructed outdoor playground of the kindergarten to be more diverse and complex when they came into the woods. As I observed them they used objects and the topography in many different ways in the forest. Even if the affordance theory was a tool for description of the functional aspects of the places I saw the children's use of the places was more complex. By using the affordance theory I was able to describe the function of the place but not the diversity and content of their play.

Inspired by the multi-sensory echography approach I developed more thick descriptions (Geertz, 1993). These descriptions are contextualising within the landscapes and places, but also include themes from the children's imaginative play and the ways in which they used the landscape and places. As they were moving through and in the landscapes and dwelling on places they intertwined their sensory experiences of the landscapes and places with their imaginative play. This corresponds with a development of play described in the theories of Edith Cobb (Cobb, 1993). I also included these multi-sensory dimensions, and moments of 'wonder' in the stories. In this way I used 'thick' descriptions in my narratives to reveal how the children created themes for play in connection to the landscape and places they visited and revisited.

My interest in the children's places and in their play made me see both the landscapes and the places from new perspectives that challenged my interpretations and my writing. In this respect the article represents the starting point of my narrative analyses.

I see this article as more descriptive than the later articles, but the topic of moving, dwelling and imaginative play is a foundation for how developed new perspectives on experience and learning in later studies, how the children experiences are connected to the natural environment, and on the social aspect of clan-building.

In this article I refer to the timeline of the study being eight months as I did not take into account the observations made in February.

Study 2 Environmental consciousness

The title of the study: “Bringing the jelly fish home. Developing environmental consciousness: Children’s encounters with landscapes and places in Norwegian Kindergartens”

The over-arching aim of this study was to elucidate and interpret topics that are relevant for how children develop environmental consciousness from their experiences in the outdoor environment.

This is the paper that elucidates the experiences of play and environmental learning aspects of it. What I wanted to elucidate in this article was different perspectives on children’s relationships to nature-landscapes and places, as I see this as a departure for developing a consciousness, open mind and ability to connect to the natural environment

The concept of environmental awareness (UNESCO/UNEP, 1977; World Commission on, Development, & Brundtland, 1987) has been used through the decades as a concept underpinning people’s knowledge of environmental problems such as global pollution and climate change. I do not propose that this is not a part of the agenda in environmental learning , but I do see environmental learning from a broader perspective, related to the direct experiences of being in natural landscapes. For that reason, I decided to use the concept of environmental consciousness. I know that consciousness is a concept that can be problematic as it in some traditions means an inner process of understanding. However in the Oxford Dictionary(Oxford University Press, 2014) consciousness can be used as synonymous with awareness, but is can also be understood as an openness. When I observed the children in their encounters within the landscapes and places, it was their openness towards the environment that was the plot I wanted to explore and present.

In this article I do present narrative maps as a tool for thinking, and also to give the reader a glimpse into the places as experienced. The narrative maps are constructs where the names of the places and the drawings are a result of my observations when being in the landscape with the children. It is maps that represent a temporality as they describe the places as they occurred when I observed them. Going back and drawing and the map today would probably result in other names, and show other activities

The narratives in this article can be identified with to places on the narrative maps. The plots of the narratives are connected to different

perspectives of children's experiences. These describe both how the children develops understandings that are fact orientated, and at the same time go to and from their fictional stories, as in the narrative about the beetles. There are also examples where the children develop storylines from animation plays they know from their home, and bring those into the natural context. The Bakuga play is an example of how place, objects and mouldable material such as sand were transformed in their imaginary play.

There are elements of wonder that are of importance both for the children's play and their fictional dimensions as well as the natural science knowledge related part of their observations (Carson & Pratt, 1965; Næss & Brun, 1995). The wonders occur as the children are imagining a monster, when they explore the structure of the sand and when they find the jellyfish washed ashore. Both the wonder and sense of place dimension along with the knowledge and ecological understanding are for these children in the early years a way of developing environmental consciousness I even see this article as a contribution to how we can educate for environmental learning and local understanding of sustainable development with a focus on a pedagogy reconnecting children to natural environments.

Study 3 Didactic implications

This is the only paper that is published as a chapter in a book. The paper is double blind reviewed and the book is in press.

Book: Brostrøm S, Lafton T, Letnes M (ed.): *Didactics in Early Childhood Education*, Trondheim: Akademika

Title: "Over a rock, we run without a stop -Moving bodies".

