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Classroom matters
Research with children as entanglement

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The subject of this thesis is everyday life in the school classroom with a focus on what matters to the children. The classroom is understood as a more-than-human context consisting of combinations and gatherings of material things, bodies, time, space and ideas. The study is located at the intersection of education, interdisciplinary childhood studies, narrative and ethnographic studies, and informed by the 'material turn' of social sciences.

The empirical part took place in a third- and fourth-grade class where the researcher was the class teacher. An approach called 'classroom diaries' was developed in which the 10-year-old pupils wrote their observations, thoughts and stories freely. The nomadic analysis departed from the question, 'What is happening in the classroom?' and proceeded through repeated readings and retellings, working with writing as inquiry. The fragmented, controversial and messy writings of the children challenged the teacher/researcher to find non-representational ways of engaging with data.

The study consists of a summary part and four research articles. First, the analysis focuses on children's voices in stories that intertwine in classroom interactions. By defining three inter-related analytical spaces, the study illustrates how children's voices are not unitary or 'authentic', but emergent, constructed in reciprocal processes of telling and listening, and contingent on their social, discursive, material and physical environments and power relations.

Second, the study presents the narrative approach of Children writing ethnography ('classroom diaries') as a way of engaging with children's lives in the classroom and in research. Nomadic thinking serves to enable one to see the children's writings as emergent knowledge and to embrace the connectivity among the writings, the classroom reality, the child-ethnographers and the research, which are seen as mutually producing one another.

Third, the thesis examines time and children in the classroom. The concept of entanglement is activated to bring time into connection with matter and space. The analysis concentrates on a music lesson and the musical instrument the recorder about which two children write. The recorder is seen as organising actions in the classroom, producing intense moments of now and various enactments of children and adults. The notion of time as a neutral, 'outside' parameter is unsettled and both children and time are seen as hybrid.

Fourth, the study develops the idea of research with children as an entangled practice. It presents a post-qualitative analysis that attempts to center children's views throughout the research and seeks to do so in ways other than through representation. The study draws attention to classroom assemblages involving time and things, as well as to temporality and materiality as parts of the research process. The study suggests engaging with children's open-ended narration by retelling and responding. These engagements highlight particular situations, the unpredictable and strange qualities of children's lives, and the significance of 'tiny' things in educational environments.

The study suggests that an open-ended narrative space allows children to produce rich and thought-provoking knowledge about what matters to them in the school classroom. The idea of entanglement can be employed to engage with that knowledge in ways that do not reduce the complexities of children's lives.

Riikka Hohti

Mitä luokassa tapahtuu?
Lapset, koulupäivä ja lapsinäkökulmainen tutkimus kietoumana

Tiivistelmä

Tämä väitöstutkimus tarkastelee arkista elämää kouluokassa kysyen mikä siinä on lapsille itselleen merkittävää – millä on heille väliä. Tutkimuksessa lapset havainnoivat omaa luokkaansa ja kirjoittavat siitä. Tutkimus sijoittuu kasvatustieteiden, monitieteisen lapsuudentutkimuksen, narratiivisen tutkimuksen ja etnografisen tutkimuksen leikkauskohtaan ja liittyy niin kutsuttuun materiaaliseen käänteeseen.

Tutkimuksen empiirisenä kontekstina on suomalaisen peruskoulun kolmas-neljäs luokka, jossa tutkija toimi luokanopettajana. Luokassa kehitettiin käytäntö nimeltä "luokkapäiväkirjat" (Lapset etnografeina), jossa 10-vuotiaat lapset havainnoivat omaa luokkansa ja kirjoittivat lisäksi vapaasti ajatuksiaan ja tarinoitaan. Monenlaisia, rikkaita ja "sotkuisia"' kirjoituksia sisältävä aineisto haastoi tutkijaa etsimään vaihtoehtoisia analyysin tapoja. Tutkimuksen lähtökohtana toimi kysymys "Mitä luokassa tapahtuu?" Nomadinen analyysi liikkui erilaisten aineistojen, paikkojen ja aikojen parissa hyödyntäen uudelleen kertomisen ja kokeilevan kirjoittamisen strategioita.

Tutkimus koostuu yhteenvedosta ja neljästä tutkimusartikkelista. Ensin tutkimuksessa analysoidaan lapsen ääntä tutkimusasetelmassa, jossa lasten sadutusmenetelmällä kerrotut sadut lomittuvat kouluokan vuorovaikutukseen. Tutkimus tuo esiin kolme analyyttistä tilaa, joiden kautta lasten äänen kuunteleminen etenee. Lasten äänet eivät ole yhtenäisiä tai autenttisia, vaan ne syntyvät vastavuoroisissa kertomisen ja kuuntelemisen prosesseissa. Ne ovat riippuvaisia sosiaalisista, diskursiivisista ja materiaalisista ympäristöstään ja valtasuhteista.

Toiseksi tutkimuksessa esitellään kerronnallinen lähestymistapa Lapset etnografeina ("luokkapäiväkirjat"), jonka avulla voi nostaa esiin ja käsitellä lasten näkemyksiä koulussa ja tutkimuksessa. Nomadinen ajattelu mahdollistaa runsauden periaatteen ja liikkumisen ohi ja yli kategorioiden rajojen. Analyysi yhdistää eri aineistoja, paikkoja ja aikoja ja ottaa huomioon yhteydet materiaalisen ja sosiaalisen ympäristön, lasten kirjoitusten, tutkimuksen ja tutkijan välillä.

Kolmanneksi tutkimus keskittyy aikaan ja tilaan. Analyysissä käytetään kietouman ajatusta, jonka mukaan aikaa ei voi erottaa aineesta ja tilasta, vaan ne ovat kiinteästi yhteydessä toisiinsa. Analyysi keskittyy kahden lapsen

kirjoittamaan kuvaukseen musiikin tunnista. Keskeinen elementti tunnilla on nokkahuilu, joka järjestää toimintaa ympärillään tuottaen intensiivisiä nyt-hetkiä mutta myös tietynlaisia lapsia ja aikuisia. Tutkimus kiistää ajan käsittämisen ulkoisena ja neutraalina mittarina, sen sijaan aika määrittää ja rakentaa luokassa elettyjä lapsuuksia. Sekä lapset että aika nähdään hybrideinä, tuloksina erilaisista materiaalisista yhdistelmistä.

Neljännessä osatutkimuksessa seuraillaan postkvalitatiivista analyysiä, jossa tavoitteena on pitää lasten näkemykset keskiössä, mutta käsitellä niitä analyyttisesti muuten kuin representaation keinoin. Luokan elämää tarkastellaan yhdistelminä, joihin osallistuu ihmisiä, asioita ja tavaroita. Aika ja tila osallistuvat näihin yhdistelmiin, lisäksi niitä tarkastellaan tutkimusprosessin osatekijöinä. Tutkimus ehdottaa, että lapsille merkittäviin asioihin voi tarttua uudelleen kertomisen, vastaamisen ja kokeilevan kirjoittamisen keinoin. Analyysi nostaa esiin arkisten tilanteiden erityisyyden ja ainutkertaisuuden, lisäksi ne huomioivat myös oudot ja odottamattomat elementit.

Tutkimus osoittaa, että kun lasten kerronnalle annetaan avoin tila, he tuottavat rikasta tietoa. Kietouman ajatuksen avulla voi lähestyä tuota tietoa sellaisilla tavoilla, jotka eivät vähennä lasten ja lapsuuksien moniulotteisuutta. Osallistava lapsuudentutkimus voidaan käsittää runsaana kietoumana, jossa erityinen huomio annetaan asioille ja tapahtumille, joilla on lapsille väliä.

Avainsanat: koululuokka, lapset etnografeina, ääni, materiaalisuus, aika, tila, kietouma, nomadinen

Acknowledgements

The idea of entanglement runs through this dissertation, drawing the attention to connections and interdependencies and challenging the possibility of addressing any entities as self-contained or separate. At this moment I am immersed in the lively connections and gatherings without which this book would not exist. There are both human and non-human participants to this relational achievement. I am thinking of times and places, histories and futures (including including my previous professional lives a class teacher and as a violinist), and of rooms, books, corridors, walks, travels, words exchanged, coffee, coffee, and coffee. But of course, I am very much thinking of certain people, whose attention, ideas, words, encouragements, care and criticism have been co-constituting this work. Yes, it is easy to say following Deleuze and Guattari's opening of *A Thousand Plateaus* that I have not written this book alone, on the contrary, there is quite a crowd here.

My biggest gratitude goes to my supervisors Liisa Karlsson, Sirpa Lappalainen and Tarja Palmu. Thank you Liisa for including me in 2010 in the Finnish Academy project TelLis led by you. Your open-minded interest in children and your uncompromising focus on listening to them has been a vital inspiration for my research. I am also thinking about your non-hierarchical approach to both research, teaching and supervising. Thank you for all your support and trust. Thank you Sirpa for the generous sharing of your expertise as an ethnographer and for your important and concrete critical comments, encouragements, support and trust. Thank you Tarja for being my supervisor for the first three years of the doctoral studies. Thank you especially for your wise comments and encouragements that came always at the right moment. I want to give my sincere thanks to Kirsti Lonka who as the leader of the Educational psychology research group at the University of Helsinki has given her unconditional support and facilitated my work in many ways. My heartfelt thoughts and thanks go further to Elina Lahelma, who was my supervisor for my Masters Thesis (which is the basis for the Article 1 in this dissertation). Thank you Elina for opening up the potentials and joy of feminist ethnography, for your continuous encouragement, and for your entire work. I am also grateful for the University of Oulu TelLis researchers: thank you Leena Syrjälä, Eila Estola, Anna-Maija Puroila, Elina Viljamaa, Susanna Kinnunen, and Virpi Louhela-Risteelä – your devotion and insight have taught me a lot.

I am greatly indebted for the groups and communities that during these five years provided me contexts of thinking and discussing. The most important research contexts for this work have been the seminars by our multidisciplinary Child perspective research group (lapsinäkökulmainen tutkimusryhmä) led by Liisa Karlsson, the KYK seminar led by Kristiina Brunila and Sirpa Lappalainen,

I want to give my sincere thanks to Maggie MacLure and Leena Alanen for agreeing to be the preliminary examiners for this thesis. It is exciting to think that you have read my work so carefully and dedicated your time and thinking to it. I have been able to improve the thesis greatly based on your encouragements and

CONTENTS

List of original publications

This thesis consists of a summary and the following publications:

Article 1
Hohti, R., & Karlsson, L. (2014). Lollipop stories: Listening to children's voices in the classroom and narrative ethnographical research. *Childhood,* 21(4), 548-562. DOI: 10.1177/0907568213496655

Article 2
Hohti, R. (2016). Children writing ethnography: children's perspectives and nomadic thinking in researching school classrooms. *Ethnography and Education,* 11(1), 74-90. DOI: 10.1080/17457823.2015.1040428

Article 3
Hohti, R. (2015). Now—and Now—and Now: Time, Space and the Material Entanglements of the Classroom. *Children & Society* (online before print). DOI: 10.1111/chso.12135

Article 4
Hohti, R. (submitted) Time, things, teacher, pupil: Engaging with what matters. (Submitted to *International Journal of Qualitative Studies in Education*.)

Prologue

This study is about ordinary events, doings and things that take place in a school classroom. And it is about children writing about these events, doings and things and about the writings becoming a fibre entwined in the everyday life of the classroom. It is about hands, hair, chairs, the classroom window, football cards and the musical instrument recorder. It is about a teacher whom the children write about and who is intertwined, or entangled, in these same events. It is about the teacher becoming a researcher and beginning her research by writing with the children's writings. It is about thinking with the children's writings with theory and with memory.

This study is a struggle towards complexity. It advocates open-ended complexity concerning children in educational environments and also concerning the ways in which to inquire with them. It is about encompassing many different locations and times in research. It is about listening to children's voices. It is about how time, space and matter participate in producing the children as complex beings-becomings. It is about having to talk to children about the research. It is also about provocations, most importantly, provocations introduced by the children's writings. It is about enlarging the space for thinking about children and childhoods and about a movement towards non-reductive ways of seeing them and knowing and being with them.

Introduction

The question "What is happening in the classroom?" was the starting point.

(Lea and Siiri:)

The teacher wishes GOOD MORNING EVERYBODY!
Elmo shouts oohh!
Our first lesson is religion and ethics.
We are practising reading for the month's devotional hour
The readers: Raila, Petri, Akseli and Terhi.
It's cold outside.
Aapeli is playing with a pencil.
(. . .)[1][2]

When I was a class teacher, I once brought a new, gleaming white laptop computer to class. It was meant for me, but when I noticed how keen the children were to try it, I asked them to use it to write about life in our classroom. I first asked them to look around carefully: "What is there? What is happening there?" Then the children were asked to write freely their observations, thoughts or stories on the laptop computer. This happened in March 2010, when the children were in the third grade. We called the practice 'classroom diaries'. There were always two classroom diary writers per day, and they had the entire school day to write without any other responsibilities. The children wrote eagerly. The writings were placed on the wall or collected in a file for all the children to read. There was a lot of talking about the writings and attention given to them. We often read them aloud in class, just for fun or to exercise reading and listening skills. Sometimes the readings were followed by further discussions in which we talked about our practices: "What do we do when we do this?" "Is this right?" We also made plays based on the writings. This activity continued until December 2010, when I joined a research project at the University of Helsinki and became a full-time researcher[3].

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[1] The names of the participants are pseudonyms and some details have been changed for the sake of anonymity. The sentences in the classroom diary excerpts have been separated onto individual lines (with the exception of section 2.3, Empirical materials).

[2] All the texts (stories, classroom diary excerpts) originally written by children have been translated into English by Anna Ihamuotila, Johannes Ihamuotila and Markus Ihamuotila.

[3] For a full presentation of the approach 'classroom diaries' (Children writing ethnography), see section 2.2 and Article 2.

Right from the first, on receiving the writings, I was seized by a feeling of their significance: there was a 'glow' about them. I had been busy and exhausted with a class of 30 pupils. Now I had found a way to listen to the children without physically listening to the cacophony of their voices. The researcher inside the teacher woke up (I had been doing an ethnographic study on the classroom as my master's thesis). I noticed elements in the children's classroom diaries that were parallel to educational ethnographies: these were 'thick descriptions', including mixtures of formal, informal and physical layers of school, and visible 'time-space-paths' (see Gordon et al. 2000). And there were completely surprising things and doings that I had not noticed as I busily carried out my plans as the teacher.

(. . .)
It's cold outside.
Aapeli is playing with a pencil.
Aapeli is laughing at Hitler =).
The teacher chatters about killing Hitler.
Elmo is playing with the pokemons.
Gorilla [the class mascot] is staring at us.
Titta hands out the music and Patrik hands out the hymnal books.
We need to take out songs 488 and 548.
The teacher asks the class what happens in the song ONCE IN THE SCHOOL YARD
Sebastian is blowing the book down.
Sebastian doesn't have the energy to stand.
(. . .)

The observations, thoughts and stories written by the children in class, such as the writings made by Lea and Siiri above, are at the heart of this study. The writings were done during a ten-month period, but the empirical part of the study extends to larger spaces and longer times, at least to a four-year period, because I had been teaching these same children since they began school.

With the help of the children's writings, this study takes a stance very close to the events that took place in the classroom. It resists closure and fixity, and instead of general statements, draws attention to the particularities of these events and the ways in which children and childhoods are produced in them. The notion of childhood here is *emergent*, in which I take into account how children are produced through the shifting and heterogeneous combinations of entities that participate in classroom events: material beings, architectures, technologies, other human beings, time, space, and more.

The central concept of the study for tuning in to the complexities outlined above is *entanglement* by Karen Barad (2007, 2010, 2003). Entanglement refers to the connections among all the elements existing in an event. According to Barad (2007, ix), 'existence is not an individual affair', by which she means that the separate existence of a human being (a child or an adult) outside her or his material, social and discursive relations is an illusion. Entanglement is not to be thought of as simple intertwining (because entities do not pre-exist their connections), but the connections of entanglement are relations of interdependence and mutual constitution[4]. For example, in the classroom diary excerpt above, Sebastian is produced as the specific being he is through the specific place he occupies in the classroom, through the hymn book in his hands and the book's fine pages as they respond to his blowing and by their invitation to him to experiment further. At the same time, the hymn book is affected by his actions, and numerous other consequences –sound, movement and the classroom diary writer's attention – emerge, shaping the situation in class by their part and producing it as the specific event that it is.

The concept of entanglement is used in this study to open up the lively variety of interactions included in events. Similar to Myers (2015), I take entanglement as a given, and the task of this study is to try to attune to it, to 'fumble' it. Entanglement embraces all aspects of research, from how the research subjects are seen to how research is actualised and written and reported. In attuning to entanglement's complex and far-reaching relations, I take advantage of the idea of *nomadic* by Deleuze and Guattari (1987), which opens research to movement. Nomadic brings curiosity and embraces open-endedness through a non-reductive adding of ever-new 'ands'. As a nomadic study, this study asks constantly: *What else? What at the same time?*

The thesis consists of three parts, as follows:

Part One (Empirical and theoretical entries) presents the empirical, theoretical and methodological basis for the study. First, I outline the theoretical starting points of childhood studies, 'children's perspective' and narrative studies. Then I present the empirical contexts and the various empirical materials used in the research (section 2). After that I introduce what I think of as the 'ontology turn' in my research: new materialist theories and the related development of qualitative research towards the post-qualitative (sections 3 and 4). I present the analytical strategies employed in this study in section 5. I end the first part by presenting the research questions (section 6).

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[4] How to translate entanglement into Finnish is still an open question. What we mostly use is 'kietouma' for entanglement, and 'kietoutunut' for entangled, but these words do not differ sufficiently from 'intertwined'. Guttorm (2014) uses 'kietoutunut', while Paju (2013) speaks of 'sidoksinen'.

Part Two is dedicated to the study results, which I introduce in three sets. Section 7 presents four aspects identified in the study's articles to explore children's lives in the classroom: Voice; Children writing ethnography; Time, space and matter; and Engaging with what matters. Section 8 presents the results as doings, and in section 9 the results are given as a list in response to the question 'What matters to the children?' Finally, I summarise what has been done in this study. I discuss the chosen approach critically, while I also reflect on the affirmative potentials of the concept of criticality in socio-material studies.

Part Three consists of the reprinted articles included in the dissertation.

The concepts of both entanglement and the nomadic bring a certain fluidity to the research: a fluidity in the research subjects and the particular field of interest, and also in analytical choices. The central analytical strategy here is writing, which is affected by the theoretical new materialist commitments: writing is used to experiment and to explore, not only to explain. At some points I *zoom* (see below) by writing in detailed, entangled complexities of an event or a concept; at other points I write to extend thinking into areas not yet known. What follows includes various types of research writing, some of which differs from how academic writing is conventionally understood.

- There are many writings by the children (quotations from the classroom diaries). They are indicated by a larger Calibri font.
- Around the sections are paragraphs in italics. These usually indicate what I call *zooming* - a particular writing strategy inspired by the idea of entanglement. In the zooming parts I use fast and careless writing in order to bring nomadic and exploratory movement into the picture. These parts include memories, stories, theoretical thought experiments, and poem-like analytical writings, all of which emphasise personal involvement in the entanglement. These parts do not necessarily employ a scientific reference style or a scientific objective and calm tone (see Law & Mol 2002, 3). Instead, they allow personal experience and different materialities, times and places to enter the writing as entanglements. In these instants writing is employed as a means of thinking and experimenting with the entanglement.
- Longer quotations from references are indented and printed in a smaller font.

