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**A MULTICASE STUDY OF NATURE-KINDERGARTEN
PRACTICES: EXPLORING THREE EXAMPLES IN
DENMARK, FINLAND AND SCOTLAND**



Clare Nugent

Thesis presented in partial fulfilment

Doctor of Philosophy

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Other publications

The journal papers, commissioned reports, book chapters and conference papers listed below were written in direct connection with this thesis and are noted here to allow the reader to easily detect my contributions to the field.

Papers

- Nugent, C. (in press). Sensory ethnographic observations at three nature kindergartens, *International Journal of Research and Method*
- Nugent, C. & Beames, S. (2015). Cultural transmission at nature kindergartens: foraging as a key ingredient, *Canadian Journal of Environmental Education*, 20, 79-92.
- MacQuarrie, S., Nugent, C. & Warden, C. (2015). Learning with nature and learning from others: nature as setting and resource for early childhood education, *Journal of Adventure Education and Outdoor Learning*, 15(1), 1-23.

Commissioned reports

- Nugent, C. (2015). Nature Play: Nature Conservation. Report commissioned by the Royal Botanic Garden Edinburgh and presented at BGCI 9th Conference Missouri, 26 April –1 May
- Mannion, G., Fenwick, A., Nugent, C. & I'Anson, J. (2011) Teaching in Nature. *Scottish Natural Heritage Commissioned Report No. 476*

Book Chapters

- MacQuarrie, S. & Nugent, C. (2017). Considering children's opportunities for exploration of their local environment and engagement with nature. In T. Waller, E. Ärlemalm-Hagsér, E.B.H. Sandseter, L. Lee-Hammond, K. Lekies & S. Wyver (Eds) *The Sage Handbook of Outdoor Play and Learning*, London: Sage.

- Nugent, C. (2015). Using the outdoor classroom in early years pedagogy. In I. Palaiologou (Ed) *The Early Years Foundation Stage: Theory and Practice (3rd Edition)*, London: Sage.
- Nugent, C. & MacQuarrie, S. (2015). Considerations for practice. In N. Buchan (Ed.), *Children in Wild Nature: A practical guide to nature-based practice*, Blairgowrie, Australia: Teaching Solutions.

Conference presentations

- MacQuarrie, S., Nugent, C. & Buchan, N. (2015). ‘I’ve just picked this straight from the bush’: Comparing nature play in botanic gardens. Paper presented at 16th Annual Conference of Pacific Early Childhood Education Research Association (PECERA), 24–26 July Macquarie University, Sydney, Australia.
- Nugent, C. & MacQuarrie, S. (2015) Reflections on water: evidence from nature kindergartens. Paper presented at *Learning in Natural Environments (LiNE): Lessons from Near and Far* International Conference on Outdoor Learning 3rd July 2015, University of East London.
- Nugent, C. (2014). Comparing nature-based practice: insights from three nature kindergartens. Seminar paper presented to visitors from University of Copenhagen at University of Edinburgh, 16 May 2014.
- Nugent, C., MacQuarrie, S. & Parikka-Nihti, M. (2014). Comparing nature-based practice: exploring the roles of listening, looking and tasting. Paper presented at VI Conference *Values of Childhood and Childhood Studies* 7–9 May 2014, of Finnish Kindergarten Union, University of Oulu, Finland.
- Nugent, C. & MacQuarrie, S. (2013). Connecting and comparing: examples of learning with nature. Paper presented at National Association of Finnish Kindergarten Union Conference. Helsinki, Finland. 28–29 September.
- MacQuarrie, S. & Nugent, C. (2012). Insight into early years: learning inside, outside and at nature kindergartens. A comparative study. Symposium presented at Improving Education through Research Conference, 23 November, of Scottish Educational Researchers Association (SERA), University of the West of Scotland, Ayr, Scotland.

Nugent, C. (2011) ‘Forest pedagogies—thinking global, acting local’: forest and home.
Forum presented at 6th Freising, Germany, 24–27 July.

Nugent, C. (2010) Nature’s kindergartens: developing comparisons. Presentation at 5th
European Pedagogics Congress, Lahti, Finland 21–22 October.

Nugent, C. (2009) Nature’s kindergartens: a comparative study of an international
phenomenon. Presentation at 4th European Pedagogics Congress, Lyss, Switzerland
28–30 September.

Signed declaration

I hereby state that this thesis, composed by myself, is my own work. The work has not
been submitted for any other degree or professional qualification and all listed
publications are my own work, except where indicated throughout the thesis and clearly
identified on the Other Publications page of the thesis.

Signed.....

Date.....

Abstract

Nature kindergartens are a type of early-childhood education that, relative to other settings, are based outdoors, season-round. They are founded on the belief that direct and immediate experiences with ‘quotidian nature’ (Kahn & Kellert, 2002, *xvii*) are beneficial in early childhood. More commonplace in Nordic nations and Germany, nature kindergartens are more recently evident worldwide and, hence, timely to research them.

By evidencing a descriptive account of ‘nature kindergartens’, this study sought distinctions and commonalities between examples to inform why practice may look the way it does. Existing knowledge presented an opportunity to explore why sharing a label does not infer similar practice arrangements. With its social constructionist lens, this inquiry considered how patterned behaviours and socialised practices (embedded in adults and emergent or developing in children) might guide variations in nature-kindergarten practices.

Theoretical tools, namely Bourdieu’s (1977) concept of habitus and Heft’s (1988) version of affordance theory, are used to endorse the position that the use of nature environments for early-childhood education are subject to wider considerations. Using these concepts, nature-kindergartens practices, including that which was seen, heard, smelt, tasted and touched by participants were interpreted for the ways different groups construct season-round relations with nature.