The book is on didactics in early childhood education. The book is written as a curricular book for kindergarten teachers and teacher students in Norway. The main headline, 'Body, movement and health', corresponds with one of the cross-curricular subjects in the curricula for Norwegian kindergartens (Ministry of Education and Research, 2011).

I do not go into the health aspect in this article. I use my empirical data in this text, and I do write in the cultural context of how the child has been understood in connection to learning in nature in the kindergarten tradition. I also contextualise the moving body in a way that has implications for how we experience places. By this, I also want to offer a critical perspective on a practise that emphasises experience more than learning. It is supported by the

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theory on the body and movement from the phenomenology of perception (Merleau-Ponty, 1962) and the multisensory approach on how children explore and create meaning. I included this because I see embodied creation of meaning, as important for the kindergarten student teachers to be aware of. This implies that the text brings up the discourse about embodied experiences and experiences of places or emplacement. Observing children with an awareness of the aspects of embodiment and emplacement reveals how the body in movement is crucial for how they understand the world.

When I introduce the narrative maps in this chapter it is because I see these maps a possible tools for the teachers when they are in the kindergartens. It can be a tool for documentation or tools for thinking and for developing stories together with the children.

What I see as the most important contribution of this paper is how we can understand moving bodies in relation to play learning. The theories of John Dewey (Dewey, 1938, 1956, 1998) .brings in a discourse in which the experience and learning can be understood as dialectically connected. The narratives exemplify the experience and learning possibilities anchored in the embodied experiences of places. The experiences themselves, brought to reflection by the children are learning situations.

This is a discussion that is relevant for kindergartens as pedagogical institutions.

Study 4 Social interaction and clan-building

The title of article 4 the last article is: “Ethnography and narrative inquiry: clan-building in nature groups in Norwegian early childhood institutions.”

The overarching theme of this article is clan-building. These groups were not savage peoples I went out in the wild to study, like Mead(Malinowski, 1992; Mead, 1928) or Malinowski.in their anthropology studies. Neither was it the social interactions of street gang, as in Whytes Street Cornes Society studies (Whyte, 1993). But, the aspect of clan-building as an ongoing means of social interaction still has some similarities with these branches of research studies, as they represent direct and shared experiences, and as my role was both to observe and to participate in parts of the social interactions

The theme emerged from my data that the children interacted in groups, or as I call them in clans, all the time. There was not one single day of observations when this did not happen. Clan-building is a word invented As I

saw the children moving around playing I observed them to be more like tribes than organised groups. For me, the concept of clans connects groups to their close relationship with the environment, often to natural landscapes. The focus on children's play in nature kindergartens as a democratic practise is elucidated by Melhuus in an ethnographic study (Melhuus, 2013), and in this article as a contribution to further development of the topic.

As I observed the children, the formation of the clans was both complex and still seemed to be structured and organised with smoothness and ease.

Using the theories of Schütz also challenged the theoretical approach to experiencing nature-landscapes and places in a social context. .

The functions of the narrative maps in this study were to present the places of the clans for the reader. The landscape in which the clan-building took place along with names that refer to common social activities developed mostly through play. For me as a writer they represented places of shared experiences and made me see the places with other lenses than in my former interpretations.

It was not difficult to find examples of clan-building in my data. What was challenging was to make divisions into different clans. The clans I came up with; the smallholders, the hunters and gatherers, and the builders and dwellers were not static groups. But, they were still continuously plots I identified in children's play

There are aspects of this discourse I did not write about in the article. One is the role of the protagonists and the power of the children inventing the games, and that the children were able to develop the storylines. The negotiations and the development of new clans were sometimes a demonstration of power, as the children could establish their own activities and play autonomously, without any permission

Another aspect to be considered is the role of the adults. Even though the children had much freedom the adults were also important for the development of clans and themes.

As I observed it they gave the children much freedom. But even if they did not act together with the children all the time they were always around them. For the final discussion on learning for democracy I do present how I saw clan-building as a possibility for developing democratic practises. This will of course not always happen. A further study on the development of clans and different strategies for negotiation and participation would be interesting

Summary

The first article, about how the children dwell and move within different places and landscapes gives an agenda for the multi-sensory aspect of children's experiences. The other three articles are directed towards perspectives within different discourses in early childhood education. These are environmental consciousness and environmental learning; didactics and social interaction. Further aspects of the articles are a part of the discussion and conclusions in chapter 7.