Even a slightly different writing style can appear striking in the context of rigid scientific conventions. Kathleen Stewart (2007) guides her readers at the opening of her book *Ordinary Affects* as follows:

I write not as a trusted guide carefully laying out the links between theoretical categories and the real world, but as a point of impact, curiosity, and encounter.

This book tries to slow the quick jump to representational thinking
and evaluative critique long enough to find ways of approaching
the complex and uncertain objects that fascinate because they
literally hit us or exert a pull on us. My effort here is not to finally
"know" them - to collect them into a good enough story of what's
going on - but to fashion some form of address that is adequate
to their form (. . .)

(Stewart 2007, 4-5)

I seek to join these aims by cherishing the open-ended aspects of this study, from the classroom diary practice to the ways in which I report the results. This study employs various writing styles because of curiosity and complexity. The heterogeneous texts make room for non-linear ways of reading and enhance back-and-forth movement (see Barad 2010). In so doing they might disturb the hierarchical conventions of analysis, representation and the kinds of power relations created by scientific research writing which Deleuze and Guattari (1987, 367-69) term 'royal science'. When a thesis consists of journal articles, I feel that much has been summarised along the way. This is why in writing this summary I want to foster open-endedness and offer entanglement's openings and contact points to you, the readers of this study. The emerging connections and between-spaces of entanglement are after all 'where everything happens' (Koro-Ljungberg et al. 2015).

The personal closeness and extensive use of the researcher's 'I' might draw the reader's attention. This, however, is not meant to be understood as a sign of self-indulgent subjectivity in interpretation, but instead refers to the entangled state of the researcher with the research process, by which she is also constituted. Barad (2007), a quantum physicist and social science scholar, speaks of the necessary involvement of the measuring agent with what comes out as the result. Accordingly, this study distances itself from any notion of objectivity, because the intervening of the researcher and methodologies is performative, productive of all the findings. The researching 'I' has to be understood as entanglement as well; instead of 'I' referring to a subjective perspective of the teacher-researcher, one could employ the expression 'I (in entanglement)', which opens up the researcher subject as a grouping of elements thoroughly involved in and co-constituted by what it engages with.

The PE lesson started and we played a game of football
the game ended at 15.13.
Then the evacuation drill started
Then the short break started.
Then we do maths.
The teacher says blaahblablablablablablablabla!!!
now the story starts

PART I EMPIRICAL AND THEORETICAL ENTRIES

1 Childhood and 'children's perspective'

In this section I will outline the theoretical starting points for how this study approaches children and childhood. First, I discuss the images of the 'active child', which became influential together with the sociological studies of childhood, or as it is known today, simply childhood studies, since 1980's. Second, I deal with the initial starting point of the study, the child perspective, reflecting on how I understood it at different phases of the research. I then delve into the recent discussions that draw the attention to the complexities and diversities of current childhoods: the idea of the 'hybrid' child (Prout 2005), childhood in an age of uncertainty (Lee 2001) and childhood as an emergent phenomenon. These viewpoints have goaded me to engage with an emerging body of new materialist and post-humanist literature on childhood and methodological experimentation. Finally, I take up narrativity, which connects the two approaches to children's views in this study: Storycrafting and Children writing ethnography ('classroom diaries').

1.1 Three images of the active child

Childhood was taken up in a new way as the focus of interest beginning in the 1980s when childhood studies strongly and boldly emerged as a discipline of its own (James & Prout 1990; Alanen 1992). In his rethinking of those phases Prout (2011) observes that the new discipline was born indebted to and linked with numerous intense societal changes such as the 'hollowing out' of institutions and other hierarchical structures, the pluralised forms of family life, the 'risk society', high-speed knowledge circulation, the increasing flexibility of production (post-Fordism). These all contributed to a general uncertainty about life paths (ibid., 5; Lee 2001). The available versions of childhood were no longer adequate. According to Prout, three main principles were emphasised in the new sociological studies of childhood at that time.

First, children were seen as *beings in their own right* protesting the view of children as incomplete, in the waiting-room of adult life. Instead of passive socialisation into culture and norms, *the active, agentic child* was introduced. Attention was drawn to the creative and differing competencies that children already have (Kjørholt 2005) instead of the earlier emphasis on developmental stages, which has been called the 'dominant framework' or 'developmentalism' (see Lee 2001; Rautio & Jokinen 2015). The second central realisation was that childhood could be seen as a cultural and context-bound *social construction*, and thus subject to critical scrutiny, deconstruction and change. A third major feature was a structural approach: *'generation'* was brought in as a societal structure

similar to that of gender and class (Alanen & Mayall 2001), and the mutual dynamics of relations between children and adults was taken as the focus of interest. The generational approach emphasises that, because of this relationship, all the changes in the ways of perceiving childhood are dependent on the changes in perceiving adulthood and vice versa. Generation as a concept has facilitated analyses of power parallel to those made in feminist studies by the concept of gender (see Alanen 2001).

Each of these images of the child has been influential in generating new formations of knowledge and societal life, for example practices of including children in decision-making (Hallett & Prout 2003). Along with the rights-based approaches drawing from the UN Convention of the Rights of the Child, these practices have contributed to different emancipatory political agendas, which promote the need of children to get their voices heard in society. These conceptions can also be found affecting educational environments in Finland today; for example, the Finnish core curriculum for basic education (POPS 2014, 17) refers to the child as an active agent and to learning as a child's individual construction process. However, this thesis will bring out how environments and children are not just discursive constructions, and it will show how numerous historical, material, spatial and temporal factors are at play in classrooms, resulting in controversial and complex realities.

1.2 'Children's perspective' – what matters to the children

The starting point for this study was the observation that in schools children's voices are still not equally recognised as voices of knowing compared to the voices of the adults. Research on schools still rarely focuses on children's views or takes children into account as experts in researching their environments. Instead of *research with children* (Christensen & James 2008; Punch 2002), the prevailing emphasis in educational studies has been research *about, of,* or *for* children. In approaching children's views about school, this thesis draws on the images of the active child as presented in the last section. The participatory narrative approaches used in this study – Storycrafting and 'classroom diaries' – position the child as a competent contributor to the community. These narrative approaches are based on children's agency and in their capacity to know: children are asked to tell freely their observations, thoughts and stories without guiding questions or regulations of any kind. Karlsson (2013; 2012) speaks about *studies of child perspective* (see also Lähteenmäki 2013; Karlsson et al. 2014), in which she emphasises that a big part of children's culture has remained hidden owing to the domination of adult voices. Thus, developing ways of listening to children's voices is needed. According to Karlsson, this is not just a recommendation: it is an obligation (see UNCRC 1989; national legislation, e.g. the Constitution of Finland).

The images of the child offered by childhood studies, while having motivated me to do the research on children's views on school, are at the same time in fact the objects of my research. The need to make space for children's voices was the initial impulse for the beginning of my pupils' writing activity. Nevertheless, some of the theoretical premises that guided my actions at that time have become destabilised in the course of the study. The view of the 'hybridity' of childhood (see the next section) and the involvement of new materialist theorisations have made me question the idea of a pre-existing difference, that is, children as a category different from adults with their distinct perspectives and their own ways of knowing, needing child-specific ways to express their views. Also what is contested is the focus on the independent, intentional and agentic human individual. Where previously was the idea of children as a voiceless minority and an agenda to listen to them, now there is an attuning to what comes to matter to us all in classroom life. Instead of definitions, there is movement, 'traffic' between the ideas of children and adults. This study asks in an open-ended manner: what and how is a child? And, in moving within the relationality of research, I return yet again to ask, What then is an adult? The emphasis has shifted to connectivity, interdependence, context and the 'becoming' nature of all beings, including children and adults (see Lee 2001; Davies 2014).

This study thus finally challenges the idea that children are in need of specific methods to reveal their hidden worlds (see Rautio 2013). Yet, in Article 4, I note that there are numerous material, historical, architectural and discursive practices in the classroom that keep children and adults apart, to the extent that they can be seen as living in different classroom realities, even if the difference between 'adults' and 'children' was not considered essential. The materiality of everyday habits keeps children on the margins of societal participation more than any documents or legislation do. If distinct 'child-perspective methodologies' remain still an issue, they remain so not because of a pre-existing difference, but because of the ways in which material, cultural and historical factors collide in places in which children and adults interact, such as classrooms.

1.3 Childhood complexities

Hybrid childhood. The central message of childhood studies, which emerged in the 1980s and 1990s, was to promote children as beings in their own right and protest the conception of children as becomings in the sense that they were incomplete adults. In his later self-critical examination of the beginning of childhood studies Alan Prout (2011) points out how in doing this, childhood scholars in fact employed modernist thinking and its dichotomies. According to Bauman (1991), modernity aims at neat divisions and works mainly through oppositions, dichotomous divisions, in order to achieve purity and order and exclude ambivalence. In the field of education dichotomously divided habits of

thinking have become almost automatic: children are perceived as non-adults, bodies as not-minds, girls as not-boys, research participants as non-researchers, teachers as knowers and students as not-knowers, and so on (see Article 4). Kehily (2012) has pleaded with childhood scholars to allow children their complexity, and Prout (2005, 66-67) warns us not to steal children their being-becomings. The aim of the present study is to delve deeper into the relational processes of childhood and challenge both category and binary thinking in connection with children's lives.

Lee (2001) examines the being/becoming division and states that such a division no longer makes sense in an era of insecurity and uncertain perspectives – both for adults and children (see also Prout 2011; Hultman & Lenz Taguchi 2010). He draws from Deleuze in offering a notion of a different 'becoming' nature of both children and adults, one that emphasises relationality and interdependency. These viewpoints are actualised in my study: instead of sticking to the 'being' child as a protest against the dominant, developing becoming child, the aim is to go beyond this divide by tuning in to the emergent becoming nature of each being in relation to other beings (Lee 2001; see also Prout 2011). This study seeks to acknowledge the full complexity of children, exploring possible ways of seeing them as being-becomings, and endeavours to account for their childhoods as constituted of both culture and nature.

Prout's (2005) concept of the 'hybridity' of children and childhoods is central to my study's move towards a complexity-sensitive approach:

> Society is seen as produced in and through patterned networks of heterogeneous materials, it is made up through a wide variety of shifting associations (and dissociations) between human and non-human entities. Indeed, so ubiquitous are associations between humans and the rest of the material world that all entities are to be seen as hybrids.
> (Prout 2005, 70)

Following Prout (2005), there is no need to separate children arbitrarily from adults; rather the task is to see whether and how different versions of the child and the adult emerge from the complex interplay of various natural, discursive, collective and hybrid materials (ibid., 81). This study attempts to enter this hybridity or complexity by listening to children's voices as non-unitary and emergent (Article 1), by taking the fragmented and controversial writings created in the open-ended space of 'classroom diaries' seriously (Article 2), by analysing how time, space and materials are entangled and produce children and childhoods (Article 3) and by employing nomadic thinking and the practices of retelling and responding in experimental analyses (Article 4).

Childhood as an emergent condition: intra-action. In this study childhood is seen as an open category or an emergent condition (Prout 2005; Ruckenstein 2010; Article 2). By using the phrase 'emergent childhood', I am emphasising the above-mentioned relational coming into existence through the constantly shifting connections among the factors involved in a given situation. Barad (2007, 2010) elaborates on this relational emergence, and offers the concept of intra-activity, which replaces the more familiar interactivity. By intra-action, she refers to the mutually co-constitutive dynamics among all the elements existing in an event:

> Existence is not an individual affair. Individuals do not pre-exist their interactions; rather, individuals emerge through and as part of their entangled intra-relating. Which is not to say that emergence happens once and for all, as an event or as a process that takes place according to some external measure of space and of time, but rather that time and space, like matter and meaning, come into existence, are iteratively reconfigured through each intra-action, thereby making it impossible to differentiate in any absolute sense between creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future.
> (Barad, 2007, ix)

Lenz Taguchi (2010) states that from the first moment, the existence of a child is by no means a merely cognitive process nor is it merely a biological or social process, because without the oxygen molecules intra-acting with the human cells, the cognitive and social would not take place. At the present time, we are getting more and more information about how invisible non-human beings affect something that has been thought of as our intimately own inner 'selves': our intellectual activities are shaped by the bacteria that inhabit our bodies (and whose DNA exceeds in number the DNA in our own cells). The rise of posthumanist approaches can be seen as a response to the current complex environmental problems and to the scientific and technological advances that are blurring the boundaries between human and animal on the other hand, and human and machine on the other (Coole and Frost 2010). For today's scholars it is necessary to ask questions that extend beyond the nature-culture divide and either-or stances. This is also why childhood studies is necessarily an interdisciplinary project (see Prout 2011).

1.4 Narrative meeting places

Liisa Karlsson (2013) has developed the Storycrafting method[5] to explore children's perspectives by offering children an unregulated, yet culturally and socially familiar space to express their thoughts by means of storytelling. Storycrafting was used as part of the narrative ethnographic framework for the preliminary study to this thesis, analysed in Article 1, and it served as the central impulse for my further construction of narrative spaces for children in an open and unregulated manner. The Storycrafting approach can be seen as deriving from a humanist tradition of empowering children's voices, which becomes challenged by the posthumanist influences later in this study. However, our analysis did emphasise the heterogeneity of voices as constructed from material, discursive and social elements, and this finding, together with open-ended narration, served as an important step in the thinking process towards more posthumanist approaches to childhood.

Open-ended narrative spaces. The approach developed in this study, Children writing ethnography ('classroom diaries')[6] (see section 2.2; Article 2), relies on the idea of free narration[7]. The aim is to create an unregulated and open-ended narrative space for children to tell anything they choose. Storycrafting begins with the words, 'Tell me story!' and continues, 'I will write it down exactly as you tell it.' Similarly, in the 'classroom diaries', the choice of topic and the ways of writing were left up to the children to decide. They were told to look carefully around their classroom – 'What is there? What is happening there?' – and asked to type on the computer their observations as well as their thoughts and stories if they wanted to. Because of their open-endedness, both Storycrafting and 'classroom diaries' can be seen as a radical contrast to the narrative tasks usually given to children in schools. In pedagogical practices or research settings narratives are largely used because of their assumed child-friendliness. Nevertheless, it is usually believed necessary at the very least for the adult to suggest a theme for a story in order for the child's narrative to be 'useful' for educational purposes or research.

When the narrative space is open-ended, both the form and the content of the stories are affected. The free-flowing stories in this study challenged me to

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[5]Storycrafting (Karlsson 2009, 2013) is a narrative method used since the 1990s in both research and in various educational and societal settings.

[6] The practice was called 'classroom diaries' in the class, while 'children writing ethnography' is a term employed in scientific contexts (see Article 2). The choice of which term is used in this study depends on the context.

[7] Free, of course, has to be understood in context, and with an awareness of the power relations that cannot be avoided, especially in educational environments.

reconsider what is meant by knowing, what is considered 'true' and what part stories play in constructing realities (see Article 1). Power was at stake in asking the children to be the full authors of their work. Thus, the questions that emerged are of a fundamental epistemological and ontological nature. The narratives for this study form a body of texts that resists conventional methodological approaches. It does not make much sense to speak about reliability or validity in the untamed landscape of children's narration ('teacher chatters about killing Hitler'). Furthermore, these stories push against the boundaries of our highly normative conceptions of children participating in research: they extend beyond the boundaries of a 'good' story or 'good' answers to establish research questions useful for purposes fixed by the researcher in advance. Yet this study argues that in an open-ended narrative space, children connect with things or doings that matter to them. And through mattering, knowing is also at stake (Barad 2007): the knowing that is at hand is specific and context-bound, but not without far-reaching dimensions, as will be shown later.

Early on, I wondered if narrativity could be seen as something other than a conceptual framework only, a way of dealing with processes beyond meaning making, sense making or identity (see e.g. Engel 1995). I was inspired by Karlsson's (2013) statement that a story is born between the teller and the listener (see also Lähteenmäki 2014), which situated narratives outside an authentic individual storyteller. I then found the concept of *narrative meeting places* introduced by Puroila, Estola and Syrjälä (2012) in their study of everyday narratives in the context of a day care centre. In the thinking of those authors, children encounter each other, their circumstances and cultural beliefs – in this case a consideration of the possible existence of Santa Claus – intertwined in a dynamic way with mundane everyday interactions. In the following, I *zoom* in to one such meeting place:

Sometimes, during the break or during a library lesson, I asked the children to tell me a story. I particularly remember a Storycrafting session with Konsta, a loud-voiced little boy, who got in trouble easily and who had a great desire for attention. I often got tired of telling him not to speak while others are talking or interrupt me, and I got irritated by his endless attempts to start arguments with his friends. But now it was his turn to tell me a story which he wanted to relate. It was just the two of us in the classroom after a tiring school day. And this is the story he told:

Once upon a time there was Konsta. He was walking on the edge of a high rock. He fell off the rock, but halfway down, he got caught and was hanging on the branch of a bush.

When I asked if the story continued in one way or another, he answered no.

Dynamic meeting places. This study claims that children's stories serve as dynamic narrative meeting places (Puroila et al. 2012) in which it is possible to create encounters with elements and ideas belonging to everyday life and beyond (see Article 1). Concerning the meeting place constructed between Konsta and myself (above), I avoid making psychological interpretations such as looking for diagnostic characteristics of an emotionally disturbed or anxious child. But this story was dynamic, because agency was involved: it had the 'capacity to affect' (Deleuze & Guattari 1987), and these affects became materialised and had real consequences in our shared life in the classroom. From the day of this Storycrafting session forward, not only was there the classroom space in which we could meet, but also there was a different dimension, the story space, which was available to me from then on and gave me patience in situations that earlier had irritated. *Something* in Konsta's story forced me to think (Deleuze 2001, 139).

Along with turning to new materialist theories - the 'ontology turn' of my study - it became possible to think of narrativity as a kind of a force, whereby stories would serve as places for things, doings and ideas to be connected in playful ways. It is a shift to seeing children's writings as assemblages, which include narrative dimensions and elements, but which cannot be exhaustively explained as narratives emanating from human intentionality. MacLure's (2013a, 2031b) work helped me recognise the material dimension of writing. New materialist ontology situates the writings of children in-between the existing elements; it sees stories made possible as much through materials, spaces and times as through what we think of the intentional human act of narration in a social context. If we see stories as entanglements, then narrativity can be seen as functioning not only in the realms of meanings, or representations, but also in its ontological potential. Instead of being irrelevant, even the most mundane or wildly incoherent children's stories are illuminated as entanglements, including 'traffic' between meaning and matter. Based on this understanding, this study presents the children's narratives in terms of material entanglements and refers to the children's written products as *writings,* instead of narratives.

Much remains open in this field and still needs to be investigated. For example, I am thinking of the horror stories that children seemed to love writing. Why was this genre so much loved, and why was it so gendered? Only the boys in my class wrote horror stories. The normal explanation would emanate from power relations, performing masculinity and resistance to authority. However, I think that the between-landscapes and the combinations of children and zombies deserve a re-consideration. In order to do this we need to go beyond the 'why?' questions, which assume explanations and causalities, and focus on the *assemblage* (Deleuze & Guattari 1987) – the connections, combinations and unpredictabilities that can be found in the material. What happens in the encounters between children, monsters and zombies? How do they connect with

each other and with the classroom materials and space, and how do power and gender work in these relations? What consequences do they have, and what is produced?