The research design and questions were established using preliminary investigations or ‘scoping’ of 15 nature kindergartens in six countries ahead of the selection of three case settings: one Danish case, one Finnish and one Scottish. By

‘looking between’ in preference to comparison, the inquiry extends our understanding of nature kindergarten as sites of social and cultural construction, where educational practices cannot be disjoined from their wider societal, cultural and natural influences. The multicase study (Stake, 2006) framed the collection of data through time-sampled observations, interviews and conversations with adult and child participants. Other peripheral data, including photographs and field journals, were collected. The author shared 53 days with participants at the three case locations and coded the observed practices using thematic analysis (Boyatzis, 1998). Children’s own words, metaphor, poem extracts and colloquial phrases have been used to further contextualise the writing.

The study findings describe nature kindergartens as a distinctive form of early-childhood education through evidencing locally relevant relationships with nature. For those under study, spending a preschool year variously shivering and sweating, exhausted and exhilarated, eating berries and eating snow evidenced differences and similarities in season-round relations with nature. This study, by deepening our understanding of nature-kindergarten practice, evidences how socialised practices can play a constitutive, rather than causal, role in practice looking the ways it does. Together, the findings contribute a foundation for the early-childhood education and outdoor-learning fields to place increased emphasis on the role of nature kindergartens in lifelong relations with the outdoors. Longitudinal and multicase research in this area is of great interest, yet currently sparse.

For Trish,

The Fishwife who pushed me into this river extolling how much I'd love it—

I almost drowned, but looking back, appreciate the push.

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This thesis has been a long, uphill journey. I owe a deep gratitude to the many people who have supported me throughout and in their own ways have helped to make this thesis possible. Each has played a significant role and made a difference.

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Chapter 1

Situating the Study

1.1 No karabiners were used in the making of this thesis

My love of outdoors did not stem from the rush of an abseil or the froth of a river. To my mind, my relationship with the outdoors was fostered placidly picking bilberries on a Welsh hillside. Everyone has memories of where they feel something started and my love originates from that hillside where my parents, together with Great Aunt Nelly in her campervan, took my brother and I each August. We didn't eat straight off the low shrubs—rather we took these home for the freezer and Mum's pies. Those times (and those pies) during childhood gave me a strength of feeling towards the great outdoors; they kindled an appreciation of nature environments that in later life fuelled escapes in my need, 'to breathe fresh air for a while' (Giono, 1985, p. 3), ultimately influenced career choice (Bixler, Floyd & Hammitt, 2002) and, while this may not be the case for all, nature inspired me. There have been 'high-octane' peaks (and abseils) along the way that will have contributed; yet, for the most part, it is a more 'quotidian nature' (Kahn & Kellert, 2002, *xvii*) that holds appeal—the extraordinary in the ordinary and elementary, the direct and immediate to hand.

Autumn 2014 and thirty-five years on, I recall our 'Halloween fingers' looking blood-stained from berry juices when in the Pentland hills near my Scottish home with my own sons as we happened upon that year's bilberries. This outing closed a circle by connecting my experiences and memories with my family by generating their own childhood experiences and developing our shared interests. What I was doing with my

family was more than the act of picking wild berries; by picking berries together (and in a way that re-enacted my earlier experiences) it was an acquired practice influenced by prior actions and thus reflecting formative contexts. My study—its inspiration rooted in practices and memories such as these—required an arena within which to capture data to better understand nature-based early childhood education.¹ Therefore, an arena was sought for my inquiry that would allow human–nature interactions and relations in nature-based early childhood education (ECE) practices to emerge. The arena I sought was not one of ‘best’ or ‘good’ practice, rather one that would reveal ‘other ways of doing things’ (Fleer, 2003, p. 64).

Word of diminishing provision of outdoor education at home and abroad (see Skår & Krogh, 2009; Waite, 2011b) is worrying, and that is why exceptional pockets of outdoor-focused practice entice inquiry. One example of such a pocket is nature kindergartens—a specialist, early-childhood provision that uses nature environments season round, as a setting and resource for practice. My decision was taken with ease, therefore, to explore nature-based early-childhood education (ECE) in the form of examples of nature kindergartens because of their marked contrast to other forms of early-childhood education (see Section 1.2.6). My own lifelong outdoor education has informed this inquiry but is not its main constituent. My study aimed to lift investigation of nature kindergartens from a descriptive account to a piece of research that offers a worthy contribution to knowledge. Yet, the premises involved in doing so are multi-layered and overlap in ways that means bringing them out into the open, which is challenging and complicated.

Prior to this doctoral study, I undertook research as part of a Master’s degree at The Secret Garden in Fife, with Cathy Bache, its founder, who had been inspired

¹ I use the term ‘nature-based early-childhood education’ (nature-based ECE) throughout my thesis to refer to the utilisation of nature environments for early-childhood education.

by outdoor learning while teaching in Norway a decade earlier. While my findings from the MEd were consistent with the wider literature and confirmed the affordances of nature's playground, both that degree and existing texts left another key issue unanswered—how different or similar was the Scottish example to the Nordic counterpart that had inspired it? References abound as to the close relationship between Scandinavians and nature that suggested there were issues worthy of further consideration. In particular, questions arose around how nature-based ECE practices actually manifest in different countries.