The studies are present in the last part off the printed version of the thesis

Chapter 7 Discussion and Conclusions

In this final chapter there is time for discussions and critical perspectives. As this is the final part of my text it is also the final stage for me as the writer to include what I see as the most important discussions and conclusions. There will always be blank and blind spots as the discussion connects to a broad theoretical framework and the rich empirical material. Experience and nature-landscape and places are key concepts for the theoretical contributions and also throughout the discussion.

Discussion

What is going on out there?

The first study was a description of how the children moved and dwelled within the landscaper and places. I see the extension from observing affordances (J. Gibson, James, 1977) towards a denser description in a narrative form as a turning point for how I was able to interpret and understand the children's experiences of the environment. Going beyond the descriptions of the landscapes and places and experience from within allowed me to interpret and understand the storied meaning as well as the moving and dwelling through landscapes connected to how children create meaning. Theoretical lenses as the phenomenology of perception and the embodied meaning, the multi-sensory aspects, and the experiences of places give direction to what we observe. I urge that if we want to know more about these outdoor practises we need to go with the children and reflect on their creation of meaning. For me this revealed qualities of the landscapes and places that were important for several reasons. These qualities were important because they have the potential to be used to understand how the body in motion is important for children's creation of places. The children in this study were fortunate to have access to these natural landscapes and places, but in addition when we plan and construct outdoor areas for children the opportunities for vegetation, diverse topography and possibilities to move between the different places

should be considered. The changes in the children's play behaviours seen in the built area and those they demonstrated in the wooded area indicate the importance of the atmosphere of light and shadow of the trees the variations in the ground, and the value of loose objects that can be transformed by children as a part of their imaginative play.

Previous research provided important knowledge about the functional use of landscape and places, and also of the development of motoric skills. At the beginning of the study, I used the theory of affordances but extended this approach with narrative inquiry.

Nature as used in this thesis refers to landscapes and places on uncultivated land. The landscaped and places the children in this study encountered mostly were rich in biodiversity. This was important for the multi-sensory way of experiencing. A contribution from all the studies was to bring in methodology connected to the sensory approach. The body and the use of the senses are essential to how children create meaning. Making 'thick' descriptions(Geertz, 1993) from observations of following the children outdoors contributed about knowledge about the construction of meaning. Imaginative play(Cobb, 1993) was related to the development of fictional narratives and at the same time, the children brought in facts. Such facts occurred in their use of knowledge related to other living species, such as the jellyfish, the crabs or a little beetle. The knowledge of the living organisms also seemed to give them an ethical attitude towards how to handle the creatures and how they were considered as a part of the children's play. Contributors to the knowledge were both the adults working in the kindergartens and other children. There were also a flux of play-themes from computer games and television that they developed further through their play in nature- landscapes and its places. The imaginative play was complex in its structure, both because many different themes could be developed. They were also complex because the children were to go in and out of the fiction, and they moved between the places and between clans. These play themes included and were also initiated by materials, topography and vegetation. As the same play themes could develop and be revisited through a longer period, the continuity and the dimension of time also seemed to be important. Furthermore the children's shared experiences motivated them to go further in transforming the narrative, adding material and actions and this became a shared creation of meaning. The adaptation of play-themes and the way

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children incorporated different landscape elements and developed places were creative.

The interest in and the parallel existence of imaginative play and constructions of narratives and scientific knowledge can be seen as resources for the development of didactics in outdoor education. Different aspects of experiences in relation to learning are important for how we interpret the didactic potential for using nature- landscapes and places in outdoor education. In early childhood education, revisiting the concepts of experience and learning created a possibility for bringing together both experiences and scientific knowledge and experiences and the development of social and narrative knowledge. In this respect the learning theories of Dewey (1938) and Bruner(1986) can make contributions by bringing different views about learning into the discourse of both early childhood education and environmental education.

Following the children into the woods and on the island, observing how well they oriented themselves in the landscape, and created places and how familiar they were with the environment made me view them as going *into* the natural landscape and places rather than *out* in nature. This sense of being at home in the nature was also apparent as they were highly tactile, touching, exploring and manipulating their surroundings. There could be heavy rain, and much water on the ground, but the children just saw this as an opportunity playing in and with the water. Digging ponds and canals to direct the water were popular activities. This was observed both in the forest group and on the island. After spending time outdoors their hands and faces had traces of earth or sand, but this did bother either the children or the adults. I would claim that the 'sense of wonder' approach is related to familiarity with nature. Being open to these moments is relating to the children's embodied and emplaced experiences. Their attention was not hindered by fear; but seemed rather to be driven by curiosity and attitude of exploration.