NOW BEGINS THE STORY HORROR HALLOWEEN

PART 1. Once upon the time there was a gloomy night.
I was alone at home
and I didn't know where all the people had gone.
I went sleeping until I heard a strange voice.
(. . .)
Then I took the machine gun from the closet and shot my father.
After that I went to set my family free
and we lived happily until the end of our lives.
THE END!!!!

Part 2
did not live happily until the end.
on the contrary, one day I saw a zombie on the street.
I shot the zombie in the head
but the zombie did not die because it was dead already (. . .)

2 The empirical part

In this section I present briefly the setting for this study: the locations and cultures in which different phases of the work took place (2.1), as well as the instructions that guided the narrative activity 'classroom diaries' (Children writing ethnography) (2.2). Thereafter I present the empirical materials, the classroom diaries, and try to give a picture of the variety of writings that constitute the core data for the study. The empirical material for Article 1 was produced as part of my master's thesis in 2006. I introduce this setting last (2.5).

2.1 The school and the classroom

The empirical portion of this study (concerning Articles 2-4) took place in a relatively small lower comprehensive school located in a peaceful suburban area near Helsinki, Finland. The school had only about 150 pupils, and all the classrooms fit along a single corridor. All the pupils could easily gather in the hall for common festivities and other events, and all the children knew each other and the teachers, at least by name. The pupils came from relatively homogeneous backgrounds in terms of class and ethnicity, mainly lower middle-class – working class, native Finnish families. The teachers formed a small, solid team, one in which I was a newcomer (although not the youngest). According to usual practice in Finland, the pupils called the teachers by their first names.

During the time they were writing the Classroom diaries, March – December 2010, the children were ten years of age and in the third-fourth grade. I had been teaching these same children since first grade, when they were 6-7 years old. Their class was the first class of my own; it is customary in Finland for one teacher to instruct all grades 1 to 6 in lower comprehensive school, and to follow the class from one grade level to the next. According to Finnish custom, teachers are relatively autonomous when it comes to choosing their pedagogical methods, and so I could freely plan the school days according to flexible timetables, as long as I stayed within the framework of the curriculum. This is what is referred to as 'writing the day timetable' in the first classroom diary written on 1 March 2010 by Raila and Eini:

> The teacher is writing the day timetable
> It is math lesson.
> The teacher is teaching the times of the clock.
> The teacher made a mistake in the day timetable
> Then the break started

the pupils went quickly to the break.
The break ended
the pupils came into the class
Then a new math lesson started.
The teacher checked the homework
and after that the pupils started to do math.
It was calm in the classroom.
The teacher is walking around the classroom.
Right now there is a lot of noise in the classroom.
Then lunch started.
The pupils went to eat.
After lunch the pupils went to break.
(. . .)

Often, our classroom was not calm. At the time the classroom diary writings were being written, there were 30 pupils in the class, of which 12 were girls and 18 were boys, which accounted for the high number of boys writing in the classroom diaries. The classroom was small and poorly ventilated. Noise and headaches were our daily companions, and simply walking across the classroom was an adventure, there always being the risk to stumble on school bags. The tight space and the large group of lively children led me to adopt a fairly conventional, frontal teaching style – quite different from what I had imagined during my study years, when I was inspired by innovative methods. The tension between the material constraints and the ideals of listening to children was one of the main factors behind my need to expand the classroom space to narrative spaces.

Our classroom was a narrative classroom. The children were engaged in a great deal of narrative activity from their first day at school: telling stories in a group or Storycrafting with an adult or in a group comprised of children. As a teacher, I noticed that storytelling was often the best way to catch the children's attention. Self-invented stories always worked better than stories read from a book. The children found writing joint stories fun. Often I heard them asking, Can we write stories? Can we write together? Groups of children found places on the floor or under the tables to gather around a notebook and invent stories. One of them served as the writer, while the others invented. Already beforehand they were looking forward to the stories being read aloud in class.

This was the context in which one morning I happened to propose the idea of 'our own book', and the children welcomed the chance to write their observations, thoughts and stories on the laptop computer as a project that was fun.

2.2 Classroom diaries/Children writing ethnography

The writing activity 'classroom diaries' started in March 2010 and continued until the end of the same year. It began when the school teachers were provided with brand new, white laptop computers. I brought the laptop to class, and when I noticed how keen the children were on trying it, I thought that their enthusiasm could be directed to something productive. At first, writing classroom diaries was a simple idea of 'writing our own book'. Soon, however, I noticed the pedagogical potential of the activity – while writing the diaries, reading them or listening to them the children were practising many skills, applying what they had learnt and learning new things. Nevertheless, I wanted to keep the task open-ended and unregulated, with no rules about what and how to write, in order to maintain the children's joy and enjoyment in their writing. The same open-endedness was still the leading idea even after I realised that the writings could be used as research material.

The writing activity took place in an improvised manner intertwined in the everyday life of the class and shaped by it: sometimes there were several days between the writings, and sometimes the writing activity was interrupted for some reason. I was not strict in asking that classroom diaries be written about lessons that were taught by other teachers, such as English or Physical education. Sometimes the children took the laptop with them into the hall to observe school gatherings and to have along on our visits to the school library and the swimming pool. Throughout the empirical phase, the guiding principles were the open-ended narrative space (no rules or regulations about writing); one entire school day devoted to writing without any other assignments; and the socially shared nature of the activity: the writings were done in pairs (usually friends, although occasionally I selected the pair), and the results were open for everyone to read (with the writers' permission). As soon as the classroom diaries were written, they were usually printed out and placed in a file or on the wall for everyone to read.

Although the activity was implemented in an improvised manner, it was enacted more or less according to these instructions from the first day on. At first I gave the instructions orally; later, in order to be able to share the instructions, I formulated them in writing:

Classroom diaries/Children writing ethnography, instructions[8]

1. A suitable place is arranged for two writers of the diary. They are provided with a (laptop) computer, paper and pens.
2. The teacher/researcher tells everyone that the purpose of the activity is to produce knowledge about this particular environment (e.g. the classroom). Specifically, the intention is to produce knowledge about the lives of the children.
3. Two children are selected amongst the volunteers. They form a pair of ethnographers/diary writers tasked with writing down their accounts of a given period (one school day, for instance). While completing their task, the writers are given no other assignments.
4. The teacher/researcher says to the writers:
   'Look at your environment (e.g. the classroom) as carefully as you can.
   What do you notice there? What is happening there?
   Type your accounts on the computer.
   You can also write your thoughts or your stories.
   You can also draw pictures or cartoons on paper.'
5. In the end, the documents will be published (with the child writers' permission).

The classroom diary activity was completely voluntary, but every morning, when it came time to choose the writers, almost all the children volunteered, raising their hands eagerly. One of the material participants, the fine new laptop, seemed to be of great importance here. Also, it seemed important to the children that the classroom diary writers could stay inside during the breaks, which was the time for others to go out into the school yard:

(Siiri & Titta:)

(. . .)
now we are doing maths or practicing for the test
and now it is lunch
and everyone was talking and fussing around in the hall
now they are out on the break
Urho was 20 minutes in
and then he went out
and right now Riitta [the English teacher] came to tell us to go out

---

[8] This written formulation has served as the basis for the further experiments of others in different settings. The activity has served, for example, in classrooms in Estonia and in training classrooms in the University of Helsinki. Several Masters Theses based on the 'classroom diaries'/Children writing ethnography approach have been published during the past five years.

but then Titta and Siiri told Riitta that we are the classroom diary
writers
so Riitta went out
(. . .)

2.3 The empirical materials

The core data of this study consist of approximately 80 documents written by the children as classroom diaries. These observations, thoughts and stories cannot be seen as a coherent body of data; they include a variety of very different texts. Some diary entries are many pages long, while others are short, offering snapshots of the events:

(Harri & Senja:)

The day started. Virpi [the P.E teacher] taught us P.E.
Now we have handwriting, the teacher tells us how to write F.
Now it's lunchtime and we have beef slices and potatoes. Ruut and Solja ate crispbread.
Now we have science class. The teacher turns on the document camera because we present pictures.
The teacher asks about all sorts of things.
(. . .)

Some writings are like detailed fieldnotes:

(Petri & Erno:)

Now the mother tongue lesson began (at 9.16). The teacher is asking who is absent.
Urho is shouting loud. The teacher is checking the homework from yesterday.
Urho is making funny noise.Everybody starts SHOUTING! Now we are supposed to ask for turns in speaking. Harri is playing with his shirt.
(. . .)
At 9.45 the break starts. everybody is rushing to the break
The teacher is asking what kinds of figures we have drawn.
At 10.02 the break ended
At 10.11 the teacher came into the class.
At 10.13 the teacher starts the lesson.
At 10. 15 the teacher sets up the projector for the computer.

At 10.16 the teacher starts the talking in pairs.
(. . .)

Some writings contain fictional stories, packed with effects meant to impress future listeners:

(Konsta & Veikko:)

Duumins Halloween part: 2 (WARNING: K-18)

You probably remember what happened in the last episode. We'll continue from there.

Duumintroll thought Duuminpappa died but Duuminpappa didn't die.
Duuminpappa said:
I'll kill you brat. Duuminpappa said: STUPID! Duuminpappa said: I'LL KILL YOU BRAT!!!!!!!
Duumintroll runs away into a weapons cellar and takes an AK-47.
Duumintroll says to Duuminpappa: come catch me STUPID!
Duuminpappa says: OK! Duuminpappa gets angry and hits Duumintroll with a chainsaw. Duumintroll dies. But when lightning hit
Duuminpappa the lightning said: when you have killed your whole family then you will die too.
Duumintroll started suffering and in the end he died.

THE DUUMINS ARE OVER NOW GO HOME TO SLEEP WHEN YOU HAVE READ THIS THEN I WILL COME AND RETURN says Duumintroll.

There are writings that slide from "factual" to "fictional":

(Aapeli & Valto:)

School started at 8 00 for the a-group and at 9 00 for the b-group We went for a forest trip right after the first lesson ended for the a-group. The teacher said to carefully draw a plant. After that you could play freely. After a moment we gathered into a group and left towards the school. At school lunch was waiting for us. On the break we played football. The bell rang and we went inside and so on! k18 But now the fake bells of the ghost house ring. Our story starts. It tells about four boys. Their names were Teijo, Kalle, Aapeli and Valto. They lived in Porvoo. One stormy night the

doorbell rang. I went to open the door (but what was behind the door? answers) behind the door was (. . .)

In some writings different fonts offered by the laptop play a visible part:

(Sebastian & Anssi:)

Urho farted! Now Terhi is babbling something about maths. Kaarlo shooooooooooooooooooooooooooooo ouuuuuuuuuuuuuuuuuuuuuuuts yaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaaaaaaaaaaaaaaaay! !!!!
Someone shouts aaaaaaaaaaaaaaaaaaaaaaaaaaaaah!!!!!!! !! Kaarlo plays with a ruler. Ville goes to Ismo's supermarket after school. Kirsi rings the bell. Senja shouts for Kirsiiiii. Henna comes to peek..... Kosta reads his story to Kirsi. Kirsi asks a question.

Raila reads her own story to the whole class. AND now Akseli reads his own story. Everyone is quieeeet!!! And now Kirsi reads!
Everyone is talking about some play. Now everyone reads!!!!!!!!!!!!!!!!!!qwetyuiopåasdfghjklöäzxcvbnm!"EUR%&/()=?`.,;:*^°'¨
Kaarlo doesn't have packed lunch!!
(…)

Or:

THE SCHOOL BURNED

Once upon a time there were two little boys.
 They lived in an old abandoned
  mansion. In the mornings they ate
   bread and drank milk.
   Their best friend was Petri.
    They thought the class's loveliest girls
      were Saara, Minttu and Anna.
       It was winter and it was snowing.
        The boys were going to get their
         cousin who's name was Eetu.
          When Christmas break was over

everyone went to school.
Someone had set the school on fire.

By: Patrik and Valto

In addition to the classroom diary writings there are all kinds of other empirical materials, things I have been keeping and thinking with during the study: my teaching diaries; school photographs; emails exchanged with parents, school personnel and others; minutes made in the teachers' weekly meetings; school books; pieces of paper with children's drawings; pencils, pens, and sharpeners; official materials of the municipality for the teachers. The 'ontology turn' of my study made me consider all of this 'stuff' in a new way. I eventually saw it as material participants in nomadic analysis, helping me to move on to memory spaces and create new forms of data, such as 'memory data'. The broad conception of empirical materials applied in this study is illustrated later by the concept of 'data++' (Koro-Ljungberg et al. 2015), see section 4.2.

2.4 Translating the classroom diaries

When I began conducting research in English, I wanted to have the writings that had been written by children also translated by children. I turned to three young people, close family friends of mine – Johannes, Anna and Markus Ihamuotila – who were between 7 and 12 years old when the research process began. At that time, their family had just moved back to Helsinki from London, where the children had gone to school until then. Whenever I needed to translate classroom diary excerpts, stories or other material written by children, they helped me. Similar to the Storytcrafting sessions or the classroom diary writing practice, usually two of these children at a time participated in our translation sessions. These experts negotiated the expressions that children had used in their writings and struggled to find corresponding English versions, always choosing the closest possible expression. They respected the specific, sometimes controversial, characteristics of this empirical material, whether factual observations, horror stories or playful engagements with words and type fonts.

2.5 'I don't like being written about'

One day, when the classroom diary writing practice had been going on for months, Matti, one of the pupils in my class, came to me and said: 'I don't like being written about in the classroom diaries.' As I tried to determine whether there was something specific in the diaries that disturbed him, he could not

specify. From that day on, I told the writers not to write about Matti, and I promised that I would remove everything from the diaries that was written about him before making them public.

This incident was a wake-up call for me and compelled me to consider the acts of writing, naming, and being written about that the classroom diary practice entailed. While the fun and creative potentials offered by the writing practice were usually the most visible, this conversation shows how important aspects of surveillance, negative power, and vulnerability are also present in it, and must therefore be taken into account.[9]

The two obvious power positions in class were my own positions as the teacher and as the researcher. My unquestioned authority as the teacher of the class was something that initially facilitated this project and shaped it in numerous ways, in which our shared history, the narrative classroom culture (see Article 2) and our mutual teacher-pupil-relations played an important part. Having done feminist research before, I was aware of the surveillance aspect of all ethnographic work, as well as the demand of reflexivity and the discomfort of making interpretations (see Pillow 2003; Article 1). But in the classroom diaries writing practice, with the 30 authors in class – authors who were research subjects at the same time – the situation was much more complicated. A complex visibility concerned all involved, whether the writing concerned the pupils ('Raila is picking her nose') or the teacher ('The teacher is shouting madly'). I had the feeling that the visibility and openness of the writing practice mostly protected the participants, because the classmates themselves would have rejected any bullying or anything rude written in the diaries. As a teacher, to make negative phenomena visible and then submit them for discussion (including my own reactions or decisions) was something that I considered to be more than just a negative option, because I would then have had the opportunity to tackle these issues with the help of the classroom diaries.

The talk with Matti made me to think about the power of the act of writing itself. The children were eager to assume their power positions as writers, choosing what and how to write and how to contribute to 'our own book'. Furthermore, they mostly wanted to be written about: there were many who frequently visited the writers' place and asked them to write about them ('Patrik asked us to put his name in this diary'). When the writings were ready at the end of the school day, the writers could say whether they agreed to have them published. They could also edit them before accepting them for publication and putting them in a file or on the wall for everyone to read – as they often did.

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[9] When presenting the 'classroom diaries' approach in various contexts, I have emphasised that it is not a tool for adults to assess the children in any way, and that a sensitivity towards possible negative effects and feelings, such as bullying, must be included all the time.

Matti's story illustrates the vulnerable side of being a child, of being part of the educational institution, and of serving as an object of observation. His expression of distress and anxiety compelled me to confront what being written about does to children. The business-as-usual of schools is full of practices that estimate, evaluate, and objectify children – practices that are recorded and stored as reports and marks. I was also forced to think about the illusory endeavours of ethnographers to 'capture' children's lives in the classroom, and how they often pursue these endeavours without giving the children any say in the actual distribution and interpretation of their videotaped, photographed, recorded and written representations after they have provided their formal consent. Matti's case highlighted how children's lives consist of particular situations that matter, and that there is never a secure place from forces that can intensify and materialise in an instant, leaving one helpless and powerless.

The children seemed to recognise the performative power (both the good and the bad) of the classroom diaries as 'data'. In the end, during one of my visits to the classroom, I asked whether there was anything someone wanted to add or ask. A boy raised his hand and said 'Promise to be careful, Riikka!' How I wish I could return to that moment and take the time to further discuss this boy's plea. What did he mean by being careful? What dangers did he imagine? But then the lesson ended, and the usual rush out from the class followed. Since then, this enigmatic message has echoed in my research, serving as a kind of strange warning, forcing me to stop and think about what I was doing with the children's writings, where I was taking them, and how I was interpreting them. It has become entangled in the very actualization of this research.

2.6 The empirical setting for Article 1

The empirical material for Article 1 was produced in 2006 in a small Finnish elementary school in the Helsinki area. The three-week participant observation took place in a first grade class in order to produce material for the ethnographic study on power in school as my master's thesis. As part of the ethnographic study, there were Storycrafting sessions for volunteers to tell their stories freely. The children always came to the Storycrafting sessions two at a time, and both pupils told their stories during the session. In Storycrafting, the listener says to the storyteller, 'Tell a story that you want. I will write it down just as you will tell it. When the story is ready I will read it aloud. And then if you want you can correct or make any changes.' (Karlsson 2013, Riihelä 1991)

3 Talking about what matters

This study is informed by what has been called 'the material turn' in social sciences (Coole & Frost 2010; Van der Tuin 2011; Alaimo & Hekman 2008; Hultman & Lenz Taguchi 2010). The theoretical framework of 'new materialisms' consists of a range of perspectives which have arisen during the last three decades, including (in addition to new materialism) material feminism, new empiricism, transcendental empiricism, post-human studies, agential realism, actor network theory, affect theory and the ontological turn, mobilised by theorists such as Deleuze (e.g. 2001; Deleuze & Guattari 1987), Barad (2007), Haraway (2008), Braidotti (2002; 2013), Latour (1993), and Bennett (2010). These theories serve in this study as a framework that welcomes everyday life unpredictabilities and complexities as opportunities for creating new knowledge and reconfiguring old subjectivities (see Rautio and Jokinen, 2015).

New materialisms can only be grouped together loosely, but they do share common underpinnings: they all share a focus on matter, or, more specifically, a commitment to theorising matter as agential and mutually constitutive with ideas and meanings. In so doing, new materialism decentres human beings as the sole meaning-makers and turns its focus to relations and processes rather than individuals, whose separate existence is rejected. Here new materialist theories differ from the poststructuralist and socio-constructivist views that have privileged discourse and culture over matter, body and nature, as well as from previous materialist theories such as Marxism (see Lenz Taguchi 2013). Koro-Ljungberg et al. (2015, 15) describe new materialisms as contesting the notion of nature as 'merely a backdrop for the humanist adventures of culture', or of matter as dumb and passive until represented to mean something of higher meaning, 'awakened to meaning by human interest and interpretation'.