1.2 What is a nature kindergarten? Introducing my research questions

Of course, one cannot offer an answer here—an introductory chapter of a thesis with such questioning as its overarching focus is not the place for that. Yet, this was the request of some to whom I talked with about my PhD. Doctoral students are advised to have a *précis* of their research to pique the interest of all who ask—short, sharp, to the point and in plain language. Every enquiry on my research topic was the chance to hone my ‘elevator’² retort: ‘They are settings where preschool children use outdoor instead of indoor spaces’, and usually, that level of explanation sufficed. Thankfully, some people requested more and there is more to know. Offered here, by way of introduction, is a discussion that sets out the parameters that support my choice of nature kindergartens as the right context in which to look at issues that surround nature-based ECE practice as well as my thinking behind a personal belief in the outdoor classroom. My introduction serves as a starting point to support the proposal that there is value in a clearer understanding of nature kindergarten practices—the *raison d’être* for my thesis—but also to bypass at the outset any wider

² An ‘elevator’ retort is commonly used to label the short, sharp, to the point, plain language *précis* to which I refer. The idea behind this label derives from having a summary of one’s thesis to share while riding in a lift.

debate on labels and names that offer little to address the questions posed. The broad question, ‘What is a nature kindergarten?’ will be investigated through two research questions,

- How do nature kindergarten participants use nature environments as setting and resource for everyday practice?
- What are the influences that shape the participants’ use of each nature environment?

I will address these two questions through a multicase study (Stake, 2006) using ethnographic methods.

1.2.1 ‘What is in a name? That which we call a rose’³

In a scene in *Romeo and Juliet*, Shakespeare has Juliet tell her lover that a name is a meaningless convention. In the late 1990s I spent time working at the Conwy Centre, a local-authority-owned outdoor centre on the Menai Straits in North Wales and I cannot introduce this thesis as my ‘life’s work’ without reference to that Centre’s neighbouring institution, ‘The Indefatigable’, which was a school preparing boys for the Royal or Merchant Navy. A read of its history recounts what the boys took from their school. There is mention of tireless persistence and how being ‘an Inde lad stood me in good stead for life and all it can throw at me’.⁴ Yet here’s the thing—by the late 1990s, The Indefatigable was long since closed down and boarded up. In fact, this school was established after a training ship of the same name was broken up for scrap in 1947. As the meaning behind the school’s label suggested never giving up, the boarded-up windows were, to me, disquieting; a contradiction

³ This title is taken from William Shakespeare’s *Romeo and Juliet*, Act II.

⁴ See more at:

<http://www.liverpoolshipsandsailors.com/2012/03/26/theindefatigable/#sthash.sWLCYT0F.dpuf>

that has stayed with me. A name or label may identify a person, place or thing and as such be seen a classification. It is, however, what is beneath the epithet that matters—layers that comprise socio-cultural meaning and in doing so render a label, a façade. This reasoning can be applied to the present context.

The synonymous manner in the use of closely associated labels referring to ‘the outdoor classroom’ offers an interesting insight (Stan & Humberstone, 2011, p. 213). The terms outdoor education, outdoor learning and, more commonly in early childhood, outdoor play ‘are often used interchangeably’ (Beames, Higgins & Nicol, 2012, p. 5) as terminology may stem from differing ideologies and professional conceptualisations (Boyes, 2000; Brown, 2006). Each term, each converging conceptualisation implies similar, comparable constituents, yet each have their own subtleties and reference a wider field in which they are known and understood. This position is further complicated by an overlapping literature that describes and debates the multiplicity of forms of practice and presents a need to spell out how philosophical ideas take shape in practical ways. Similar criticism can be applied to the name ‘nature kindergarten’—two familiar words that, upon closer inspection, require a more subtle understanding so that the practice and approach of these institutions are described appropriately. Considering Wittgenstein’s (1953/2001) reluctance to see fixity of meaning in language raised my awareness that the same word may be differently applied across the contexts of different communities. The meaning of the name ‘nature kindergarten’, and the forms of practice which that name encompasses, hinges upon the usefulness of the name in context rather than its ideal referent outside of all possible contexts. By attending to contextualised practices that happen at ‘nature kindergarten’, we might begin to better understand that they are not all the same, in particular, when one looks between practices in different contexts or

when practices are adopted from one culture to another. Adhering to the utility of a one size (or label) suits all approach we may overlook important distinctions embedded beneath the label and risk the removal of choices to act according to context.

To set my scene, there is a vast array of international terms to label nature-based ECE practice. One example stems from a focus group comprised of British, Danish, Finnish, Norwegian, American and Australian participants, who offered their terminology (MacQuarrie, 2012). Contributions included a myriad of names and overlapping terms for comparable practice. Well established and locally known in English as 'nature kindergartens', 'nature preschools', 'outdoor nurseries', 'bush kindy' or 'forest kindergartens', there were also, for example, the *Waldkindergärten* of Germany, Danish *naturbørnehaven* and *skøgsbornehaven* and the Norwegian *naturbarnehager*. Similarly, concepts including *I ur och Skur* (Rain or Shine kindergartens) in Sweden and *Metsamorri* in Finland entered the discussion.⁵

Subtleties between these labels are easier to unpick during such discussions and some literature has since sought to make comparisons (Waite, Bølling & Bentsen, 2015).

Despite an ever-expanding body of research that evidences an international interest in the outdoor classroom, texts on nature kindergartens remain relatively meagre and a detailed description beneath their label is not at all clear. All too frequently, this field seems satisfied with superficial understandings that fail to recognise deeper layers of understanding (Schaffer & Kistemann, 2012; Warden, 2010). During the early stages of this thesis, I visited various provisions called 'nature kindergartens' and, both between and within countries, there were often diverse manifestations of practice.