While environmentalist worry about the nature deficit disorder (Louv, 2009; Sobel, 1996) the children in this study represented the opposite end of the spectrum. However I cannot draw any conclusions about their engagement and interest in environmental matters in the future. On the other hand I do see the importance of the concepts we use. If the development of environmental awareness is simply connected to how we understand environmental problems, then I do see a need for inventing new concepts. When I do use environmental consciousness, it is because I see a need to

include experiential aspects in how we to open for and engage with nature in our local environment. I do not propose that doing so will ensure that the children will become environmentalists as adults. But it will give them a focus on local landscapes and places that connected to memories of childhood experiences

There is a danger for the research regarding children's experiences to end up as descriptions. Following Ricoeur (Ricoeur, Pellauer, & Blamey, 2004) on how we interpret and understand a practise and how it develops within a cultural context in the future is related to our critical reflection. The context for children's experiences of landscapes and outdoor places is different from Rousseau's time and Dewey's time; so too are the cultural and political ideas. It is even very different from when I was a child. One of these contexts is that kindergartens are a part of the educational system with their own curricula. I see a potential for transforming an educational discourse towards experiencing and learning in nature. This must be a discourse where both learning and an existential sense of wonder have a place. I also see this study as important because we do live in a world in which landscapes and places are changing. If natural landscapes and places are of importance, then we will also have to revisit how we plan learning environments in education as we look beyond the classrooms walls.

Our existence as such is social. This also emerged as an important aspect in the children's activities and play. Using Schütz's (Schütz, 1972) modes of worlds highlights the importance of the contemporarily shared world and the direct experiences and common actions. The nature-dominated environments of the nature groups in this study offered good opportunities for these kinds of social interactions. Their interactions implicated negotiations and the building of social clans. In this, the children had a strong agency and also embodied communication as part of the discourse. This was especially important for the inclusion of the smallest children. In the discourse of developing modern pedagogical institutions, these aspects are highly worthy of consideration.

Conclusions

In this text, I have brought different perspectives of the children's experiences into the ever-winding hermeneutic spiral of interpretations and understanding.

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In this respect, it might not be right to close with conclusions. The starting point was my question: What is going on out there?

Through the turns the study has taken, there have been contributions to the theoretical approach on the multi-sensory aspect of children's experiences of nature-landscapes and places. These imply the importance of their embodied and emplaced experience that allow children to explore and experience the landscapes. This provides a direction towards bringing in new and contradictory approaches-including awareness of pre-understandings, interpretations as constructions of meaning and interpretations and text as steps forward towards new approaches. When this study is presented as a text it is the reader who interprets it and who can develop further understanding.

But there are interpretations in this study that have contributed in new aspects to be considered in the national and international agenda for learning in nature.

One is the embodied and emplaced knowledge of bringing places into the pedagogical agenda. The most complex and exciting places I see are the wild places.

The concept of environmental awareness through the ways is used too closely related to environmental problems. For that reason, we need to rethink the concept and to identify one that better connects to an experiential openness towards the environment. I use the concept of environmental consciousness in this thesis.

I see the need for going into the discourse of experience, play and learning in kindergartens to use and interpret these concepts in order to develop the didactics. Outdoor nature dominated environments should be seen as places not only for experience but also for wonder reflection and learning. Dewey's notions on the development of reflective thinking and learning; Continuity, situation and interaction are elucidated through the narrative presentation and the topics of the articles. The regular use of the same areas, and the timeline, spending the whole days outdoors were important for the continuity. The situational contexts and the interaction were at a grate extend intertwined. This elucidates the importance of nature-landscapes and places in the development of shared experiences and creation of meaning. The shared experiences are a foundation for communication and development of common understanding. The uniqueness of nature-landscapes is their opportunities for children to create places and develop clans within their social interactions.

WHAT IS GOING ON OUT THERE?

The storied form of the narrative inquiry is a way to present meaning.

Even if I cannot draw general conclusions from this study, my interpretations can be commonly understood. I see the implications of this study for making contributions towards bringing the child out of a deterministic nature-saver context and into new discourses for development.

Of the three levels of Ricoeur's narrated time, the third level is when it is left to the reader. There will, as I see it always be blind and blank spots. In this way, this thesis is a contribution in revealing several aspects of importance for the further development of pedagogical practises in the outdoors.