In its focus on what matters, this study draws mainly on Karen Barad (2007) and her connective concept of intra-active entanglements. Although Gilles Deleuze did not consider himself as a materialist, the above mentioned focus on relations and processes is embedded in many of his concepts, such as *nomadic* (see below). Between the distinction of understanding matter as mechanistic or vital, he claimed to belong to the latter, stating that everything he wrote 'is vitalist; at least I hope it is.' (Deleuze 1995, 4, cited in Coole & Frost 2010, 9).

3.1 Mattering and meaning

Materiality is always more than 'mere' matter. Speaking about matter, one speaks at once also about relationality, difference, excess, force, vitality, and causation in complex terms – all of which makes us recognise that phenomena exist in a

multitude of interlocking forces (Coole & Frost 2010). Along with this recognition, the location and capacity of agency is inevitably reconsidered. Mattering, then, is a complex and pluralistic process, relatively open and consisting of productive contingencies which embrace all humans, including theorists and research participants. Rautio and Jokinen (2015) define mattering as 'being significant', but they point out that most things arguably both matter and have meaning. While everything is material inasmuch as it is composed of physicochemical processes, nothing is reducible to such processes – the society is simultaneously materially real and socially constructed. Accordingly, Coole and Frost (2010) define their critical materialist stance by stating that our material lives are always culturally mediated, but they are not only cultural. The challenge is to give materiality its due while recognising its plural dimensions and its contingent modes of appearing.

This thesis claims that, engaged in their open-ended and unregulated narrative practice, children speak about things and doings that matter to them. The children's writings often pushed me to shift my focus from humans to things in the classroom. A similar strategy has been used by Taylor (2013) who focuses on what she calls 'material moments' to examine how objects, bodies and spaces do crucial though often unnoticed performative work as vital materialities within the classroom. Nevertheless, based on the relationality embedded in the new materialist understanding of matter, such move does neither lead to the argument that things would function as agents as such, separate from their surroundings, nor that the agency at hand would be like 'human agency' in any sense (Taylor 2013, 690). In the course of the study I noticed repeatedly, that simply attempting to take the departure from things in analytical processes was a powerful move that was able to destabilise the human-centered habits of thought in education. This move, for example in connection with the recorder that is being played on the music lesson in Article 3, facilitates detecting new kinds of relational processes in the interplay between humans and non-humans in classroom situations.

Rautio and Jokinen (2015) examine the distinction between meaning and mattering in their study about children and snow piles in Northern Finland. They take the snow pile as an anchor in their discussion that contests simplifying one-sidedly developmental views of childhood and sheds light on the emergence of more-than-individual subjectivities. We have long lived in an 'age of meaning' where language is the epitome and carrier of meaning (e.g. St. Pierre, 2011) and the making and communicating of meanings is virtually equal to existing. What especially is the obsession of education, Rautio and Jokinen (2015) argue, is to attach meanings derived from developmental theories and skills thinking to children's actions (see also MacLure 2013b). In my study I noticed often, how everything that children do almost cries for an explanation; accordingly, it is almost impossible for an educational professional to observe children, say, climbing a snow pile or writing horror stories, without interpreting these actions

against the meanings emanating from either developmentalism or discursive power relations.

There is a temporal aspect to mattering, which Rautio and Jokinen (2015) describe as follows:

> Most things arguably both matter and have meaning. Meaning is often the retrospectively assigned attribute to a practice that took place because it mattered. Meanings can be speculated or imposed by anyone, mattering is only for those involved in the moment. Yet, mattering and meaning do not necessarily settle as a linear and/or causal connection in which mattering would always precede meaning. Meaning can be ascribed to things that did not matter to those involved, as well as – and perhaps more often – things that matter, don't necessarily mean much in retrospect.
> (Rautio & Jokinen 2015, 4)

This study examines time and matter in connection with the concept of entanglement. Barad (2007, 3) in Meeting the Universe Halfway illustrates the inherent connectivity between mattering and meaning. She introduces the concept of intra-action based on quantum physics to capture the mutuality of matter-discourse-relations and challenges the concept of an intentional state of mind as if it were a property of an individual as well as fixed in time and space. Barad's concept of entanglement highlights the materiality of both humans and non-humans, which exist in co-constitutive relations with specific times and spaces. Article 3 illustrates, how the seemingly stable material beings and spaces are fragile and porous with large enough timespans, just are humans and time.

Barad states that matter 'feels, converses, suffers, desires, yearns and remembers' (Barad, in Van der Tuin & Dolphijn 2012, 59). For Barad, the tangible and poignant entanglements of 'matter of being, knowing, and doing, of ontology, epistemology, and ethics, of fact and value' invite one to consider the ethics and responsibility within the interdependent relations of mattering (ibid., 3). This emphasises the ethical need for educational research to deal with a world that is larger than humans.

3.2 Researching children's lives as mattering

The term 'more-than-human' offered by Haraway (2004; see also Taylor et al. 2013) points at an enlarging space of inquiry that becomes available when the pre-existing divides (between matter and meaning and between the researcher and the object of research) do not hold. This study finds the classroom as a more-than-human environment: an emergent assemblage of children, their writings, things and doings, along with material beings, experiences and memories, learning, and ongoing potentially proliferating connections. Everyday life in the classroom

becomes thus seen as an 'endless stream' of relations between materials, practices and humans, which is where the 'hybrid' child emerges (Prout 2011, 7). There is a part of our existence that can be called 'ongoingness'. According to Rautio and Jokinen (2015), this part cannot be mediated but it matters nevertheless, whether labeled as meaningful against a given rationale or not. This *ongoingness within everydayness* could be what I sensed as a 'glow' or significance when receiving the classroom diaries, and which I realised I would be losing if I were to employ more conventional analytical strategies that entail separating and dividing, or coding.

To focus on the relational and ongoing processes of mattering is a different way to elicit and highlight children's views in research than the humanist practice of 'listening to children's voices', which, even though currently problematised as complex and plural (see Spyrou 2011; Article 1), is based on the image of research 'capturing' voices through specific methods. Also, it differs from exploring children's 'perspectives' into a given thematic or environment that could be understood as an entirely separate entity. Rather, new materialisms offer a framework to tune in to the relational conditions in which children and adults find themselves, transforming with and learning with things that matter to them.

The consequence of new materialisms is that one has to find new ways of engaging in analysis to address the complex relational ongoingness at hand. According to narrative conventions, the writings would be analysed for the meanings that children attach to their experiences, whereas new materialisms can used to explore their ontological potential as well. The analysis extends beyond mere language or representations, to attend to how the narratives of the children include 'traffic' between matter (those mundane things, the football cards, school bags, hands touching hair, and so on) and meaning. Even the most fragmented and ambiguous narratives of the children can be taken into account as playful engagements with the material world, and their transformative potential can be acknowledged. New materialisms challenge the hierarchies between simple things and higher-order concepts. This 'flat ontology' (DeLanda 2002, 47) protests privileged kinds of knowledge and thus helps us to consider children's ways of writing and being (or being-with, see Pyyry 2015) as knowing.

3.3 Unravelling binaries

Rejecting the modernist binary dichotomies is at the heart of the new materialist theories. Van der Tuin and Dolphijn (2012, 119) speak about new materialism as a rewriting of modernity, which 'shifts the dualist gesture of prioritizing mind over matter, soul over body, and culture over nature that can be found in modernist as well as post-modernist cultural theories'. The realisation that meaning and matter only exist in connections and that humans are inherently connected to and co-produced with non-human entities results in many taken-for-granted binaries no

longer being usable. Among the divides examined and challenged in this study are being/becoming, adult/child, teacher/pupil, discourse/matter, knower/known, theory/practice, nature/culture, matter/meaning and fact/fiction. Myers (2015) in her study on an early childhood classroom draws attention to the space that is opened as the dichotomies unravel. My study moves in just such spaces, and these between-spaces gradually come to be seen as the spaces 'where everything happens' (Koro-Ljungberg et al. 2015).

   With new materialisms, one can conceptualise a school classroom beyond the normative ideas of what constructs the educational environment. When the classroom is seen as entangled, also teacher and pupils can be viewed beyond the normative conceptions that push them towards binary ends (see Article 4). The new materialist and posthumanist reading of a classroom invokes a relational space, in which no participant is totally pre-fixed; some of the relations form sets of more stable combinations, some less; in any case, a space for transformation and possibility is recognised (Nordstrom 2015). Nevertheless, the more-than-human classroom is not to be seen one-sidedly as a rosy space of endless positive transformations, because, as Nordstrom (2015, 188) observes, that which participates in assemblages can also be horrible. For this study, the relationality of the classroom and the 'between-zones' (Braidotti 2002, 174) within this relationality were the crucial theoretical ideas that helped in exploring beyond the taken-for-granted picture of classroom life and accounting for the children as complex beings-becomings.

3.4 Three concepts: assemblage, entanglement and nomadic

The new materialist understandings of onto-epistemology have highlighted the need for new theoretical concepts and forced scholars to question many previously used concepts. According to Barad, from a relational materialist view, a 'lively new ontology' emerges, which reworks concepts such as space, time, matter, dynamics, agency, structure, subjectivity, objectivity, knowing, intentionality, discursivity, performativity, entanglement and ethical engagement (Barad 2007, 33). Take, for example, agency: in a situation in which bodies do not exist as discrete entities and where one acknowledges the mutual constitution of matter and meaning, agency can no longer be considered as a characteristic or possession of a human individual. Rather, agency emerges between the shifting assemblages present, which are more than human.

   The theoretical concepts central to this study are *assemblage* and the *nomadic* by Deleuze and Guattari (1987), and e*ntanglement* by Barad (2007; 2010). The compatibility of the philosophies of Deleuze and Barad is not seen as fully unproblematic (for current discussion see Hein, 2016). Hein, for example, notes that even when using the same words, these philosophers may mean different things. Regarding the focus on mattering, this study draws primarily on Barad.

Insofar as this study concerns a non-anthropocentric focus on groupings and gatherings instead of individuals, I consider both theorists useful, even if each one brings different aspects of relationality to play. Nevertheless, I emphasise the productive potentialities and possible intertwinings of the following concepts by both Deleuze and Barad, where the primary concern is not whether the concepts construct a coherent system of thought, but rather how they are used.

Assemblage. The childhood scholar Alan Prout (2005) defines the task of contemporary childhood research as examining 'whether and how different versions of the child and adult emerge from the complex interplay of different natural, discursive, collective and hybrid materials' (p. 81). The new materialist or posthumanist approaches shift the focus from individual children, or their social relations, to assemblages (Deleuze & Guattari 1987): combinations, groupings and gatherings of diverse elements found in classroom situations. The children and their teacher are thus examined beyond their assumed normative positions and viewed instead as emergent, enacted through the interconnections between the human and the non-human participants in the events of the classroom. There are several concepts employed by different posthumanist theorists to describe the non-hierarchical co-existence of different entities in combination: assemblage (Deleuze & Guattari 1987), entanglement (Barad 2007), mangle (Pickering 1995), manifold (DeLanda 2002) and actor network (Latour 2007). Lecercle (2002, 54) has called Deleuzian assemblage a 'logic of unholy mixtures', a term which refers to the inclusive character of this concept, as it embraces strange and unpredictable elements. This study uses the concept of assemblage to highlight the relationalities in children's lives in the school classroom. Furthermore, this concept serves to acknowledge the strange, controversial and coincidental elements of the children's classroom diary writings and their lives.

Entanglement. The concept of entanglement by Karen Barad (2007) brings a dynamism to the idea of combinations and groupings – assemblages. Barad stresses the primacy of interrelations between entities that are grouped together, as well as the interdependent and co-constitutive dynamics between all the elements involved in events, thereby urging one to attend to a vibrant liveliness in both the empirical context and the methodology. Understanding the school classroom in particular as entangled emphasizes the interdependencies of children and their surroundings. In the opening of her book Meeting the Universe Halfway, Barad explains:

> This book is about entanglements. To be entangled is not simply to be intertwined with another, as in the joining of separate entities, but to lack an independent, self-contained existence. Existence is not an individual affair. Individuals do not

preexist their interactions; rather, individuals emerge through and as part of their entangled intra-relating.

(Barad, 2007, ix).

Entanglement rejects the separation of matter and meaning, connecting them inherently as parts of the same whole. Because the intra-active relations of entanglement are co-constitutive of all the participants, the division between the world and the separate observer – the knowing subject and the 'known' world – does not hold. In the Baradian onto-epistemology, knowing is an act of *mattering*:

> There is an important sense in which practices of knowing cannot fully be claimed as human practices, not simply because we use nonhuman elements in our practices, but because knowing is a matter of part of the world making itself intelligible to another part. Practices of knowing and being are not isolable; they are mutually implicated. We don't obtain knowledge by standing outside the world; we know because we are of the world. We are part of the world in its differential becoming. (Barad, 2007, 185)

When Barad speaks of mattering, she refers to the material world and to meanings, but she also embraces time and space. An important part of the new materialist framework is the rejection of simplified linear conceptions of time and fixed space. Barad's (2007) agential realist theory involves complex interactions, *intra-actions,* which do not happen at a specific time and space; rather, time and space are involved and reconfigured in these very intra-actions. The stability of time and space becomes questioned (see Article 3). Time and space thus participate in how children are produced in particular situations in particular ways, but not as separate, 'outside' parametres.

This study advocates *research with children* as a *lively entanglement* (see also Kind 2013, 434). Rather than aiming at generalised results or relying on pre-set structures, research as entanglement is a generative, I would say a generous, methodology that enables detailed specificity and simultaneously widening perspectives situated in a world of multiple, non-traditional causalities (see Barad 2007, 21). Research as entanglement requires proximity and personal engagement (as the measuring agent necessarily interferes with what comes out as a result), which are perhaps not conventionally regarded as belonging to educational scientific work. Furthermore, research as entanglement does not neglect 'mess' (Law 2004, Rautio 2013). Working from the idea of entanglement has driven me to look for non-traditional research writing and talking (see Articles 3 and 4).

Nomadic. Nomadic thinking (Deleuze & Guattari 1987) generates movement and values restless curiosity. This study has employed nomadic thinking as part of a non-reductive approach in which I was constantly urged to ask *'What else?*

What else goes on at the same time as this?' (see Deleuze & Guattari 1987, Hermansson 2013; Cole 2013). Nomadic thinking refuses closure and linearity and enables me to embrace different types of research engagements, and different locations, times and spaces. Braidotti (2002) speaks of nomadic thinking as bringing focus to relations and processes, which according to her is vital in the contemporary world in which nothing is constant but change. She describes nomadic thought as capable of

> 'moving on, passing through, creating connections where things were previously disconnected or seemed unrelated, where there seemed to be 'nothing to see'. (Braidotti 2002, 173)

It is frightening to pluck two concepts from such immense bodies of philosophical work as those of Barad and Deleuze. Many have noted that just a single Deleuzian concept, for example, introduces an entire world of concepts, which are deeply connected in his complex system of thought. That is why speaking of *the nomadic* often evokes the concepts of *rhizome* and *assemblage* as well. These images, each in their differing ways, refer to the relationality of things and tune in to combinations, gatherings and groupings. In the cornucopia of new materialist concepts, I return yet again to the way Deleuze himself saw his concepts as 'tool boxes' (Deleuze 1972 in an interview with Foucault 2004, 208), in which the value of each concept is affirmed by its use alone.

Why did entanglement become so alive and so essential a concept for this study? Entanglement is non-reductive. Entanglement does not leave us; it encompasses all times and spaces as well as material and virtual beings that could possibly actualise in a given moment. For example, as I now raise my eyes from my laptop in our old farmhouse in the middle of a cool, light Finnish summer night and suddenly notice the sound of the clock on the wall – or even now, with you, my future reader, as you are drawn into this entanglement. Entanglement takes it all in: the Pokémon figure which Titta and Siiri wrote about, the rainy spring day outside the classroom window, the veins in my body, which reacted to the stress that I experienced in the classroom as a new teacher, the theories of voice in the book edited by Jackson and Mazzei (2009) lying on the table, and the black-and-white photographs of Deleuze, which I have seen in reflected on the wall in people's presentations and which always come to mind when I think of him.

Research with children as a 'lively entanglement' opens itself to things and doings as fluid and vibrant, not fixed and stable. Thinking with entanglement, I can momentarily imagine myself in the middle of things, before any structures or categories. Momentarily, it becomes possible to attend to both things and ideas, and to ignore the usual hierarchical relation between them (which especially in education has made us to think about things as merely as representing ideas or as

means to achieve something higher). As soon as I observe something, something else is necessarily always related.

Entanglement is specific for anyone who seeks to go very close to the specific relations of an event, yet it never permits closure. It is open to nomadic movement. Working with entanglement, one is forced to experiment, because drawing a reductive line to include only a certain number of variables is impossible. And still, entanglement always leaves space for what is not expressed. Entanglement extends from the real, the lived and the concrete, to ideas, and then back – back and forth. Entanglement is about the transformative dynamics between things, humans and ideas. Thus, it is, of course, also about learning and education.

3.4 The three central concepts, a summary

The figure below presents the three central concepts of this study. The aim is not so much to present a conceptual framework than to illustrate the capacities offered by the concepts. The emphasis is on how the concepts have been activated in this study, both in terms of 'substance' and methodology.

Assemblage
(Deleuze & Guattari 1987; Deleuze 2007, 1980)
- attending to combinations and groupings of heterogeneous elements in the classroom
- resisting the anthropocentric focus in education
- acknowledging strange and accidental things as parts of the children's writings and lives

Entanglement
(Barad 2007, 2010)
- focus on the interdependencies and co-constitutive dynamics between elements in an event → intra-action
- unsettling simplified notions of time, things and space → they are reconfigured in each intra-action
- the performative nature of research methodologies → affecting the result
- the researcher is entangled in and reconfigured by the research apparatus → there is no distant 'outside' observer
- responsibility

Nomadic
(Deleuze and Guattari 1987, Braidotti 2002)
- movement and curiosity → a non-reductive approach to children's lives
- *what else, what at the same time?*
- a broad notion of data → encompassing different times, locations and positions, 'memory data'
- experimenting and exploring through writing

4 Post-qualitative research

The posthumanist or new materialist refusal to separate the knowing subject from the object of knowledge, has resulted to a need to reconceptualise research methodologies. In the following, I present the context of my work, the emerging branch of so called post-qualitative educational studies, and bring out some of the most influential studies therein. Then I delve deeper in one central methodological concept affected by the new materialist epistemological and ontological assumptions: the concept of data. Finally, I examine how doing 'research with children' and educational ethnography might be affected through employing posthumanist notions.