Common to each interpretation was not their location, type of landscape, nor any

⁵ Readers unfamiliar with these concepts are invited to read Chapter 2, Section 2.5 for that part of the literature review sets out more background on other forms of nature-based ECE.

curriculum specific to early childhood education; they simply shared a designating label that implied that similar practice arrangements would be evident in each setting.

Essentially, and in sum, beyond the name, existing assertions are broad and tentative, and practitioners themselves are aware of its ambiguity in early childhood, environmental education and outdoor learning fields (Baille, 2014; MacQuarrie, Nugent & Warden, 2015). At this early point, one must consider that placing confidence in a label that speaks of ‘nature’ yet overlooks situated relations and local facets that hallmark the ways these environments are used would be misguided. There is, therefore, value in addressing misunderstandings around such practice in a theoretically informed and critical way so that a clearer description can be shared. I acknowledge these issues are relevant to my study of nature kindergartens and respond to them in Chapter 2.

1.2.2. Scoping, outwith Scotland

The use here of the word ‘outwith’, more commonly used in Scotland than elsewhere in the UK, refers to a knowledge gained from being in the world. Shortly after completing my MEd, the opportunity arose to visit Denmark where my hosts were British-born Jane Williams-Sieghfredsen and her Danish husband, Keld. Our tour of examples of Danish kindergartens served to boost my interest around a palpable multiplicity of practice. The word ‘outwith’ stresses ‘that which is not within’ or ‘not part of’ something and, while familiar with nature kindergartens in Scotland, the settings I visited with Jane and Keld challenged my understanding through revealing diversity. The media at that time reported a visit to outdoor kindergartens in Norway in which Bronwen Cohen⁶ reflected that:

⁶ Personal communication (26.5.2009) with the then Chief Executive, Children in Scotland.

We have resources and nature in Scotland that are just as good, but we are not making as much use of them. The effect of this is that children in Scotland do seem more constrained; that [is] perhaps the overwhelming difference.

(Hepburn, 2007, p. 14)

Since then, while provision may have improved its foothold in Scotland, longitudinal evidence shows that preschool-age children remain predominantly within their institutions' premises (Mannion, Mattu & Wilson, 2015; Nicol, Higgins, Ross & Mannion, 2006). Adam Ingram,⁷ who had been part of the same visit to Norway, went so far as to recognise that a 'movement' was apparent across Scotland in the utilisation of nature environments for early childhood education. There were two reasons that led my study to look at nature kindergartens 'outwith' Scotland: my MEd experience had a Scottish focus and left me knowing that there was more to discover; there was evidence emerging around Scandinavian and German examples of practice that enticed me to take a closer look.

Ethnographic and case studies are conducted by researchers who make choices—what to study, when to do that, and how to record, interpret and write. To this end, scoping was an important part of the planning for my study that, in essence, let me take the 'closer look' that I needed to and formalise it. More detail on my design of a multicase approach (Stake, 2006) comprises Chapter 4 (Section 4.2), but I make mention here in Chapter 1 to flag the important part that scoping played in my study's design. It is prudent to state that scoping was not a formative, pilot case study (Yin, 2011), rather, it was a preliminary exploration to steer fundamental choices in

⁷ Scotland's Minister for Children and Early Years (17.5.2007–25.5.2011).

the journey of my thesis—choices that needed to be made early on to narrow the focus of the inquiry. Scoping was an exercise in seeking realities that I was eager to learn about beyond my Scottish ‘known’ and seek other everyday realities that research participants helped to create, live through, experience, practice in or feel constrained by. Such philosophical thinking did not present a clear structure as to a way forward—the premises and chains of reasoning overlapped in ways that called for some preliminary investigation.

Scoping established the focus, design and aim of my research as the need for a clearer understanding of nature-kindergarten practice. Although ‘less focused than the ultimate data collection plan’ (Yin, 2009, p. 93), scoping helped to build a platform from which my research questions could emerge. During that first visit to Denmark, four of the nature kindergartens I visited were within an area of 80 square kilometres. The various expressions of nature kindergartens hinted to me that there were influences that called for consideration of why each nature kindergarten looked the way it did. Each kindergarten comprised context-specific facets that questioned my existing understanding of nature kindergartens in Scotland: at one, there were sheep and a rabbit ‘hotel’ so children could feed and clean after livestock and pets; at another, a boat moored on a nearby estuary for use by the group. Insights from my scoping informed the study; not as data, but as a route to clarify the research issues, and thus my research questions, by allowing examples of nature kindergartens to be identified within selected countries for their potential to understand my primary research issue—‘what is a nature kindergarten?’

My study of nature kindergartens is timely. Recent texts foreground situated and culturally constituted facets in nature-based practice (Waite, Huggins & Wickett, 2014) and Evans et al.’s (2007) writing of a cultural heterogeneity highlights that new

knowledge should be open to recognising diversity in educational practice. Nature-based ECE practice may be culturally nuanced, and by foregrounding the role of socio-cultural influences and context in practice, recognition may be given to settings as ‘significant loci of cultural transmission’ (Gulløv, 2003, p. 26). For me, two events highlighted this view.