Norsk oppsummering

Denne avhandlingen bygger på empirisk materiale fra en etnografisk studie der jeg fulgte to naturgrupper i en barnehage over en periode på ti måneder.

Mitt utgangspunkt er gitt i hoved tittelen på avhandlingen:

- Hva skjer der ute?
- Hva betyr det for barnehagebarns erfaringer når deres hverdagsaktiviteter flyttes ut i landskap og steder i natur?

Bakgrunn

Som lærer i utefag og fagområdet fysisk fostring, nå en del av emnet natur, helse og bevegelse i barnehagelærerutdanningen har jeg gjennom flere ti-år vært engasjert i barns erfaringer i natur pregede landskap og steder i nærmiljøet. For mange barnehager er uteområdene, utmark og enkelte steder også parkområder slike landskap og steder som brukes regelmessig. Vi har også en del barnehager som er ute største delen av dagen gjennom hele året.(Lysklett, 2013; Melhuus, 2012)

En teoretisk overbygning er Paul Riceurs filosofi som både omfatter hvordan tid forstås og tolkes i forhold til historie og den kritiske hermeneutikken(Ricoeur et al., 2010).

En kulturell kontekst

Ideen om barns læring i natur belyses I denne delen som en del av en kulturell kontekst. Den kulturelle kontekst er i denne sammenhengen den norske som er slik som også min forforståelse er forankret i en norsk kontekst med nasjonale fortellinger der naturen fremheves som nasjonalt symbol og der friluftliv forstås som en del av den norske kulturarven(Slagstad, 2008; Tordsson, 2003). En annen kontekst er den norske og nordiske barnehagetradisjonen der bruk av naturen og lek er en del av innholdet og vurderes som positivt (Halldén, 2009b). En tredje kontekst er knyttet til læring i naturen, og jeg trekker frem to modeller som kan tolkes som deterministiske. Begge tar utgangspunkt i små barns møter med fri natur og ender opp med

det miljøbevisste mennesket (Bang et al., 1989; Chawla 2002). Ved å gå inn i en studie med fokus på barnas egne opplevelser vil vi kunne åpne for nye tolkninger og forståelser av barns møter med naturlandskap og steder i barnehagen.

Studier knyttet til barn og utemiljø

Emnet er vidt og ut fra søk med ulike kombinasjoner av søkeord i ERIC presenterer jeg en oversikt som er relevant for denne studiens fokus på barns opplevelser i møte med natur, landskap og steder.

Studiene er presentert ut fra følgende inndeling:

Topografi og barns lek, affordanseteorien og barns lek, læreres og barns perspektiver på læring i utemiljø og til slutt naturvitenskap og miljølære.

Som oversikten viser er studier av barns opplevelser av natur, landskap og steder knyttet til en rekke ulike fagområder og forskningstradisjoner som alle er viktige bidrag for hvordan vi forstår denne praksisen.

Erfaring

Dette kapittelet viser ulike perspektiver på erfaringsbegrepet. Først tas erfaring og læring opp. Her er det Deweys (Dewey, 1938) erfaringsbegrep som knyttes til erfaring og læring i barnehagen. Læring drøftes også ut fra sosial interaksjon og sosial overføring av kunnskap (Bruner, 1996; Schütz, 1972).

Erfaringsbegrepet belyses også i tilknytning til natur, landskap og steder. Og til kroppslig erfaring og forankring til steder, ulike tolkninger av naturbegrepet og hva vi erfarer som natur i forhold til en natur-kultur forståelse

Metode

Dette er en etnografisk studie.

Deltagende observasjon, uformelle samtaler og foto har vært grunnlaget for konstruksjon av data. Bearbeiding og presentasjon av data har vært gjort med narrativ analyse, etter retningslinjer fra Polkinghorne (Polkinghorne, 1995). Jeg har samlet narrativene, knyttet til fire ulike hovedtema:

En annen måte data presenteres på er ved bruk av det jeg kaller narrative, eller fortellende kart. Med tegninger knyttet til temaer fra barns lek viser kartet opplevelsesdimensjoner ved landskapet og stedene. Studiene er gjennomført

med tillatelse fra Norsk Samfunnsvitenskapelig Datatjeneste. Skriftlig informert samtykke foreldre. Etske retningslinjer for barns samtykke og rett til å trekke seg ut av studien er fulgt..