4.1 'This new work'

Post-qualitative research[10] or post-qualitative inquiry (St. Pierre 2011, Lather 2013) is a field of new approaches based on the new materialist unravelling of the earlier, divided ways of thinking about the knowing subject and the object of knowledge. The subject/object division has made it possible to believe that empirical knowledge can be stored in data and furthermore, can be made to mean or represent something through certain research procedures (St. Pierre 2011, 2014). Engaging with new materialist theorisations has led scholars to question earlier methodological premises, and has imposed a proliferation of conceptual work and empirical experiments. The most important influences on my study have come from Lenz Taguchi (2010; 2013), Rautio (2013; 2014), St. Pierre (1997a, 1997b, 2011), MacLure (2013a; 2013b; see also Koro-Ljungberg et al. 2015), and Davies and Gannon (2012). Lenz Taguchi's *Going Beyond the Theory/Practice Divide in Early Childhood Education* (2010) gave a strong early impulse towards new materialism. Her study, based on pedagogical documentation in the context of a Reggio Emilia kindergarten, resonates on many levels with mine, although there are differences; for example, my empirical centre consists of writings made by the children themselves (in entanglement). Her work served as my early teacher on Barad's *intra-action*. Lenz Taguchi also shows how it is possible and fruitful, albeit challenging, to engage in empirical work with both transcendental empiricism by Deleuze and Guattari (1987) and agential realism by Barad (2007). Rautio (2013, 2014) shows how childhood research can start 'in the middle' (see Prout 2011) – from mundane encounters with ordinary things that matter to the

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[10] A range of examples of post-qualitative work can be found in the special issue of International Journal of Qualitative Studies in Education (26(6), 2013), in the book *Deleuze and research methodologies* edited by Ringrose and Cole (2013), and in the special issue on data in Cultural Studies <-> Critical methodologies (13 (4), 2013).

children, such as stones or snow (see also Rautio & Jokinen 2015). She strongly advocates space for messy methodologies in childhood research and practice. Myers (2015) draws on both Lenz Taguchi's and Rautio's work in her study on child-matter relations in an early childhood classroom, for example, attending to 'tinythings' usually considered irrelevant, such as missing teeth, Lego pieces and little plant parts. St. Pierre's (1997a, 1997b, 2011) seminal work continues to create space for a radical rethinking of qualitative research. St. Pierre says of qualitative methodology, "We made it up", meaning that no methodology can be considered as unchangeable or taken for granted (in an interview with Guttorm et al. 2015). MacLure's (2013a, 2013b) work on representationalism and data has helped me to think about the classroom diaries in terms of entanglements of matter and language, and to acknowledge the agentic force they can have as data. In intra-acting with currently ongoing post-qualitative research, I have experienced all over again how 'nothing' becomes 'something' (see Article 4; also Andersen 2015; see Braidotti 2002, quoted below). Further valuable examples and encouragements have been offered by Osgood et al. (2015), Myers (2015), Mayes (2015), Guttorm (2014), Bodén (2015), Andersen (2015), Otterstad and Waterhouse (2015), Sauzet (2014), Gunnarsson (2015), and Hermansson (2012).

There is energy, joy and generosity in 'this new work' (St. Pierre 2015), in doing research differently and post-qualitatively. Nevertheless, the impetus behind this effort is an ethical realisation of the world we live in: the 'mobility, displacement, coexistence, difference, heterogeneous, thrown together and precarious' (Taylor et al. 2013), which define contemporary childhoods and to which we as researchers have to be able to respond. Indeed, as Braidotti (2002, 1-2) says, in a world in which nothing is certain but change, we need to think what we focus on. For her this means not holding on to mental habits of linearity and objectivity, but rather thinking through flows and interconnections and seeking fluid in-between flows of data, experience and information. Post-qualitative research based on new materialist theories is delineated for me in Braidotti's words about nomadic thought: 'moving on, passing through, creating connections where things were previously disconnected or seemed unrelated, where there seemed to be "nothing to see"' (Braidotti 2002, 173).

4.2 Data, 'data', data++

The concept of data lies at the heart of rethinking research methodologies. In other words, when a study is considered an entanglement, and the co-constitutive relations between the human and the more-than-human elements in the classroom are taken seriously, then what is perceived as data has to be rethought. 'Data' (often put in quotation marks by new materialist scholars) are deeply connected to what is considered knowing and being, which is why epistemological and ontological issues will be brought up in this connection.

Here is a typification of how the data of my study could be seen through the lens of the interpretative vein of ethnography (see e.g. Walford 2008). Firstly, after selecting a field of interest (the classroom), the researcher does her field work. In the field, data are collected or produced through specific methods (participant observation, a participatory method such as 'classroom diaries', interviews with children, school personnel, photographs, conversations, video). Fieldwork is usually thought of as taking place at the beginning of the study. When the researcher leaves the field, she has something called data with her: field notes scribbled in her notebook or materialised in pictures or saved as bits on a memory card. These days it all ends up in computer files. There it is, waiting. In the words of Koro-Ljungberg et al. (2015), data are waiting to be awakened to meaning by the researchers marching in, using their specialist, methodical procedures. The results of a study often include interpretations made from the data in light of theories, whereby data excerpts serve as supportive, illustrative examples of theories and thoughts.

When I left my work at the school and started full-time study as a doctoral student, I had about 80 documents (classroom diaries) written by the children downloaded on my computer. Apart from these, I had nothing. Or I had plenty, depending on how one understands data. I was enchanted by the children's writings - I could feel their agentic force. But above all, I was deeply worried. Was it sufficient? Was it a little bit too much? Was it good data? What use could I make of it? I regretted not having been organised: I had not implemented the writing practice in a regular manner; rather I had improvised, fitting it to other events and schedules. Sometimes I had almost forgotten about the whole thing in the everyday buzz. Was this good? Was this bad? With regard to producing more data from my own perspective, I could only rely on memories. But if I agreed to work with memory, what happened to the timeline of my 'fieldwork'? I could not activate only a limited set of memories, those strictly concerning the ten months when the children wrote their classroom diaries, but my thoughts immediately broke out of this time span and wandered freely and unrestrictedly among many times and locations.

Many researchers have challenged the tidy ideal of ethnographic fieldwork, bringing out the 'messy', intertwined character of the various phases of fieldwork, analysis and writing (e.g. Palmu 2007; Lappalainen 2007; Paju et al. 2014). Nevertheless, even if problematised, the persistent idea of research as a linear procedure pointed to the losses, defeats, messiness and incompleteness of my work, something I would have to rescue myself from somehow.

Agentic data. The new materialist theories put forward, for example, by Deleuze and Guattari (1987), Barad (2007), Bennett (2010) and Latour (1993),

have pointed to the agency and dynamism that empirical materials can have. Already in 1997 St. Pierre introduced her concept of 'transgressive data' to refer to the status of emotional data, dream data, sensual data, memory data, and response data (St. Pierre 2011, 621). Transgressive data encompass information that is not textualised, fixed or visible. Now, with the turn to new materialisms, researchers are actualising these ideas in many ways. For example, Andersen (2015), in her study on race, uses 'race-events', encounters with stuff, media texts, people and places, as her 'data'. Guttorm (2014) uses assemblages of different texts to study language and representation in educational ethnography. Bodén (2015) introduces 'intraviews' to expand the idea of the interview to encompass non-human participants such as the software used to register absences in school. Nordstrom (2015), in her genealogy of family history, assembles 'object-interview data' (conversational interviews in which both living and non-living subjects [ancestors] and objects are folded together); dream and response data; weather data; spectral data; books recommended by participants; popular media about genealogy; and 'perhaps data' — data that she does not know and may never know. According to Nordstrom, these folding, fibrous, and rhizomatic data refuse categorisation and form an assemblage that continues to assemble long after leaving 'the field'.

Instead of seeing data as inert and lifeless, it has become possible to ask what do data do? Or echoing Koro-Ljungberg et al. (2015): 'Might data do more than merely nod in agreement with researchers' interpretations and generalizations?'

Starting in the middle. New materialist researchers do not challenge conventional data just to be different or to emancipate their creative powers or for fun (although fun is a productive alternative to the above-mentioned anxiety). They do so because of the basic assumptions related to being and knowing that the new materialist onto-epistemology entail. Matter is seen as something other than 'dumb' and passive, awakened to meaning by human interest and interpretation. In the new materialist 'flat' ontology, the shifting relationships among entities, which are conventionally supposed to belong to different levels or domains, are taken into account (Hultman & Lenz Taguchi, 2010). Koro-Ljungberg et al. (2015, 16) state: "We always start in the middle of things, before there are discrete subjects and objects, agents and patients, and before these become locked into grammatical and logical relations of domination and subordination." (See also Prout 2005; Rautio 2013). This makes it impossible to think of data as existing independent of the researcher, as something that awaits human intervention in order to attain significance or meaning.

Time and space. A second prerogative that changes conceptions about data is related to space and time. Data usually belong to the early phases of research, and after this raw and unrefined phase, the research usually moves on to higher-order

things: concepts, understandings, interpretations, representations or (specifically in narrative studies) meanings. Koro-Ljungberg et al. (2015) note that numerous research practices - timed observations, detailed notes about the length of specific experiences, historical timelines, and dated records - create time structures for participants' lives and experiences. These fixations do not seem relevant if one challenges the linearity of time. New materialist theories suggest that the relationship with data and time might be multidirectional. According to Barad's onto-epistemology, intra-actions do not occur in determinate time and space, but rather with every intra-action, time and space are also at play. Thus, data might not be fixed. Rather they may appear or transform themselves differently within different spaces (Koro-Ljungberg et al. 2015). Koro-Ljungberg et al. (2015) refer to these evolving connections and transformations with their concept of 'data ++'.

Memory data. For this study the concept of transgressive data enabled working with memory and the creation of 'memory data'. The memory data that I started to write with the children could be described as 'data++': it travelled (see also Thomson et al. 2012) and formed ever new connections with different times and spaces, humans, places and materialities. Here, following Barad (2007), memory is not a record of a fixed past, a replay of a string of moments, but rather 'an enlivening and reconfiguring of past and future that is larger than any individual' (Barad 2007, ix; see also Davies & Gannon 2012). I could start in the middle and see what happens. And I could acknowledge my part as a no longer stable or neutral distant observer, but as something like an assemblage myself (see Nordstrom, 2015, 167): the authority in class, the object of the children's gaze, someone who remembers and retells things, someone who has children herself and so on. It can be said that the 80 documents that I had as my 'core data' still continue to be reproduced in every intra-active encounter: those printed words are not separate from how they are read and where they are taken – they are not alone. By thinking of the writings of the children as data ++, I could tune in to the emerging connections and agentic encounters, which already sizzled and glowed in my first encounter with the children's writings, and think between different times and locations for memory data to be written (see Article 4).

4.3 Entangling research with children

The agenda of listening to children's voices has led many childhood scholars to search for participatory methodologies, that is, ways to include children's views and knowing in different phases of the research. The narrative method of Storycrafting (Karlsson 2013, see Article 1) and the multi-modal Mosaic Approach (Clark & Moss 2011) are examples of child-friendly approaches that endeavour to elicit new information in ways that are 'natural' to children and motivate them to participate. In relation to new materialist ontology, however, the

status of children and children's perspectives seems contradictory. The prerogatives of participatory projects with children are children's agency and that children have knowledge about their own lives (Mayall 2000; Article 1) and that this unexplored field of knowledge can best be approached through specific child-friendly methodologies. How are these premises to be understood if the pre-existence of the distinct categories of adult and child are problematised? If the child is seen as a 'hybrid'? On the other hand, how can the evocative force of the children's writings (compared to uninteresting reports by adults) and their surprising suggestion of two different realities – the adults' classroom and the children's classroom (see Article 4) – be explained? During the course of the study, I often found myself *zooming* the between-space of the categories of adult and child. Similarly for example Otterstad and Waterhouse (2015) want to move beyond the fixed narratives of child/ren/hood which have to do with this binary. In the nomadic movement, I sometimes recognised the fluidity and the inherent 'becoming' that concerns similarly both children and adults, yet other times I was drawn to something specific in the children's ways of attuning to the world and telling about it.

For me, there is a special attachment to the world's complex and material becoming that is tangible in the children's writings – a force or 'glow' that serves as a provocation to think further. Rautio (2013, 395) writes about children's relation to matter: 'Children, by virtue of their both biophysical and socially/culturally constructed existence, often seem to apply what Bennett (2010) describes as *aesthetic-affective openness* towards material surroundings: an attentiveness to and sensuous enchantment by non-human forces, an openness to be surprised and to grant agency to non-human entities.' This attachment to material beings was troubling my concept of classroom life as an educational professional. In Rautio's view it is not an essential phenomenon that children can attend to matter, but an emergent one. This attention or 'enchantment' (see Pyyry 2014) is often taken as naïveté that has to be overcome with education and replaced with higher-order concepts, rationality and facts. Prout (2011, 7) cites Haraway (1991), who lists childhood as one of the phenomena (the others include madness and women's bodies) that eluded modernity because they straddle the culture/nature divide that modernity erected. Deleuze and Guattari (1987, 100; Guttorm 2014, 186) speak about 'minor language' used by for example the mad and the children. For Prout (2011) it is the hybrid character of childhood, part natural and part social, that feels distinctly uncomfortable to the modernist mentality with its concern for dichotomising phenomena. In *research with children as entanglement*, children's expressions, from one perspective incomplete, unrefined or 'nothing', are taken seriously as a kind of conceptual grammar of entanglement; but they are also understood as only a few of the multiple forces involved.

If we work from an understanding of an entangled research process that aims to relate to entangled situations in life, then the status of knowing differs from how knowledge production is conventionally understood. Mayes (2015, 14) deals with similar questions in her examination of participatory child research, which focusses on a puppet production: *"What is produced when we view children, researchers, environments and materials as entangled in research encounters?"* The question is no longer how we can neutralise the power imbalance between the child and the adult through participatory settings; nor is it how to capture children's perspective on a certain event. The question is rather how to tune in to the assemblages and combinations that produce voices and knowing. The focus of research with children shifts from pinning down children's perspectives to knowledge as 'relating to' and to a non-reductive proliferation of new knowledges. Mayes (2015) points to the need to de-romanticise a participatory production (such as the narrative approaches in this study) as somehow rescuing us from power imbalances. With regard to methodologies the child-centred/adult-centred dualism of participatory methodologies is yet another division that entanglement challenges.

4.4 Entangling educational ethnography

This study would be unthinkable without previous ethnographic research on educational institutions and their insights into everyday life in these contexts. I draw especially on the work done by feminist ethnographers who have pointed out the need for such research; they have enabled me to 'fight familiarity' (Delamont & Atkinson 1995; Lappalainen 2007), to recognise the role of context as well as the role of the researcher in producing data and interpretations, and to acknowledge the role of reflexivity concerning these (e.g. Pillow 2003). Feminists have brought up differences that intersect within educational contexts, as well as the concept of the 'curriculum of the body' (Lesko 1988; Lahelma 2002). Moreover, feminist ethnography has emphasised the need for an ethical commitment to listen to those voices that are not easily heard and the consequences of the research in the research subjects' lives (Skeggs 2001).

Many previous educational ethnographies have addressed school practices departing from differences such as gender, ethnicity, or (dis)ability (see e.g. Gordon et al. 2000; Lahelma 2002; Palmu 2003; Lappalainen 2006; Hakala 2007; Mietola 2014; Niemi 2015). The concepts of power, discourse and subjectification emanating from Michel Foucault and Judith Butler (see also Davies 1993, 2003; St. Pierre 2000) are central to these analyses. Furthermore, many of them deal with the methodological complexities of ethnographic research processes. A fluidity of discourses and subjectivities as well as research processes is thus acknowledged. Engaging in the post-humanist/new materialist theories brings this fluidity to an even more heterogeneous level (see Article 2). A new materialist

ethnography (see e.g. Renold & Mellor 2013) embraces not only the relations between the subjects and ideas, but also considers materialities as agentic co-constructors of life, whereby knowing is perceived as a matter of matter. As a contribution to new materialist ethnography, this study decentres the rational human being, including the researcher, and attempts to see children as parts of a vivid and lively entanglement of ideas, bodies and matter. New materialist ontology and the idea of the nomadic (Deleuze & Guattari 1987) also made it possible for me to include in the research my different positions as teacher and researcher, different times, locations and various types of 'data' such as my memory writings.

In writing about ethnography, Renold and Mellor (2013, 27) speak about the DeleuzeGuattarian imperative of opening the social field to constant movement and processual creativity. For them, engaging with Deleuze's ontology means working from a 'wild empiricism' that can see and capture the instability of everyday life (see also Jones et al. 2010). Here, body and matter are central, yet are seen as constitutive parts of subjectivities, which are theorised beyond individual bodies as parts of an ongoing more-than-human emergence. MacLure (2013b) draws on Deleuze and Guattari's (1987) concept of *assemblage* in challenging representation and the reductive habits of ethnographic analyses (see Article 4). She wants to free children and other research participants from the 'banality and burden of ethnographic codes that hold them in place' (MacLure, 2013a, 174) and open up post-qualitative work to account for strange connections and combinations and accidental happenings.

Ethnographic methodology is a factor behind much of the ongoing developmental work in the field of participatory child study approaches as well as recent new materialist and post-qualitative approaches. For example, St. Pierre was doing ethnographic work with older women in her hometown when, using theories of Foucault, Butler, Derrida and Deleuze, when she began to question the separate existence of field and data and the ability of research to enclose the research participants' lives in meanings or interpretations. In an interview with us (Guttorm & al. 2015) St. Pierre argued that rigorous scientific research does not require methodologies, but it does require encounters that help one think: 'If you want to learn something about some people, go and talk to them.' (ibid.) The post-humanist and post-qualitative work that is only now emerging is diffuse, and many difficult questions remain open. 'This new work' (St. Pierre 2015) might require unlearning, it might become 'anti-methodology' (Nordstrom 2015), but as Renold and Mellor (2013) state, it inspires the methodological imagination. A new space for ethnography is opened –an open-ended and lively methodological space capable of embracing 'the awkward, messy, unequal, unstable, surprising and creative qualities of encounters and interconnections across difference' (Stewart 2007, 128).

5 Analysing children's writings: writing as inquiry

Adopting a nomadic approach led me to engage with a variety of different writing strategies: memory writing, cases, stories, lists, 'zooming', and poetic forms of nomadic writing as analysis. All of these writing strategies are related to recognising the potential of writing as thinking or to the 'thinking that writing produces' (St. Pierre 2011, Guttorm et al. 2015). I follow Richardson and St. Pierre (1994, 2005), who promote the use of writing as not just a mapping-up activity at the end of a research project, but as a method of discovery and analysis (Richardson 1994, 923; see also Gale & Wyatt 2009).

5.1 Memory writing

I left school in January of 2011 to begin work full-time on a research project on children's narrated well-being. Sitting in my empty and silent room at the university, staring at the screen of the computer on which I had uploaded the classroom diaries, I had the sense of being at a complete loss. The idea of analysing what I had would begin with organising the data somehow. Yet whenever I attempted to start an activity like that, I could not continue for long. Labelling some instants in the children's writings as belonging to categories of, say, gender or informal interaction, immediately clarified for me that I was reducing their richness, and not attending to 'something' I sensed was more important, something that had to do with the particular everydayness and the complex character of the children's writing. In attempting to classify the texts, I was not dealing with the dynamic, affective qualities of the children's writings, which after all was the foremost feature that had made them seem significant and special. As soon as I engaged in reading those writings without trying to organise them, there was again this 'glow', a burst of meaning, feeling and memories, some of which I felt as physical reactions.

What I *could* do, not even knowing whether it was really useful, was to write about what the children's writings evoked in me – these memories. In starting *memory writing*, I went in the opposite direction from the assumption of analytical objectivity: rather than taking distance, I was strengthening the bond between myself and those documents. It was a few years later, after familiarising myself with new materialist theories, that I could see that recognising the necessary involvement of myself, the teacher-researcher, with the children's writings about our class was indeed the step needed to research entanglement.