The first was when I returned to Denmark, shortly after my stay with Jane and Keld, leading a group of female teachers from England and Wales. When travelling, I like to read a country’s literature and, in Copenhagen airport, it was Hans Christian Andersen’s autobiography that stood out (Wullschlager, 2000). I found it enlightening to read of Denmark’s history and the author’s life alongside comments made by teachers during that visit. Comments from the touring teachers included discussion of less prescriptive practices combined with a marked contrast in parental support for the use of nature that, when considered alongside the fairy tales that made Andersen a household name, stirred thoughts of contrasting as well as intergenerational and habitual practices. Andersen made his tales compelling by appealing to children and adults alike through his animation of the natural world and, for me, his stories express something about the Danes whom we had gone to visit. A characteristic of Andersen’s tales is their lack of dependence on happy endings. For example, Andersen’s fir tree is chopped down for Christmas and ends up as firewood. Andersen’s tales, my scoping, and visits to other settings were marking a way forward for my thesis; a way that suggested for nature kindergartens’ participants that ‘Life is not Disney’ (see Section 8.4), as has been noted elsewhere in the literature (MacQuarrie et al., 2015; Nugent & Beames, 2015); a way that could reveal examples of human interactions with Kahn and Kellert’s (2002) ‘quotidian nature’ (see Section 1.1) and nature-kindergarten practices in terms of van Manen’s (2013) ‘everyday

quotidianess' (p.136); a way readily imbued with aspects of ephemerality and immediacy linked to context and situation (see Sections 2.2.2), for example, a shower of rain or a nettle sting. It seemed like there ought to be reasons to explain our different forms of relations with nature as contextualised by our customary ways within societal and historical worlds. The Danes' relationship with nature suggested cultural nuances, reciprocity and an abiding relationship that was apparent to an outsider only when there, seeing and sensing it first-hand. For example, the Danish educators that I met spoke fervidly of their need to help children to learn to live in symbiosis with nature. Interactions presented in my findings chapters, when interpreted from a theoretically informed perspective, are revealing in their depiction of human–nature relations and customary ways. Work cited as part of Chapter 2 (Section 2.3.2) looks at different ways of living with nature that include, for example, *friluftsliv* in Nordic nations. Having previously only heard or read about these ideals, what I was seeing first-hand helped in forming an understanding about how their ways of living and interacting with nature could include a relationship on nature's own terms. These Danes interacted and engaged with nature in ways that invited consideration of how and why such relationships may translate into practice in nature-kindergarten communities; ways that struck me as beyond any romanticised representation of nature—they very much took whatever it threw at them.

The situation introduced so far indicates my awakening to cultural nuances. My reading Hans Christian Andersen in Denmark may be mildly contrived, however, the second event that contributed to my awakening was unexpected. On 14 April 2010, a volcanic ash cloud from the Eyjafjallajökull eruption in Iceland caused aviation havoc and unexpectedly extended my fieldwork visit to Finland by 11 days. During this time, I was invited to stay at a pedagogue's home. By getting the

opportunity to live with a Finnish family, I saw behind the scenes, and this was for the greater good of the study as one consequence of this hospitality was a profoundly enriched understanding of Finnish culture. There were valuable moments in informal conversations and outings around town, staff nights out and saunas (see Section 7.4). The hospitality I was shown during that time not only evoked the reserved warmth of the Finns and their respect for nature but also displayed how they nurture trust and independence in their children. I took loan of a bike for my daily commute to and from the kindergarten and passed homes where there was little or no distinction between back gardens that divided urban streets and where they melded into forest. Many young children cycled these routes also, alone and with peers. There were rope swings amongst branches, tree houses and toy diggers in these spaces that suggested regular use for play. On the weekend, my host family took me to a nearby lake to fish. This family's young children had their own knives; we chopped wood as well as using the ready supply from the woodpile stocked by municipal workers for public use. We cooked sausages on an open fire pit and it was explained to me that these practices were in no way isolated to my host family.⁸ Both the visit to Denmark and the extended stay in Finland had an impact on the path that this thesis took, notably its perspective on a social and cultural understanding of nature-based practices. Interacting with these Danes and Finns, I faced the realisation that there were going to be obstacles caused by differences in our understanding of our actions; yet there was also common ground and mutual understanding. Contextualised notions of relations with nature have not been apparent in much of the relevant outdoor learning nor early childhood texts, and a literature that depicts one universal form of practice—overlooking how nature settings and their resources may be culturally and socially

⁸ Practices participated in and recorded during data collection confirm there was nothing unusual in these pastimes in the lives of Finn's like my host family.

inscribed—is misguided. There was clear merit in delving deeper into the pedagogical beliefs that drive, and the patterned behaviours that subtly guide, practices. Thinking in these ways also involved engaging with the notion that multi-layered dimensions as well as local factors may have an impact on the use of nature environments. If links between social worlds are pertinent (Broadhead, 2003; Pramling Samuelsson & Asplund-Carlsson, 2008), then influences from outwith one’s own familiar thresholds have to be considered.

Such stories are not data, yet they helped my understanding of how wider beliefs and dispositions can be mirrored in pursuit of a shared enterprise (Barab & Duffy, 2000) between home and institution, between genders, between generations; and to see how these social worlds can relate to each other and how this in turn may frame, and have value for, an understanding of practice within a nature-based community. Fler (2003) explores how adult members share responsibility within a community’s context, and practices are embedded in everyday ways and my thesis could explore this notion in relation to nature kindergartens. In writing and sharing these stories—in writing my thesis—a characterisation of the outdoor classroom is set out as a site of social and cultural construction that attempts to express what I understand by that, to articulate why I believe it and to show why I think the reader should believe it too.