Studiene

Artikkel 1 «A rock, a smile a glimpse and a jump. Children's experiences of places and landscapes in local environments in Norwegian kindergartens.»

Denne artikkelen beskriver hvordan barna beveger seg og skaper steder I landskapet. Narrativene relaterer seg til barns meningsdanning og deres multi-sensoriske og kroppslig erfaringer.

Artikkel 2: «Bringing the Jellyfish home. Developing environmental consciousness: Children's encounters with landscapes and places in Norwegian Kindergartens.»

I denne artikkelen drøfter jeg med bakgrunn i empiri begrepene miljøbevissthet og miljøoppmerksomhet. Jeg argumenterer for bruk av det siste begrepet, naturoppmerksomhet i en pedagogisk sammenheng. Mine observasjoner viser at barnas åpenhet i forhold til utforske naturmiljøet var viktig. Fordi miljøbevissthet er innarbeidet i språket som et begrep rettet mot miljøproblem mener jeg vi trenger ett nytt begrep.

Artikkel 3

Dette er et bok kapittel i en norsk didaktikkbok. Brostøm,, Lafton&Letnes: Barnehagedidaktikk, Trondheim: Akademika.

Tittlene på min artikkel er : « En stein og et hopp så løper vi uten stopp. Kropper i bevegelse:»

Hovedanliggende ved dette kapittelet er å fokusere på den kroppslig og sanselige dimensjoner ved læring og knytte denne typen erfaringer til Deweys teorier om erfaring og læring.

Artikkel 4 : « Ethnography and narrative inquiry: clan-building in nature groups in Norwegian early childhood education.»

Her presenteres barns danning av «klaner» gjennom lek, og drøftes I forhold til Schütz's teorier om den sosiale verdens fenomenologi.

Diskusjon og konklusjon

Studien bringer inn fire diskurser om hva det betyr for barns erfaringer når barnehagen flytter sin praksis ut i natur-dominerte landskap og steder.

Den ene diskursen hvordan barns erfaringer er kroppslige og sanselige og hvordan disse erfaringene brukes inn i leken. Lek der både fiksjon og fakta er viktige element i barns lek tema. De sider både en forståelse av naturvitenskapliges fakta kombinert med en lekenhet og en felles fantasiverden.

Den andre diskursen er relatert til miljølære og erfaringer i natur og mener vi i en pedagogisk sammenheng trenger et begrep som viser til en nærhet i forståelsen av natur basert på direkte opplevelser og eksistensielle opplevelser. Begrepet miljøoppmerksomhet er et alternativ..

Når det gjelder det didaktisk perspektivet i forhold til barns erfaringer i natur mener er det viktig ikke bare å se på erfaringen, men også hvordan disse kan trekkes videre i forhold til læring.

Klandannelse, og den autonomi som barna hadde til å bestemme sine egen lek, hvor de lekte og hvem de lekte med gjorde at de dannet grupper. Dette var ikke statiske gruppe, men grupper som de dels gikk ut og inn av. Denne typen autonomi kan også forstås som en demokratisk praksis og knyttes til barns medbestemmelse. En fysisk delt omverden det barna bruker naturmiljøet inn i sin lek gir muligheter for felles utvikling av lektema , bruk av materialer. Klandanning er en måte å organisere seg på som setter krav til kommunikasjon og samhandling.

I tillegg til de fire diskursene bidrar denne studien metodisk i forhold til utvikling av narrative eller fortellende kart og bruk av narrativ analyse for å forstå barns erfaringer.

Ved å bruke Riceour som en overbygning har jeg trukket inn tema som erfart praksis, som tematisert tekst og som aktuell diskurs.

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Part II

Articles

1. Kari-Anne Jørgensen: “A rock, a smile, a glimpse and a jump. Children’s experiences of places and landscapes in local natural environments in Norwegian kindergartens.”
Article submitted 2013
 2. Kari-Anne Jørgensen: “Bringing the jelly fish home. Developing environmental consciousness: Children’s encounters with landscapes and places in Norwegian Kindergartens” Article submitted
 3. Kari-Anne Jørgensen: “Over a rock, we run without a stop -Moving bodies”.
Chapter in a book: Brostrøm S, Lafton T, Letnes M ed(2014): *Didactics in Early Childhood Education*, Trondheim: Akademi
- Kari-Anne Jørgensen: “Ethnography and narrative inquiry: clan-building in nature groups in Norwegian early childhood institutions.” To be submitted.

Appendix 1-3 NSD, approval of the study