There were signposts along the way. Gubrium and Holstein's (2008) narrative ethnography pointed to the dynamics between narratives and their context, emphasising the contingencies and consequences of stories. I learnt about the narrative strategy of telling and retelling used by Puroila et al. (2012, see also Puroila & Estola 2014; Kinnunen & Einarsdottir 2013; Viljamaa 2012). I was fascinated by the narrative analytical strategy used by Gee (1991), in which he re-transcribed his interview data as poetic stanzas. When I did the same with the children's writings, I could see how different spaces and dynamics entered the picture. This text:

(Siiri & Titta:)

(. . .)a fun lesson starts now and now we eat our snacks and now Senja is telling Sebastian to get off her place but Sebastian doesn't want to leave and now Senja came to beg Siiri for snacks but she didn't get any because Titta and Siiri had eaten the snacks and now we talk about birds and birds' voices and now it may be a fun lesson the teacher talks about africa and the asians and now Australia and now Konsta is hitting the desk with his fingers and now you are supposed to raise your hand for speaking and now there is a horrible noise and now there was a fun thing because everybody got the right to write fun things on notes on each others' backs (. . .)

became:

(. . .)
a fun lesson starts now
and now we eat our snacks
and now Senja is telling Sebastian to get off her place
but Sebastian doesn't want to leave
and now Senja came to beg Siiri for snacks
but she didn't get any because Titta and Siiri had eaten the snacks
and now we talk about birds and birds' voices
and now it may be a fun lesson
the teacher talks about africa and the asians and now australia
and now Konsta is hitting the desk with his fingers
and now you are supposed to raise your hand for speaking
and now there is a horrible noise
and now there was a fun thing because everybody got the right to write
fun things on notes on each others' backs

(. . .)

The analytical move of putting each sentence on a separate line allowed me to engage in selected moments in greater detail without interrupting too much the complex 'ongoingness' of the children's writing. It made it easier to move back and forth in the writings without sticking to the imperative of linear reading. Eventually, the spaces between the sentences became spaces for me to produce new writing and thinking.

In writing down my memories, I soon began asking myself: What am I working with as I work with memory? Although immersed in my personal experiences, I felt I was not alone, but constantly connecting with people, events and things. When Barad (2007, ix) says that memories are not authentic replays of events, but creations, I nevertheless felt a need to hurry in order not to lose something that started to slip away, out of reach, things like the direct engagements with those events and things, how they felt, how they looked and what happened around them. I was still able to ask: *What else? what at the same time?* and situate those questions within the context of our classroom. Davies and Gannon (2012) present memory writing as part of their collective biography approach in which the aim is to produce material for further phases of collective work. I was drawn to their advice to write only, not to explain, and similarly I produced my own memory writing as a flow of consciousness, trying to go as close to *what happened in the classroom* as possible, without halting to make meaning of it. Later, with the help of MacLure (2013b), I saw how refraining from explanations (so difficult for an educational professional!) was crucial to disrupting the idea of analysis as representation.

Nomadic thought is committed to movement in the relationality of research, as well as to unlimited curiosity and to navigating the space between the subject and object (Cole 2013). In bringing nomadic thought in connection with writing as a method of inquiry, St. Pierre (2005) asks: What else might writing do than *mean* something? She says that, by using writing as a method with which to think, she writes her way into particular spaces that she could not have occupied by sorting data with a computer programme or by analytical induction (ibid. 970). For her, nomadic writing is related to an ethical retaining from having the 'right' knowledge about her participants through interpreting their lives and stories. Participants can instead be seen as *provocations,* a line of flight that takes you elsewhere (ibid. 971).

The body of my memory writings still continues to grow, constantly circling around what I initially received from my child participants. At this point, however, influenced by post-humanist and new materialist theories, I have been urged to experiment with a range of writing strategies. Some of this writing-as-inquiry can be seen as being more like analysis, while some writings were written just for myself in order to explore further an event (to produce what I have been calling

'memory data' following St. Pierre (2011). I have been writing cases and episodes, such as a narrative about my visit with a pupil to a meeting at the child psychiatry department of a hospital. Some writings have explored particular affects, for example, shame. Some writings test and try out a theoretical concept, such as the writing about entanglement in section 3.3. I have been writing lists (section 10) and stories (section 11). In writing this summary portion of the thesis, I have at times employed a writing strategy that I call *zooming*, in which I aim at going very close to a specific event or concept, an approach which is at the same time both somewhat careless yet also detailed, in aiming at attending to entanglement. In connection with a research report I see the variety of different writing styles as an opportunity to offer a variety of contact points to different readers and encourage them to move freely around the study in a non-linear way.

5.2 Retelling and responding

Law and Mol (2002, 1) raise the question of how complexities might be handled in knowledge practices, which still strongly rely on modernist ideals of neatness and clear divisions, and those scientific models which eliminate variables to a restricted number to enable writing clean and sure statements as results. They also ask how a text might make room within for whatever it necessarily leaves out, for what is not there, not made explicit (ibid. 6). I think, drawing on many other qualitative researchers (see e.g. Richardson & St. Pierre 2005; Guttorm 2012; Clark/Keefe 2014) that the resources offered by many kinds of writing styles should not be rejected by social science researchers.

In Article 4 I present how I employed the strategies of *retelling* and *responding* during the phase of the study, in which I was to meet the participating children in order to share my analysis with them. In this particular situation, preparing my talk to the children, I needed to consider how children can access my thinking. I also needed to read the text aloud, and I wanted to do it in ways that did not position me as the knower in relation to the children as 'known'. These premises required me to adopt research writing with short sentences and pauses between the sentences (to breathe, to think, to connect) – that is, poem-like research writing.

The writing strategies of this study offer various ways of dealing with space, mess, multiple and non-linear times, and material things. Moreover, the retellings written in poetic form do not require explanations (see Davies & Gannon 2012), thus holding potential for non-representational analytical engaging with children (see Article 4)[11.] I do make a division between poem-like research writing and

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[11] I have summarised the productive possibilities of nomadic, poem-like research writing as follows:
- it encourages one to employ and experiment with a complicated theoretical concept

poetry as literary art, although I agree with Richardson (1994) that the division between literary writing and scientific writing is artificial. It obscures the fact that even the most formal writing styles of research reports are constructed, and by no means somehow more neutral and closer to reality than other ways of writing.

For Article 3, evoked by the children's writings about the moment of Now in class, I began to elaborate temporal complexities by experimenting with retelling. In the piece below called 'The school morning', I actualise the exploratory potential of nomadic writing [12] in studying the entanglement of time, space and matter. In other words, this particular piece was a kind of meeting place for the children's classroom diary writings and my personal experiences and memories. There were particularly important theoretical texts that joined this meeting place, such as Massey's (1994) theories of space as relational and practiced place. There were also the novels *The Waves* by Virginia Woolf (1992) and *Moomin Valley in November* by Tove Jansson (1971), to which I turned in a search for texts which would deal with temporal and spatial complexities. Among the things that I write about are events that I remembered from the class, but I also activate my own history as a school girl with long trips to school on dark winter mornings. All in all, this piece of nomadic, poem-like research writing was a step without which the final product, Article 3, could not have been made.

The school morning
The planet earth moves to a different relation with other planets and stars.
The light touches objects. It touches land, wood, the railway beside the school, the constructions. They wake up. They are vibrant, ready to intra-actions with the light, the children, the parents.
It is time to wake up.
The parents and the children at home. The homely chaos's. All directed to being in time at school or at work.

- it allows non-reductive processing of ideas and connections
- it allows experimenting and exploring without staying within pre-existing structures (wandering among theoretical ideas, material beings and physical sensations)
- it enables a closeness to material/physical beings, taking them as the centre instead of centering the knowing humanist individual subject (approaching the way children are a enchanted by material beings)
- nomadic writing does not require obeying hierarchical rules of grammar or explanatory, transitional passages (the works of the knowing subject)
- it enables embracing many times and many locations
- it enhances movement among things and associations
- it activates a non-reductive attending to entanglements
- it leaves space for the not-expressed
- it invites readers to join the entanglement

[12] In a way all writing can be seen nomadic when not seen as instrumental means to an end: Hermansson (2012), for example, examines pre-school children's text-like writing practices as nomadic.

The light comes sooner (spring) or later (winter: when it is dark almost until noon)
The light wakes up the birds, but in the winter
there are no other birds but the dark big crows
that flee when the snowploughs start to move in the freezing darkness of the early morning
because it is time to do so.
It is time to come to school
because the pointers of the clock have travelled to the position indicating it
The school janitor comes to open the doors
because it is time to do so.
The children come, one by one or by groups of friends,
sounds and silent shouts emerge in the corridor
they get more and stronger, until they mix and fill the space
"Space is a moment" (Massey 1994):
a moment of relations
this is why you cannot speak about time and space as separate
but only as space-times
The space-time of the school morning:
now it is time to be in the corridor
but as soon as the lesson begins (in two minutes)
it is absolutely not time to be there anymore
and being there is suspicious, sign of improper behavior, if you do not have an explanation.
The familiar iterative encounters in the school morning, "always the same"
but never the same:
The children do not have same clothes than yesterday – they have changed them to clean ones (a faint smell of washing detergent) or someone has a new coat or bag
The hair is combed (it is a fraction of a millimeter longer than yesterday)
a new joke is told, a new eye contact, a new friendship.
Time flies and children grow, we state, and we think of the linear continuum and children travelling along it
What actually takes places
what relations between materialities are made and remade?
What space-times are produced in these material entanglements?
The hair gets longer, yes
the teeth fall, and new teeth eventually fill the mouth (many ten-year-olds have holes in their smiles)
We take these changes in the relations to be caused by something called time, age, growth.
When actually it is time, age and growth themselves that are produced in these relations.

6 The research questions, entangled

Open-enededness characterises this study right from the beginning, with open-ended narrative space for children serving as methodological, theoretical and empirical drivers of the research. As a nomadic inquiry, this study is by definition committed to restless curiosity, and each question is potentially accompanied by new questions: *What else? What at the same time as this?* In the following, I present the central research questions of this open-ended and entangled inquiry.

> The question that we, the teacher-researcher and the children, shared as a starting point was:
> *What is happening in the classroom?*

> However, as the inquiry proceeded, new questions emerged:
> *How do classroom diary writings or children's stories intertwine in the life do lived in the classroom?*

> Given the claim that the open-ended narrative space is a space for children to write about what matters to them, the next question was:
> *What matters to the children?*

> Along with this question, the following methodological questions emerged:
> *How to take seriously what matters to the children? What is provoked by the children's writings?*
> *How to listen to children's voices in their complexity?*

> With the help of new materialist theories, especially Barad's *entanglement* and Deleuze and Guattari's idea of the *nomadic*, the following question related to the children became possible:
> *How do time, space and matter entangle in the processes in which children are produced as 'hybrids' in the classroom?*
> And:
> *How do children's writings entangle with life in classroom and research methodologies, and how do they participate in producing the children and the researcher?*

> Finally, needing to materialise the research in academic writing and in talking to the participating children, I asked:
> *How does understanding research with children as an entanglement enable new ways of writing research and talking to children?*

PART II RESULTS

In the following, I will present the results of the study. The results are simultaneously related to 'substance' and methodology, as the concept of entanglement challenges the separation of these two. Barad's (2007) onto-epistemology is illustrated in her statement that there is no knowing without direct engagement with the world. In this study, attention is thus drawn to the interplay between the inquiring subject, the methodologies and the empirical context, in which all are seen as constantly constituted and reconstituted.

There are three different sets of results. First, I present the aspects examined in the articles published for this study (section 8). In that section I delve into the themes of *voice, children writing ethnography, time, space and matter,* and analysis as *engaging with what matters*. Then I consider what this study has undertaken in terms of *doings* (as an alternative to meanings or representations) (section 9). Last, I consider the results of this study from the perspective of *what matters to the children* (section 10). Following Law and Mol (2002, 14), I do this in the form of a list, which is a non-hierarchical, partial and open-ended way to attend to particular and complex issues.

7 Results (1): Four aspects to what matters to the children in the classroom

This section presents the results of the study by delving into the themes of the sub-studies. In A Thousand Plateaus (1987) Deleuze and Guattari offer the image of a rhizome as an alternative to the more hierarchical image of the root, which represents how science is usually organised. I am thinking of this image in connection with the results of this study: they construct a rhizome of ideas and doings, and seek to offer openings and new contact points for other possible rhizomes which do not necessarily have to relate to any larger entity in hierarchy.

7.1 Voice

The focus on *voice* in Article 1 takes up an issue at the heart of childhood studies and research methodologies. Along with the emphasis on children's participation and related to it, there has been a growing interest in participatory methodologies; research *with* children (Christensen & James 2008) has been favoured as an alternative to research *on*, *of* or *for* children. In this connection one of the main concerns of many empirical childhood studies is how to include children's voices in the study. The issue of voice is inevitably linked to power, and the ethical task of ethnographies has been seen to include and elicit voices of subordinated minorities. Recently, the participatory agendas of childhood studies have been re-thought by post-structural and new materialist critiques. Childhood scholars have drawn attention to the complexities of children's environments and the environmental role in shaping the voices of children (James 2007). Voices can also be affected by researchers' assumptions and methodological choices (Mazzei 2009). Voices can be *used* in simplistic manners to strengthen pre-set ideas; for example, a study of children might select and retell the kinds of voices that are easily recognised as competent, active and agentic (see Spyrou 2011).

My study contributes to the above-mentioned discussions by approaching the listening to children's voices both as a practical and as a theoretical question. Narrative ethnography (Gubrium & Holstein 2008) is used as a loose framework for the combinations of narrative and ethnographic practices. The idea is that settings are always integral parts of narrativity. The relation between narratives and the ethnographic environment is the focus: stories always reveal their material and discursive environment and the relational identities of the storytellers; on the other hand, they affect also their environments, partly constituting what is understood as the ethnographic context.

The empirical context of Article 1 is a Finnish primary school first-grade class, in which narrative ethnographic research combining participant observation (for three weeks) and Storycrafting (ten sessions) took place. The data were originally produced for my master's thesis on power in the classroom (Hohti 2007); for Article 1, I returned to the empirical material with Liisa Karlsson to analyse it from the perspective of children's voices. In terms of voice, the class was like many others in Finland: while adult-centred pedagogies are widely questioned, classrooms are still dominated by adult voices, and many traditional ways of controlling the classroom interaction, such as silencing the children and allowing them to speak only in strict turns, still exist.

The analysis concentrates on a single school day, and its episodes relate to class preparations for a performance for its spring festival. During the analysis, we were constantly moving between the story-crafted stories and their narrative context and telling and retelling (Puroila et al. 2012) the ethnographic episodes from different viewpoints (the children's, the teacher's, the researcher's). The course of this process was summarised in Article 1 as three interrelated analytical spaces as follows:

First, we analysed the ethnographic observations by constructing an ethnographic narrative based on the field notes. We called this analytical space 'the observational space'. This phase of the analysis suggested that voices are linked with power on many levels. Here, however, power is to be understood not only as a discursive question (who can use their voices, whose voice counts as knowledge), but also as a practical, physical and material question. For example, when the teacher controlled the classroom interaction, she was affected by numerous material/physical factors, such as classroom architecture and the number of pupils in the class. Nevertheless, in this controlled classroom space, it became almost impossible for the observing researcher to make sense of the children's voices as anything other than irrelevant or disturbing; there was no way to perceive their voices as voices of knowing. The teacher even thought that, in these situations, the voices revealed individual behaviour problems. This analytical space suggested that voices are not individual, unitary and something solely human, but also are constructed from discursive, social and material/physical elements.

The second analytical phase was called 'the participatory space'. In this phase we analysed the stories produced in the Storycrafting sessions, which took place on the same day these observations were made. We chose to focus on four stories told by boys, who commented on the classroom situations from their own points of view. The boys' stories were rebellious, reflecting the cultural category of 'naughty boys', and expressed a will to continue 'bad behaviour' in future situations. Through the open-ended and relatively unregulated narrative space of Storycrafting, the children were considered capable of knowing. We accessed perspectives that otherwise would have remained hidden, such as the dynamics

between strengthening control and resistance. Material elements, such as the microphone and the lollipop that the teacher had given to those who were well behaved, intertwined in these stories of power. It suggested to us that voices do not exist in a vacuum, but rather they are emergent, contingent on power relations and constructed from the material, social and cultural elements available in a given event.

As the third analytical space, we turned our attention to our own ways of conducting the previous analyses. In this 'reflexive space', informed by the post-structural critical viewpoints mentioned above, we noticed that we had been selecting stories that we could easily understand as well as stories that we could utilise according to our Foucauldian theoretical framework of power/knowing. Nevertheless, we now wanted to turn to the remaining four stories that we had left out during the first phase and challenge our earlier analyses. We found that the voices in these stories were not that 'loud' and factual and that they did not directly present the children as active, rebellious (heroic) agents struggling to have their voices heard. Some of these stories seemed conventional, and some remained enigmatic. We noticed that we had left out more of the girls' stories, and that by doing so, we were actually perpetuating the cultural category of girls not being heard and being more silent in class and in research than boys.

We conclude by arguing that *children's voices are emergent and constructed from the material, social and discursive elements available*. We offer three suggestions for ways in which children's voices could be listened to more carefully in classrooms and in research:

First, listening to children's voices needs **time and space.** The historical ideas of education are still visible in the ways in which educational environments are organised. These ideas positioned children as merely objects (of care or education) while their own viewpoints received little consideration. Time is also needed for the researchers to listen repeatedly to the voices. Second, voices should be understood as emerging in **reciprocal processes of telling and listening**. Voices are not out there waiting to be found, but rather they are *produced* between the existing elements in specific space-times, and thus they can be better thought of as processes rather than products. Third, **power** is always involved in shaping voices and in listening to them. The link between power and knowing means that if an adult believes that she knows everything in advance and a child does not know before having been taught, then new perspectives are not likely to be created. The voices of children are not recognised, heard or understood as relevant or as voices of knowing unless a shared between-space is created. This kind of between-space is productive only when sensitivity to power relations exists. Also refraining from making strong interpretations can be part of an ethical attitude towards research with children.

As a conclusion, we suggest that researchers turn in uncomfortable directions and challenge their earlier assumptions so as not to simplify children's voices nor

to reproduce power through categories of gender or generation, for example. *The narrative rights of children* (Puroila et al. 2012) require that children are offered narrative spaces in which to encounter things and issues that they themselves consider relevant and participate in the narrative culture in ways that are suitable to them.

7.2 Children's perspectives and nomadic thinking: Children writing ethnography ('classroom diaries')

Article 2 presents the approach developed in this study, Children writing ethnography.[13] The approach uses matters brought up by children as the focus of educational research, thus complementing the dominant research emphasis on educational aims believed by adults to be relevant. Scholars Prout (2005) and Lee (2001) among others have emphasised the diversities and complexities of childhoods today. Children writing ethnography ('classroom diaries') serves as a complexity-sensitive approache to diverse and specific childhoods and considers children as participant researchers, ethnographers and writers. The instructions for the approach are as follows:

Classroom diaries/Children writing ethnography, instructions

1. A suitable place is arranged for two writers of the diary. They are provided with a (laptop) computer, paper and pens.
2. The teacher/researcher tells everyone that the purpose of the activity is to produce knowledge about this particular environment (e.g. the classroom). Specifically, the intention is to produce knowledge about the lives of the children.
3. Two children are selected amongst the volunteers. They form a pair of ethnographers/diary writers tasked with writing down their ac-counts of a given period (one school day, for instance). While com-pleting their task, the writers are given no other assignments.
4. The teacher/researcher says to the writers:
   'Look at your environment (e.g. the classroom) as carefully as you can. What do you notice there? What is happening there?
   Type your accounts on the computer.
   You can also write your thoughts or your stories.
   You can also draw pictures or cartoons on paper.'
5. In the end, the documents will be published (with the child writers' permission).