1.2.3 Children’s gardens and educational fashions

The onset of the Industrial Revolution brought, amongst other things, an increasing number of young children into urban areas who ‘participated in forms of care and education provided by individuals other than their parents’ (Good, 2008,

p. 42). Propelled by dramatic societal change, broader notions of the developing child included considering their socialisation, and there are elements of how institutions formed as sites of social and cultural construction that are pertinent to my study. Changes were evident in the ethos and political perceptions of the role of early childhood provision (see Wilkekens, Scheiwe & Nawrotski, 2009). ECE institutions and their ‘extremely sophisticated mechanisms’ (Bourdieu & Passeron, 1997, *vii*) were developing as sites that contributed to enculturation. Moreover, these institutions became places where adults were given opportunities to pass on socially relevant information in a process heavily influenced by how those adults in that society tended to socialise and share information with their young.

Playing outdoors has not always been a component of the ‘good childhood’ (Kernan & Devine, 2009; Korsvold, 2009). In contemporary Western framings ‘natural childhood’ (Natural England, 2009) has become aesthetically pleasing. The time when a ‘pacified nature became visible’ (Elias, 2012, p. 461) was when ‘nature’ became the ‘countryside’ or the ‘great outdoors’ and began to contribute to ecological and environmental sensibilities (Sutton, 2000). While Jean-Jacques Rousseau (1712–88) insisted that children learn through direct interaction with the natural environment and had his ideas further articulated by Johann Pestalozzi (1746–1827), it is Friedrich Froebel (1782–1852), the German educationalist and student of Pestalozzi, who is recognised as the founder of early-childhood education (William, 1992). In 1840, Froebel renamed his Play and Activity Institute in Bad Blankenburg ‘kindergarten’ (Brehony, 2006; Dombkowski, 2001), and the name ‘kindergarten’ came to signify a garden both *for* and *of* children. Froebel's legacy, complemented by the ideas of Maria Montessori (1869–1952), Susan Isaacs (1885–1948) and Margaret McMillan (1860–1927), amongst others, has contributed significantly to contemporary early childhood

practice and pedagogy in many European countries. For example, in 1854 Søren Sørensen took inspiration from Froebel and established, when back home in Denmark, his own institution with its focus on ‘play and movement, particularly out in the fresh air’ (translated, Sigsgaard, 1978, p. 40). Almost a hundred years later in Germany, Ella Flatau’s *vandrebørnehaven* (wandering kindergartens)—akin to today’s *Waldkindergarten* and the generically titled ‘nature kindergartens’—were coined in Denmark (Bentsen, Andkjær & Ejbye-Ernst, 2009).

Pestalozzi emphasised manual dexterity (New, 1992) and during this same era of educational reform, the Swede, Otto Salomon (1849-1907)—a proponent of manual learning—coined *pedagogisk slöjd* to refer to educational, practical skills that require the hand as well as the head (Neville, 1892). Indeed, he felt such practices were a vital element in school curricula as he viewed ‘education, cultivation of the mind, [are] what is left when we have forgotten what we learned in school’ (Salomon, 1905, p.10). The guiding principle behind Salomon’s *Nääs-slöjd*⁹ was not the actual skill, design or quality of completed product—although production and evaluation of artifacts was emphasised (Virta, Metsärinne & Kallio, 2013)—but, rather, that the success of the outcome was measured in terms of the child’s holistic development through the process (Peltonen, 2009). By 1890, the concept had been anglicised to ‘sloyd’ and became an educational fashion in England (Brehony, 1998). Similarities noted between Froebelian kindergarten practices and sloyd are relevant here as both place value on manual, practical methods and the acquirement of skills or faculties for life. Finland gave recognition to sloyd in its national curriculum in 1866, where it remains compulsory through preschool to Grade Seven and optional until Grade Nine as a ‘tool to teach children the abilities to learn’ (Virta, 2013, p. 58). For British

⁹ See Thorbjörnsson (1994) accessed at <http://www.ibe.unesco.org/publications/ThinkersPdf/salomone.PDF> for a more detailed explanation.

education, however, the fashion for hand-and-eye methods waned (Brehony, 1997). It is interesting to look at the transfer of educational notions through examples such as sloyd. While the word transfer suggests completion of an activity with the main purpose met, the transfer of educational approaches is an early step of a larger process, and we are aware of the potential difficulties that can follow naive ‘borrowing’ (see Alexander 2000). The transfer of sloyd to the UK lasted a mere decade. What is evident in this is that it had little lasting impact and so contrasts with the original that remains embedded in its country of origin and across the Nordic region (Ólafsson & Thorsteinsson, 2001).

Notwithstanding this legacy, there are issues posed by and presented within today’s use of natural environments for early childhood education that are relevant to pioneering models and introducing these at the outset is prudent (Nugent, 2015b). Pioneering models of forms of education were a response to particular local conditions and as ideas moved to different contexts the models were adapted (Spodek, 2006; Tovey, 2012), and this ‘lost in translation’ perspective (Leather, 2013, 2016; Power, Cree & Knight, 2015) is useful to keep in mind—it guided me as I moved between settings in my position as an English-speaking, British researcher.

1.2.4 Seeing difference and seeing commonalities

My thesis aims to see difference and commonalities between examples of nature kindergartens by conceptualising selected examples of nature-based ECE as a ‘target collection’ or ‘quintain’¹⁰ (Stake, 2006, p. 6). In due course (Section 4.2), I describe the methodological approach of Stake’s (2006) multicase study and justify its use in my study design. I use this introductory section to outline the ways that the

¹⁰ See Section 4.2.

process of comparison differs to Stake's (2006) multicase study approach that I have used to understand the quintain of nature kindergartens. In essence, I wanted to 'look between', rather than compare examples, as the latter not only implied evaluation but also inadequately embraced diversity of provision.

On my early visits abroad and from experiences of home, I was seeing apparent links and overlap between practices that crossed borders, which led to me questioning the potential addition to knowledge of a comparative route of inquiry. I was, however, mindful of there being more than terminology and words (Section 1.2.1) that are only meaningful to members of the society in which they originate. Classification tools were developed (for example, Eurypedia, 2015; OECD, 2015) to address confusion around terminology, output and learning environments across different countries. Tools that allow transparency and comprehensibility are one step towards comparison going ahead purposefully, however, the impacts of context and newly emergent issues remain. These include 'nature' as context and the complexity of participant relations with it as well as contemporary debates around globalisation and different paradigmatic orientations. There is potential for looking between forms of nature-based ECE in a way that appreciates difference in our relationships with nature including sustainable traditions across different socio-cultural environments.

I was seeing evidence of transfer between nations and cultural transmission within and I was seeing evidence of difference and resonance that needed to be better understood. Education transfer is defined, for the purposes of this study, as the movement of ideas and practices across international borders (Beech, 2006), and, as a research tradition, one aim is to understand the transfer better (Waldow, 2009). The present study, however, does not propose to look at the process of transfer, *per se*, for risk of overgeneralising (see Brookes, 2002) nature-based ECE practices. Rather, it

will be open to noticing when and if elements of nature-based practice and their associated meanings are or are not shared, as, for many European systems, ‘education is ... the space for the construction of national identity’ (No’voa & Yariv-Mashal, 2003, p. 46). There is evidence of the UK looking to Nordic nations, in particular, to develop their nature-based provision. One example, Forest School,¹¹ is an interpretation of nature-based practice that originates in Denmark and, while Knight (2011) and others (Ridgers, Knowles & Sayers, 2012) helpfully clarify the characteristics and ethos of Forest Schools in the UK, examples are evolving somewhat differently from those in Denmark. Knight (2011) recognises how Forest School practitioners are continuing to adapt their practice to meet the needs of the communities they serve. Likewise, Beames et al. (2012) focus on guidelines for practice, yet are aware that ‘guidance’ is just that—an adaptable requisite to be modified according to cultural and developmental needs. Cultural transmission is the process of passing on socially learned information; for example, between generations. Evidence that early childhood institutions are ‘significant loci of cultural transmission’ (Gulløv, 2003, p. 26) strongly suggests that practices may not be shared across cultural boundaries, as ideals and ways are transmitted within the culture in which they emerge.

A comparative approach is the basis of much educational research (Alexander, Broadfoot & Phillips, 1999; Crossley, Broadfoot & Schweisfurth, 2006) and has been used successfully within outdoor education (Lynch, Moore & Minchington, 2012; Sandester, Little & Wyver, 2012). At the outset, there was a comparative intent to my thesis in its aim to locate nature-based practice within broader contexts, as in response to Benwell (2013), who calls for more sensitive understandings of children’s outdoor

¹¹ See Chapter 2, Section 2.2.1 for further discussion and Chapter 4, Section 4.2.1 for relevance of the concept to scoping.

experiences, and to reveal what Stake (2006) terms ‘situationality’ (p. 83). In education, comparison is often directed towards either uncovering and explaining contrasting perspectives or differences and similarities both between and within cultures or finding better ways to do so. Waite and Pleasants’ (2012) editorial comments on a special issue around cultural perspectives of outdoor learning see value in awareness and transparency of cultural influences as not just useful but essential, yet not comparison for comparison’s sake. Indeed, evidence of ‘differences’ or ‘similarities’ in themselves will not necessarily advance knowledge. These two words featured heavily in my early scoping for this study and were the basis to its research questions until I came to realise that evidence of the impact of context was key in pinpointing a valuable description, and thus reaching a better understanding of nature kindergartens through interrogating ‘surprising as well as the taken-for-granted ways’ (Rogoff, 2003, p. 9). While international comparisons are driving the development of nature-based practice, there has been a call for comparative perspectives that account more explicitly for the importance of culture (Waite & Pleasants, 2012). To this end, my thesis aims to answer that call regarding nature-kindergarten practices by looking at this form of nature-based ECE as a ‘target collection’ or ‘quintain’ (Stake, 2006, p. 6). Investigating different examples of a phenomenon in a way that sees each example in their ‘complexity and situational uniqueness’ (Stake, 2006, p. 6) centres on my view that social worlds are continually comprised through relationships and practices uniquely situated in multiple layers of ‘culture-specific’ contexts (Fleer, 2003, p. 77). My thesis is not presented as a means of evaluating practice, but rather as a route to investigate the use of nature at different settings as evidenced through the provision and relationships found in their midst.

1.2.5 Geographical focus and breadth of coverage

I choose to open here by addressing that the labels ‘Scandinavia’ and ‘Nordic’ are worthy of clarification. Scandinavia is generally used to refer to Norway, Sweden and Denmark. As a geographical region, Scandinavia is characterised by peoples, cultures and linguistic heritage that are Germanic in origin (Nuñez, 1987). While the term Scandinavia is sometimes taken to include Finland, Iceland and the Faroe Islands on account of their historical association, the terms ‘Nordic countries’ or ‘Nordic nations’ are more accurate when referring to this broader group. For the purposes of this thesis, unless directly applying labels chosen by other authors, the term Nordic will be used.