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[13] The approach was called 'classroom diaries' in the school context, while in this scientific connection it is called 'Children writing ethnography'.

With this instruction, a ten-month process of more or less regular writing of classroom diaries took place in the third- and fourth- grade class, in which I was the class teacher.

The starting point for the classroom diary activity, similar to Storycrafting (Karlsson 2013, see Article 1), is open-ended: it does not restrict or guide the participants with pre-determined questions. This open-ended narrative space does not produce knowing understood in a normative way, rather, it relies on narrative knowing (Bruner 1986) which emphasises life-likeness and empathy.

(Siiri & Petri:)

The day began
and the teacher is telling us a cruel story.
Tuure [the school assistant] is venturing around the room,
Raila is picking her nose.
What is the difference between a diagonal cross and a vertical cross?
Harri and Akseli are chatting,
Teijo kills a gorilla [the class mascot]
The teacher comes in late.
And Pekka shows the picture he has drawn and laughs.
Konsta was holding his football cards
Sebastian is talking with Teijo.
Tuure is keeping an eye on Sebastian
and Teijo
and now Aapeli,
Judah kissed Jesus!
Sebastian is pretending to do some kind of murder
and laughing with Satu,
Konsta is tired,
And suddenly Virpi [the PE teacher] comes in and asks about some playtime training
Konsta is asking whether there is school tomorrow
but there isn't.
The teacher rages at Urho
and Sebastian is playing with a roll of tape
but Tuure took the gorilla from Teijo
and Aapeli is messing around,
and now we have to sing

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some kind of bible religion song
lalalalalalalalalaalalala
Teijo is not singing
or Sebastian
now it's 10 minutes of inside play
Ville is putting his cards into his pockets,
Now a story begins.
(. . .)

In the article I examine the children's writings, such as the one by Siiri and Petri above, and lead the reader through methodological considerations. First, I demonstrate the similarities of classroom diaries to previous ethnographic research, such as in terms of time-space paths and the informal, official and physical layers (see Gordon et al. 2000). Furthermore, I draw the attention to the 'messy', untamed and incoherent character of the children's writings, which challenge the ways in which educational professionals usually see children. The children's writings capture the intensity of everyday life through fragmented, quickly changing and sometimes overlapping events. They invite the reader to acknowledge hybridity (Prout 2005), the fluidity between categories, and to notice how human lives are parts of continuous entanglements among social relations, power and non-human elements. What became especially clear in the writings was the part played by non-human objects, including material beings such as chairs, pencils and small toys hidden in the pencil case, the class space itself and more.

I first analyse the classroom diary writings by drawing on the idea of narrative ethnography proposed by Gubrium and Holstein (2008), which emphasises the interplay between the writings and their social context. I further consider them with the help of the concept of 'small stories' (Bamberg & Georgakopoulou 2008; see also Puroila et al. 2012). This concept enabled me to examine fragments of interaction, bits and pieces of mundane events, which are usually regarded as analytical nuisances or seen as 'nothing'. I claim that this analysis reveals hidden and ignored aspects of children's lives, such as humour, which dictates both the form and the content of many of the children's writings and seems to be an important goal of their school day.

My analysis then moves on to consider the materiality of writing ethnography, by which I situate the children's writings within a web of human, non-human and material participants. I state that if children's observations are to be taken seriously, then the children's attention to material beings and the role of these beings in shaping children's lives cannot be overlooked (see Lenz Taguchi 2010). We need to rethink the divides that separate mind and body, as well as separating the psychological, the social and the material in educational research. I follow the new materialist and post-humanist philosophers Deleuze and Guattari (1987),

Braidotti (2002) and Barad (2007, 170) in exploring the mutually co-constitutive nature of the relations between human and non-human elements.

By employing nomadic thinking (Deleuze & Guattari 1987) a researcher can resist the tendency of complexity reduction, which has long dictated the ways in which research and practice in children's daily educational environments have been carried out. The approach Children writing ethnography contributes to the fluid and non-reductive notions of ethnographic research and claims that research can be generative, because in the processes of open-ended writing, educators, environments and children themselves are affected. This approach highlights connections between elements in an event and claims that humans can be agents only as parts of entangled agencies of material, social and discursive entities. Focusing on relations rather than on individual beings enables one to investigate movement and change.

For me as a researcher, nomadic thinking allowed me to encompass my different positions of teacher-researcher, to enclose a variety of writings by the children and to move between the material-discursive complexities of the research setting with non-reductive curiosity. For the children classroom diaries meant a space in which to create humour and joy and enact productive power. On the other hand, here power can be at stake in a negative way, too, which means that sensitivity to possible negative dimensions such as bullying is constantly needed. For me as the teacher, the approach allowed me to listen to my pupils without physically listening. I gained access to a different classroom reality that was going on besides my lesson plan and was surprised by the rich and evocative writings the children produced well beyond their assumed individual abilities.

I conclude by defining Children writing ethnography as a participatory ethnographic approach whose primary goal is not to obtain results that can be generalised about children's lives, but rather to focus on lived moments with a particular specificity; it urges engaging with children's narration in a non-exclusive way. In this study the most important consequence for children is perhaps that their potentials are kept radically open. It is an ethical choice to refrain from seeing children through the lens of exclusive categories. For example, Siiri and Petri, the writers of the classroom diary excerpt above, are not primarily seen as representatives of categories such as '10-year-old' or 'girl' or 'a student with special needs', but rather as parts of an open-ended web of relations working in the moment in various and partly unpredictable ways. Nomadic thinking means first and foremost curiosity about whatever factors might be involved in the event at hand. Even if this analytical work might appear to be imprecise because it blurs categories and avoids explanations and representations, its strength is a different kind of accuracy achieved by embracing the particularity of the lived moment of 'what is happening in the classroom'.

7.3 Time, space and matter: NOW

Article 3 is about time in the classroom. In this article I endeavour to unsettle instrumental and simplified temporal notions by connecting time with space and material beings. I activate Barad's (2007) theoretical concept of entanglement to explore time, space and matter in a nomadic analysis of free-flowing classroom diary writings produced by 10-year-olds in the classroom. The analysis suggests that along with the notion of the 'hybrid' child, time could also be seen as a hybrid phenomenon, producing specific enactments of children and childhoods.

The Article departs from the empirical observation that time plays a part in how children's voices are constructed (Article 1) and what stories are told and in what ways (Articles 1 and 2). From the point of view of the ontology turn, time participates not only in how practices are organised in schools, but also in what we do and what we are within our everyday contexts. My study also joins in the ongoing theoretical discussions of temporalities and childhood, drawing especially on Prout (2005) and Lee (2001) who try to acknowledge children as complex being-becomings by rejecting dualistic thinking. Nielsen (2015) in her longitudinal study suggests that temporalities are related to how we perceive children and proposes a notion of two temporalities intertwining in children's lives: the more linear arrow of time and the non-linear space of the present moment (see also McLeod & Thomson 2009).

My analysis draws on an emerging body of new materialist and post-humanist childhood studies (Lenz Taguchi & Palmer 2013; Juelskjaer 2013; Pacini-Ketchabaw 2012; Myers 2014; Rautio 2013; Bodén 2015; see Deleuze & Guattari 1987). My specific take on temporality departs from agential realism developed by the physicist and feminist social science scholar Barad (2007) and her concept of entanglement. I draw also on Massey's (1994) conception of relational space, as she states that 'space is a moment of relations'. The analysis aims at examining time, or rather different times, which are thought of not as 'being there' outside humans as a parameter, but as produced in relations among spatial, material and social factors. Humans, time, space and matter are seen as existing in relation to each other, a notion implied in Barad's definition of entanglement. In the analysis I activate the concept of entanglement to challenge central educational notions, namely that children travel through (linear) time, are situated in (stable) spaces and use material/technological tools as the means to acquire skills. Based on these theoretical premises, I also rethink research with children as an entangled practice (see Myers 2014).

The context of the study is a Finnish elementary school classroom, in which children were engaged in writing their observations, thoughts and stories in the open-ended narrative activity 'classroom diaries'. I had been working as the teacher of the class since the beginning school years of these children, who were ten at the time of the empirical work. The article comes very close to the mundane

life of a classroom, as I rely on my own experiences with time in the classroom on the one hand and on the classroom diaries written by the children on the other.

In their writings the children observed temporal matters a great deal. Titta and Siiri, two girls writing in the music class, particularly stimulated my thinking. In the lesson they were rehearsing pieces on the musical instrument called the recorder. They write:

(. . .)
and now we sing
and now we play the recorder
and now we sing
and we play the recorder again
and now we stand up
And play the recorder at the same time
and now we sing
and we play the recorder again
Ville isn't standing properly
And we sing again
and now we play the recorder again
A fun lesson starts now
And now we eat our snacks
and now Senja is telling Sebastian to get off her place
But Sebastian doesn't want to leave
And now Senja came to beg Siiri for snacks
But she didn't get any because Titta and Siiri had eaten the snacks
And now we talk about birds and birds' voices
(. . .)

My analysis takes the material being of the musical instrument as its centre. This analytical move complicates the normal emphasis on mental, social or discursive dimensions of the educational environments and puts time and space into 'analytical motion' (Juelskjaer 2013). By activating Barad's concept of *entanglement*, I suggest that a refined spatial-temporal order emerges with the recorder, in which the instruments, the moving and singing bodies of the children, the teacher, the music class and the subject of music were involved and, in a specific way, co-constituted. The analysis highlights the fact that there are different *nows* — *the now* of the children in the group, who are supposed to move in synchronisation with the sounds and the rests; *the now* of Ville who is not standing properly; and *the now* of the teacher who is produced as the authoritative organiser of the situation. Without the large group of children and the material being of the recorder, these specific enactments of children and their teacher

would not take place. Furthermore, Titta and Siiri, the classroom diary writers, are produced differently, in a way that is specific to material and spatial factors, as they sit together on one side of the music classroom writing on the laptop computer.

The analysis suggests that material things can also be seen as vibrant (Bennett 2010; Rautio 2013) in that they participate in the shifting networks of relations, emerging differently in different connections. Attending to entanglements can help unsettle simplified ideas about material beings as dead, numb and only a means for human agents to achieve 'higher' goals, thereby inviting us to a more refined inspection of relations between children and things (see Rautio 2013). The concept of entanglement allowed an examination of children as produced differently according to shifting gatherings and combinations of elements existing in classroom situations. Moreover, along with multiple enactments of the children, multiple, hybrid and porous moments of now were also produced in the entanglements. Thus, the idea of time as an outside parameter, neutral and equal for everyone, was unsettled.

The article concludes by claiming that Barad's idea of entanglement enables us to examine the dynamics in which both continuities and change actualise in children's lives. From an agential realist viewpoint, rather than thinking of children as beings or becomings *in* time, we could see children and adults as being and becoming *with* time or *of* time, thus opening up both time and children as complex and hybrid.

Finally, I suggest that, in addition to attending to the spatial dimension in connection with time, we could employ even more heterogeneous, non-reductive approaches to temporality and children. Researchers themselves need to engage in experimental, particular and open-ended ways of engaging with children and data. Research with children could be understood as 'lively entanglements' in which special attention is paid to things and doings that matter to children.

7.4 Engaging with what matters: retelling and responding to children's writings

The Article 4 develops the idea of research with children as an entangled practice. It has two main goals, to presents an empirical example of what it means to place children's views at the centre of inquiry throughout the research project, and to seek ways of engaging in analysis other than representation. The assumption behind the article is that involved in their unregulated classroom diary writing practice, children write about what matters to them. The previous three articles mainly raised various complexities related to children's lives in classroom: their voices (Article 1), their narratives and writings (Article 2), and their entangled co-existence with time and matter (Article 3). This fourth article highlights the actual

analysis, which attempts to center what matters to the children and engages with it in non-reductive ways.

Prout (2005, 70) speaks of the 'ubiquitous associations' found in children's everyday environments, and urges childhood researchers to examine 'whether and how different versions of child and adult emerge from the complex interplay of different natural, discursive, collective and hybrid materials' (ibid., 81). The relational ontologies compel us to view knowing and being as mutually implicated, and to acknowledge what matters as essential to knowing: 'Practices of knowing and being are not isolable; rather they are mutually implicated. We do not obtain knowledge by standing outside the world; we know because we are of the world. We are part of the world in its differential becoming.' (Barad 2007, 185). As noted in Article 3, time and things are not viewed as stable background factors or 'outside' parameters for this becoming, but as active participants therein. The idea of entanglement, whether in classroom or in research process, reconfigures both the 'objects' and 'agencies of observation', including researchers, time and space (Barad 2007, 384, 403). The destabilation of time and things affects both how we see classroom life and how we perceive research methodologies. The implications of this theoretical premise to research analysis are the focus of this article.

The concept of *assemblage* (Deleuze and Guattari 1987) is used in the analysis to attend to time and things both as parts of classroom situations and as elements of the post-qualitative research process. The idea of assemblage is activated in a twofold movement (see also Huuki & Renold 2015): first, to zoom in into the detail of how time, things, teacher and pupils are co-constituted and emerging in the classroom combinations and gatherings. Here, the temporal arrangements are seen in terms of striated, strictly structured spaces, and smoother states, in which a more unstructured movement and transformations become possible (see Hickey-Moody & Malins 2007). The second movement is to zoom out, to the assemblages beyond the initial empirical material, to follow how the children's writings are connected with ever new elements, affects, and situations (see Huuki & Renold 2015; Koro-Ljungberg et al. 2015). Elizabeth Adams St. Pierre (1997) introduced already two decades ago the idea that data and analysis can fold and unfold in an ongoing process. She used the Deleuzian term 'smooth spaces' to refer to the nomadic, non-linear trails of research and coined the concept transgressive data (St. Pierre 1997a, 2011) to describe data that are neither fixed, textualised nor frozen into representation – that is 'memory data', 'emotional data', 'response data' and more. This study puts these ideas to work to acknowledge the potential of knowing that comes from the interplay of histories, memories, professional positions (as a teacher and researcher) and locations involved.

My analytical engagements began by experimenting with the children's writings as text. As I divided the sentences and placed them on separate lines (which is how the classroom diary excerpts mostly are displayed throughout this

thesis), the writings started to adhere to a different logic: the linear representation was disturbed. As with poetry, it became possible for the reader to halt, move back, jump forward, and go beyond the linear reading habits through a zigzagging movement. At the same time the role of the material beings in class, which the children are so good at recognising, became more visible. I continued to read and re-arrange the children's texts in this poem-like manner, and I started also to experiment by writing my own retellings in the emerging between-spaces, which became spaces for new thinking and writing (Richardson & St. Pierre 2005). However, in drawing on the analytical strategy of retelling (e.g. Puroila et al. 2012), I do not look for meanings as is common in narrative inquiry, but instead, I avoid explaining and instead use writing to experiment and to explore.

The article presents an example of an evolving post-qualitative research, which seeks to take children's words seriously, even if they sometimes seem enigmatic or controversial. Furthermore, this study seeks to view the empirical material as else than something to be represented or interpreted. Rather, the classroom diaries serve as 'provocations' to new retellings and invitations to enter the connective entanglement, not to distance from it. MacLure (2013b) speaks of writing as the entanglement of matter and language and points out the potentialities of writing that can extend beyond representation. The issue of representation became poignant for my study, not only because I became aware of the posthumanist endeavours towards extending social inquiry beyond representations (e.g. Osgood et al. 2015; Otterstad & Waterhouse 2015; Holmes & Jones 2013; Reinertsen et al. 2013; Guttorm 2012) but also because of something embodied and material: a final meeting in class with the participating children which took place after two years of research.

The final meeting in class illustrates the analysis as a nomadic and non-linear process, embracing different times, histories and memories. In this final meeting I wanted to respond to what I had received from the children with something like 'results' – to tell them what I had been thinking so far. What most affected my analysis was that this meeting was to be an embodied and physical encounter: I really had to step into the classroom, look at the children, speak those words and be prepared for the children's responses. I did not want to come up with an explanation of why they had acted in certain ways or tell them what their actions meant translated into a conceptual vocabulary (that I would have to teach them). The challenge of talking to the children demanded me to be concrete and comprehensible while also being theoretical and accurate. I had to find a way to write and talk about the research that was easy to speak and listen to, and it had to be honest in the demanding endeavour of following things that mattered to the children and that mattered to me. This suggested that I had to take a decisive step away from representational research writing.

In the meeting I read aloud a text to the children: a new assemblage of their classroom diary writings and my retellings, examples of which are shown in

sections of the article. I enclose one of those retellings, in which the normative and taken-for-granted conceptions of teacher and pupil are disturbed through 'different encounters' involving the non-human elements of food, exhaustion, silence, spring sunshine and pieces of ice:

Encounter with the tired teacher:
When a pupil came to me, the teacher,
I was really tired then,
and the pupil simply asked: "What's wrong?"
Encounter with nice pupils:
Returning from the teachers' room, I find the classroom door closed
and there's such a silence that I almost guess.
Behind the door I find the entire big group
surprising the teacher by sitting in their places in complete silence!
Encounter in the smoothness of the math lesson:
When the math lesson made space for all of us to be at peace
and it felt like a dance in which everyone knows their part.
So strange: if the school were not organised with these schedules and the familiar routines,
this smooth space would not be created.
Encounter in the spring sunshine:
When it is March and I have guard duty during the break.
The sun radiates so much that I have to close my eyes,
the snow reflects the light and it is so bright.
The children take pieces of ice from the ground
and rub the teacher's back and shoulders.
The teacher melts,
eyes closed, hoping this moment will never end.
The difference between the adult and child melts.
(A retelling)

MacLure (2013b, 662) speaks about 'the rage for explanation and meaning' found in much of educational work, as children's actions and words are constantly viewed as representing something and transformed into concepts such as 'behaviour'. Due to the prevailing developmental approach to children's lives, their doings are often assigned meanings by parents, educators, and other fellow adult citizens (Rautio & Jokinen 2015). This article suggests engaging with children through the analytical movements of retelling and responding rather than representing. It examines the potentialities of a relational materialist analysis working through experimentation rather than interpretation (Deleuze & Guattari 1987, 162). According to Edwards and Fenwick (2014), sociomaterial critical inquiry would function through affirmative interventions in practices rather than

unmasking what is wrong by taking apart, separating out and unveiling what lies behind people's actions (see Braidotti 2013; Latour 2004). In a similar vein, the engagements and retellings of this study could be seen as an affirmative alternative to more conventional critical inquiry relying on negative or category difference.

For Deleuze, there is an ethical side to attending to life in its heterogeneous emergence, as he in his Logic of Sense (1990) demands that we should not 'be unworthy of what happens to us' (p. 149). I argue that ignoring what matters (seeing it as passive and interesting only insofar as it serves as a means to higher intellectual ends) has led educational researchers to regard much of children's lives as 'nothing'. Examining classrooms through assemblages and avoiding the conventional focus on human-centered meaning-making enables one to embrace children's lives as ordinary and stable, but also as surprising, strange, and 'messy'. In so doing, this approach loosens the normative boundaries of how we think about children and resists forces of complexity reduction in education.

Entanglement is dynamic, because it shows not only how we are connected but also how we are co-produced. As I read my talk aloud in the meeting with the class, we, the teacher-researcher and the children, were not outside observers of this material entanglement, but rather produced as parts of it. Non-representational or post-representational writing does not close us within the realms of meanings or concepts (that we must learn before we can use them), but points at a vibrant, intra-related landscape of things and doings, predictabilities and unpredictabilities. As I read my talk, the children joined in with peals of laughter and shouts of excitement. In the discussion that followed, the children still considered their work important and maintained that they could observe things other than those adults see. It is not possible to know whether this meeting mattered equally to every one of the children. No questionnaire or interview could prove that this was the case. But through entanglement, I can know that it mattered to me.

8 Results (2) as doings

A new materialist inquiry is not primarily concerned with certainties and closures. Nevertheless, I claim that this study does not move in an utopian space, but is orientated towards practice and what is actually happening – in *what is*. Deleuze and Guattari help me to think of the results of this study in a practice-orientated way when they pragmatically say:

> We will never ask what a book means, as signified or signifier; we will not look for anything to understand in it. We will ask what it functions with, in connection with what other things it does or does not transmit intensities (. . .)
> (Deleuze & Guattari 1987, 4)

In a similar vein, I would like to see if the the results of 'our book' could be presented as doings, not things. This way, the results are as follows:

- Creating an open-ended narrative space (Children writing ethnography/classroom diaries) for listening to what matters to children
  - an open-ended narrative space allows an open-ended view of children (and adults) and voices and embraces the classroom as more-than-human
- Taking seriously the things that matter to children
- Engaging in research with children as an entanglement
- Recognising the agentic work of matter, time and space in the classroom
  - children are mutually co-produced as hybrid beings and becomings in the relations among matter, time and space
- Creating conceptual and practical space for children as emergent, complex beings-becomings
- Experimenting with retelling and responding in order to analyse what matters.

9 Results (3): What matters to the children?

This thesis claims that, engaged in their open-ended and unregulated narrative practice, children speak about things and doings that matter to them. Mattering, in English, can mean 'being important' as well as 'to materialise'.[14] According to new materialist ontology, mattering embraces both meaning and matter: 'Mattering is simultaneously a matter of substance and significance' (Barad 2007, 3). In this section I will first talk about these things by experimenting and constructing a list (9.1), and after that, by summarizing how I understand things that matter to the children as objects of inquiry (9.2).

Law and Mol (2002, 15) examine the ways in which research might account for complex things without imposing on them hierarchical relations or closed orders. They suggest presenting *cases*, not as representatives of something larger than examples that neatly fit in, but rather as phenomena in their own right, each differing in some (perhaps unexpected) way from all the others. From the beginning of this thesis I have been creating openings to such writing thesis I have been creating openings to such writing (the *zooming* writings). Another strategy suggested by Law and Mol (2002) to use *lists* to talk about complex things without closure. They refer to Foucault's *The Order of Things* (2005)[15] and suggest that a list does not have to impose a single mode of ordering and further, that it is able to recognise its own incompleteness. '*If someone comes along with something to add to the list, something that emerges as important, this may indeed be added to it.*' (Law & Mol 2002, 14).

Listening – the realisation that I was not able sufficiently to listen to the children – was the starting point for the narrative practice of classroom diaries. As I close this study, I confirm the difficulty of listening, yet by understanding research with children as entanglement, the conception of listening has shifted. Davies (2014) refers to e*mergent listening as* something other than listening-as-usual, which seeks to establish borders, to judge, to define. Emergent listening urges one to be open to children's intra-active becoming. This kind of listening only works within entanglements; it stops working from an objective distance.

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[14] In Finnish we might use the expression 'jollakin on väliä' for 'mattering', thus making a connection to another concept by Barad, the 'agential cut'. Agential cuts make it possible to observe the things separately, even though they are entangled and dependent on other entities in their existence.

[15] In the preface of *The Order of Things* Foucault (2005, xvi) borrows from Borges a list derived from 'a certain Chinese encyclopaedia'. According to Borges, animals were divided into '(a) belonging to the Emperor, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (l) et cetera, (m) having just broken the water pitcher, (n) that from a long way off look like flies.'

According to flat ontology and outside representational agendas, this kind of listening does not seek explanations. This list, one of the results of this thesis, is based on just such listening – to what the children were writing about, namely what matters.

9.1 What matters to the children? A list

Silence.
Loud noise.
Writing on the board.
Break.
The long break.
Where one sits.
Mistakes.
Where one has to be at certain times, and exceptions.
To write on the laptop computer.
To find unusual fonts on the laptop.
Hands.
Plans for holidays, plans for Christmas.
Feet, if someone puts feet in the wrong place.
Turns in doing anything.
Going to the toilet.
Raising hands, playing with fingers.
Funny sounds.
What is for lunch.
Whether one can have more food at lunch.
When school begins.
What is the homework.
Pokémons.
Football cards.
Saying something to the boys as a girl.
Commenting on girls' play as a boy.
Talking about TV programmes.
Tell stories using characters from TV programmes.
Stories about potatoes, how they make one laugh.
Zombies.
Building things with pencils and erasers and rubber band.
Looking at what has been written in the classroom diaries.
When the school day ends.
Who can have a pillow under one's bottom.
What teacher did at home.
What teacher did when she woke up in the middle of the night.

What teacher did when she was small.
What boys do.
What is drawn in the notebooks.
Playing the recorder.
Who can be with you after school.
Telling a story.
Have someone listen to your story.
To have one's name in a story.
One's own place.
To sit in unusual places.
Hair.
To touch hair.
To write on the board.
To write at the projector.
Football players.
Football cards.
Peaceful silence.
To have a say in arguments.
To laugh loud.
Zombies.
To tell the teacher what happened.
Funny words of one's own.
Who may speak.
Who wins in football.

9.2 Mattering as object of inquiry

What matters to the children in the classroom
- is always particular
  - because a specific entanglement involves a specific timespace
- is always far-reaching
  - because entanglements are open-ended
- can be funny
  - because entanglements can include nonpredictable and surprising combinations
- can be something tiny, and regarded as 'nothing' by adults and educators
  - because of the long-lasting dominance of human-centred meaning-making in education

10 Concluding thoughts: from 'nothing' to 'something'

> The vagueness or the unfinished quality of the ordinary is not so much a deficiency as a resource, like a fog of immanent forces still moving even though so much has already happened and there seems to be plenty that's set in stone.
>
> This is no utopia. Not a challenge to be achieved or an ideal to be realised, but a mode of attunement, a continuous responding to something not quite already given and yet somehow happening.
>
> (Stewart 2007, 127)

10.1 Are new materialisms useful as a critical approach?

The new materialist and posthumanist approaches are currently being employed in many fields of social inquiry. Coole and Frost (2010) situate the 'material turn' in the big picture of the ethical and political concerns that accompany the emerging scientific and technological advances, especially those manifesting in biopolitics and the global political economy. Taylor et al. (2013) point to human-induced global warming as ultimately forcing us to broaden the educational focus from human-centred towards 'more-than-human'. According to Coole and Frost, these conditions have existential implications, they force us to rethink some of our fundamental beliefs – that is, the ontological assumptions underlying our everyday lives. This also shifts the focus of what we wish to achieve as researchers. In Braidotti's (2002) view, we need to learn to focus on relations, processes and change, and in between-spaces, instead of stable entities. These demands can be seen as especially pressing for education, which is directly involved with the future inhabitants of our planet.

The contribution of new materialisms to social inquiry has been challenged based on the argument that it lacks the necessary conceptual tools to analyse social inequalities and to promote political change. Indeed, the analyses emerging from new materialisms do not primarily lean on explanatory categories (such as social class, age or gender) and the power relations between them, as social constructivist analyses mostly do (see Coole & Frost 2010, 26). Edwards and Fenwick (2014) examine this debate in relation to the large framework of 'sociomateriality', which they use to refer to agential realism (Barad 2007), vital materialism (Bennett 2010), post-humanism (Braidotti 2002; 2013) and actor-network theory (Latour 1993). They say that the political nature of sociomaterial analyses can seem unsatisfactory to those who associate critical thinking with categories and categorical (negative) difference – specifically, difference *from.* Furthermore,

sociomaterial analyses are a problem if one believes that making a critique requires making a stand, having a standpoint (Fenwick & Edwards 2014, 9). Although Deleuze himself did not regard himself primarily as a materialist, his idea of positive difference or 'difference in itself' (see Deleuze 2001; Lenz Taguchi 2010, 57-58) is at the core of the posthumanist and new materialist approaches. Positive difference is a concept that demands hard unlearning of the exercise of criticism (and political practice), which relies on differences between categories or structures. This does not mean that one must ignore the dominant discourses of our era, such as neoliberalism, but the aim is rather to attend to their materially entangled and particular ways of working while, on the other hand, situating them among the multiple forces at play in life, as pressing and intense as they sometimes be.

Latour (2004) provocatively sees critical work relying on socially constructed structures as a kind of a play enacted from morally comfortable places by those who master the right language and are able to point to things that are wrong. That kind of criticism is guided by the belief that emancipation follows the recognition of structures, but Latour argues that it has had little effect outside academic journals and their self-referential circles. MacLure (2013b) also sees the conventional critical practices of taking apart, unmasking and exposing what is wrong as dangerous because they lead to a binary opposition between those who know (the critical researchers) and those who are known (the ones who have to learn what lies behind their own actions). This study suggests that the new materialist approaches can disrupt how we think of children as political beings. They resist the conception of politics as something that can be practised only by those able to name, speak up and participate in societal structures through the 'right' kinds of activities, such as voting. Myers (2015), for example, presents an example of the politics of '*tinythings*' in her study of a kindergarten. She focuses on the smallest kinds of things, such as pieces of Lego characters, dust and missing teeth. These things seem like 'nothing' to adults, but through them, complex webs of interaction and power imbalances come into existence.

The crucial question would then be: Is it possible to discuss across different ontologies? Can one bridge, for example, Barad's agential realism with other theories? Barad's writing does not repeat the word 'radical' without reason; her ideas of mutual intra-active interdependencies and entanglements are radical indeed and carry huge implications for the human-centred educational worldview. Yet, in some instances I can see the possible danger of entangled and intra-active states of agencies becoming a kind of mantra (especially since so few social science scholars have the competence to tackle Barad's concepts on the level of nuclear physics). In other instances, I agree with Ahmed (2008), who points out how Barad makes an unnecessary distinction between earlier feminists' and her own agential realist conceptualisation of the body. Although rejecting binary thinking is one of the valuable contributions of the idea of entanglement,

ironically, some studies construct new binary settings in applying the idea of entanglement.

Coole and Frost (2010, see also Lenz Taguchi 2010) illustrate the domination of the Cartesian *cogito* that constructed non-human beings as ontologically other than humans who were seen as rational, self-aware agents making sense of nature by measuring and classifying it from distance. They state that despite having offered valuable insights into the workings of power, for example, social constructivism has reinforced the domination of the meaning-making human by emphasising human constructions and authorship. Zizek (2014) criticises the tendency of new materialisms to impose human subjectivity on matter which one presumes to empathetically 'know' (p. 14). For Coole and Frost (2010, 8), the concept of materiality is not reduced to such praise of 'matter as human', because materiality is always to be understood in terms of relationality that extends beyond 'mere' matter. In this way, new materialisms can embrace society as both materially real and socially constructed and tackle complex questions that relate simultaneously to individuals' biological needs, the micropowers of governmentality and the natural and artificial objects that surround them.

10.2 About this study

Discussing posthumanist or new materialist inquiry, I think that the case of education is somewhat special. It can be stated that the intellectual beliefs of each era can be found in intensified form in schools, where educators aim to project them onto children through their pedagogical practices. Just as the historical notion of the efficient transmission of measurable knowledge from lecturing teachers to listening students is deeply rooted in school practices and architectures, so one can see an intensification of the meaning-making, agentic human at the very centre of our educational practices, whether in schools or in research. Escaping the covert voice of the centred subject, which so easily reinserts itself, as well as the humanist and representational practices that drive conventional qualitative educational research, is a huge task, particularly when it involves adults and children in educational environments.

Obviously, this dissertation cannot claim to have overcome at once the obstacles described above. Rather, I see what I have done as a series of attempts, openings*, zoomings,* and instances of seeing differently. Throughout the study I have yet again attempted to resist my own educational gaze, that is, the automatic ways to centre individual children's psychological or social capacities when reading the children's writings. At my boldest moments, I have even succeeded momentarily in letting go the persistent 'why?' question, which demands reasons and explanations. I have moved towards seeing myself as 'I (in entanglement)' (see Introduction), and have undertaken the practice of accompanying my findings with the restless question of *'What else?'* (see Article 2); I have also tried to stop

and stay with odd and strange things without hurrying to classify them under some educational concept (especially Article 4).

This study identified pragmatic methodological potential in the posthumanist concepts. I turned to classroom *assemblages* and examined how they enact and move realities. I followed the examples of thinker-researchers such as Lenz Taguchi (2010), MacLure (2013), and Rautio (2013) by trying to begin in the middle of such assemblages. Deleuze (in Foucault and Deleuze 1977, 208) urges us to regard his theoretical concepts as 'tool boxes', the value of which can be affirmed only by their use. The concepts of entanglement, assemblage and the nomad became activated in this study to open the inquiry to curiosity, movement and to the non-reductive recognition of the complexities of children's lives. The title of the thesis uses the concept of *entanglement* to emphasise the claim that no 'real' world exists outside research, which can be unmasked by a distant critic. Rather, multiple worlds emerged each time the narrative practice 'classroom diaries' intervened; without this writing activity, these worlds (in a very precise sense) could not have existed.

The implications of the new materialist and posthumanist theories in this study became actualised in the multiple ways of connecting with and seeing differently the *things that matter to the children*. These things, often tiny and seemingly irrelevant, come up sometimes in funny combinations and gatherings, and fun became seen as an important goal of the school day. In terms of analysis, a small but significant move was to depart from these things (football cards, book pages, or the musical instrument recorder). This departure affected the habitual ways of thinking about the educational environment (see Articles 3 and 4). Working with the connective concepts of assemblage and entanglement further allowed me to go beyond the divide between theory and practice (see also Lenz Taguchi 2010), which in my study was a poignant and realistic one, because of my positions as both the class teacher and as a researcher.

On one occasion, when I opened a brand new notebook with plastic covers, a 10-year-old boy, interested in my activity and following it beside me, sniffed the plastic and said succinctly: 'Smells like child labour'. I cannot explain how he made this connection. But I like to think of this event as an entanglement in which, by having the book in our hands, far-reaching and open-ended interactions related to inequality became alive and evident; the relation between plastic book covers and inequality began to matter. In this entanglement, I learned that inequality can be sensed, indeed smelled, in those poor quality, mass-produced plastic items, and since then, I recognise this smell wherever I encounter it.

10.3 Towards affirmative criticality

It has been said that it is in the ordinary routines and mundane situations where political change is hardest. Haraway (2007, on the back cover of Stewart's book *Ordinary Affects*) emphasises the importance of exploring everyday life 'without which we are in the dark in politics, philosophy, and cultural theory'. To do that, she suggests engaging in the hard practices of 'slow looking and off-stage hearing'. In illuminating everyday complexities, this posthumanist inquiry chose not to focus on individuals against the background of their complex circumstances of individual growth, social relations, school or society. Instead, it invites one to enter a vivid and dynamic interplay among these and other factors, even coincidental ones. It is not sufficient to see these material and embodied processes as mere reflections of power or ideas.

The politics of new materialisms works by participating in practices rather than pointing out inequalities or errors. It is political inquiry that seeks to avoid separation, working instead through attachment and combination (Edwards & Fenwick, 2014). Braidotti (2011, 259-260) has taken Deleuzian ideas forward by developing affirmative politics, or 'horizons of hope'. She aims to find ways to address the injustices, violence and vulgarity in a productive and affirmative manner, which is not the same as neglecting them. Many researchers in the field of education are currently engaged in precisely this struggle towards affirmative critical research, beyond negative difference. Andersen examines 'race-events' and seeks to give 'race' its full potential to see how it matters to her as a white woman. In her study of health education, Gunnarson (2015) presents the concept of 'careful critique'. Guttorm (2014) writes love letters to her participants as a refusal to enclose them in representations. Tammi (submitted) examines how political activity emerges in rhizomatic encounters between discourses, humans and mould in a mould-infected school. With regard to this study as part of a project on the well-being of children, a conventional critical stance might have led me to highlight faults and thus focus on ill-being rather than well-being; an affirmative critique would attempt to explore beyond the dichotomous division between well-being and ill-being and take into account associations and traceable attachments in which well-being is not assumed to be exclusively human.

The ethical and political commitment of a study that seeks to listen to and elicit children's voices can at first glance be regarded as obvious. Nevertheless, listening to children's voices can be something other than ethical if the researcher fails to apply sensitivity to the material complexities shaping the children's voices and research procedures. The need for complex approaches in regard to the ethics of research with children is clear (see Christensen & Prout 2002; Strandell 2010). A framework of justice drawing on categorical difference can be misleading, as Kallio (2009) illustrates in a case involving the UNCRC which fails to recognise many young parents and employees simply because they are under 18. In

connection with the idea of entanglement, Barad (2007) suggests a very different understanding of justice. For her, justice is a constant question of responsibility relating to all the particular and unique encounters in life:

> Justice, which entails acknowledgment, recognition, and loving attention, is not a state that can be achieved once and for all. There are no solutions; there is only the ongoing practice of being open and alive to each meeting, each intra-action, so that we might use our ability to respond, our responsibility, to help awaken, to breathe life into ever new possibilities for living justly. The world and its possibilities for becoming are remade in each meeting.
> (Barad, 2007, x)

In my study, open-endedness, whether in connection with the children's classroom diary writing activity, my own ways of engaging with them in terms of analysis, or reporting the results of the study, is a political choice intended to resist the tendency of education to draw things to a close and to continue stealing children's complexity. Working from the assumptions of new materialism means acknowledging that change does not happen thanks to human intention alone. Even so, I agree with Edwards and Fenwick (2014) that it is important not to turn one's attention to assemblages and combinations into a mere celebration of interconnectivity, potentials and flow. As Renold and Mellor (2013) point out, strong destructive and limiting forces can also be involved in the assemblages, which is perhaps something that warrants greater attention in materially engaged studies in the future.

What remains to be addressed more in the future is the affective dimension of this research. MacLure (2013a) introduces the concept of 'glow' to refer to something that occurs while doing research, something that can only be sensed; a feeling that something is choosing you just as you are choosing it. This is how affects perform their important role in entanglements: they transcend categories, connect things, people and ideas, set them in motion and point at combinations that are sometimes odd and surprising. Nevertheless, analyses usually ignore sensations such as humour, mockery, disgust, fascination, unease or resistance, as if these things were not happening or did not matter and treat them as obstacles to the production of good data, clear ideas, or trustworthy accounts (MacLure, 664). When summarising the study, I had to recognise the *joy* that both permeated and guided my work throughout the process. What could be more closely related to well-being? Humour certainly was something that mattered to the children in the classroom, yet humour might just as well be one of those essential elements for a good life that the modernist endeavour of education has sadly neglected. Many of the children's visible and audible reactions to the classroom diaries were laughter and excited shouts (*I bet that's me!*). Earlier, I told about Matti, who taught me that there is no guarantee of how

particular entanglements will matter for particular people in particular situations. It would be unjustified (and not my intention) to state that the experience of engaging in the classroom diary writing practice was unproblematic and joyful for each participant all the time, but it would be equally wrong to ignore the flux, energy and joy that emerged when the children asked: '*Can we write stories? Can we write together?*'

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PART III THE ARTICLES INCLUDED IN THE DISSERTATION