This thesis applies a northern European focus to nature-kindergarten practice and in doing so sets aside a broader landscape. While examples of nature-based practice are emerging in the USA and Canada (Power, Cree & Knight, 2015) and Australia (Buchan, 2015), as well as other countries outside Europe, these require an understanding of their own, nested according to factors pertinent within each location.

Data from the European Union are not available regarding the extent of participation in nature kindergartens and such institutions, however, they are certainly in the minority. The Danish Forest and Nature Agency, for example, quotes that ten per cent of that country’s preschools use forests or other nature settings, but are not specific on nature kindergartens. There is anecdotal evidence that the concept is spreading within other countries in mainland Europe—in the Czech Republic, for example, it is estimated that between 1,000 and 2,000 nature kindergartens have been established since 2008.¹² At the inception and study design stages of my research, there were only three nature kindergartens in Scotland, one of which later closed in

¹² Juliet Robertson of Creative Star Learning in Scotland has recently returned from a visit to the Czech Republic to see the practice in that country (personal communication 4.11.2015).

2013. Since then, further and related examples have been established in this country,¹³ yet to accept such provision as a ‘movement’ (see Adam Ingram above) reads as an overstatement, suggesting greater availability of such provision than is accurate.

The rise in nature-based ECE, and specifically nature kindergartens, is most clearly seen in Germany with estimates suggesting 350 at the turn of this century (Häfner, 2002) and 650 a decade later (Schäffer & Kistemann, 2012). To date, and perhaps unsurprisingly given their popularity in these nations, all empirical research on nature kindergartens originates from outside the UK and valuable attempts have been made by German, Norwegian, Swedish and Danish authors (Bolay & Reichle, 2007; Godau, 2009; Halldén, 2009, 2011; Lyskett, Emilsen & Hagen, 2003; Nilson, 2008, 2009; Schäffer & Kistemann, 2012) to identify common features and practices. These studies, however, are limited in their scope as they are focused on one country at a time (Ånggård, 2009) or are conducted by researchers of the same culture (Lysklett, 2005) or are based on self-reported data (Moser & Martinsen, 2010). In a study of Norwegian kindergartens, for example, Moser and Martinsen (2010) note variations in outdoor provision that impact on experiences, and this descriptive text makes only tacit suggestions as to why such difference occurs and in what ways. With reference to the Nordic region, for example, a growing literature may garner more attention but needs to be set against a prejudice that *all* Nords are *always* outdoors as recent texts suggest this view may be out-dated (Skår & Krogh, 2009). This acknowledgement adds timely support to inquiring into ‘who’s outdoors, doing what, when and how?’ By looking more closely, it might appear misguided to overlook variations amongst a group invariably grouped together. Danes, for example, Ejbye-Ernst and Stokholm (2014) and Ejbye-Ernst and Bentsen (2015), refer to the work of

¹³ Dunblane Nature Kindergarten in Perthshire is one privately owned example and Stramash Outdoor Nurseries in Elgin, Fort William and Oban are part of a Social Enterprise Company where practice appears heavily influenced by the nature-kindergarten ethos.

Änggård (2009) and Nilsen (2009) in Sweden and Norway respectively, to argue for variations in the relationships with nature and how they manifest between countries within a geographical region. I explore this issue further in Section 2.3.2 and begin to contest understanding of a ‘Nordic norm’.

While more examples of nature kindergartens appear, as detailed here, it is prudent to acknowledge that this form of early childhood education stands on the periphery, and one may be misguided in suggesting that nature kindergartens may develop otherwise. Such provision, however, is distinctive, and raises our curiosity to inquire further.

1.2.6 A distinct form of ECE

With nature kindergartens came the opportunity to understand the specialist, the phenomenal and the distinct and to look closely at examples of practice to identify determinants of variation in practices. Nature kindergartens offer an empirical insight into nature-based provision for early-childhood education. As such, my thesis will focus on specific characteristics ‘that are uniquely the province of learning in the natural environment’ (Ballantyne & Packer, 2009, p. 250). My Master’s study explored the possibilities of these settings—settings that embrace what Waite (2011a) calls the ‘values associated with outdoor learning’ (p. 69)—to unravel the complexities of nature-based ECE pedagogies and practices. Waite and Rea (2006) have previously suggested that specific aspects of contexts or ‘attributed contributions of nature’ (p. 4) can assist in ‘telling a story about a cultural position’¹⁴ and these views lent credence to my interest in why these settings are deserving of a considered approach.

¹⁴ Taken from personal communication with Sue Waite (12.12.2013).

The nature environments under scrutiny contrast with managed gardens and maintained playgrounds (Ernst & Tournabene, 2012; Luchs & Fikus, 2013) as they feature less prescribed forms of interaction evident in these types of nature environments. But also, I wish to set aside a discussion of pure nature or wilderness (Griffiths, 2008) as the nature kindergarten settings have been directly, or indirectly, altered by humans in some way or another (Council for Learning Outside the Classroom, 2008).

In the acknowledgements of her book, Haraway (2008) writes of how we learn by grappling with the ordinary as ‘creature[s] of the mud, not the sky’ (p. 3). I may well have fond childhood memories of the ‘great outdoors’, yet, to understand nature-based ECE in context, I knew very early on (Nugent, 2008) that I would have to get muddy, crawl inside the dens and eat berries in order to help me to grapple with Kahn and Kellert’s ‘quotidian nature’ (Section 1.1). By sharing participants’ experiences, I may better ‘communicate the sensory emplaced knowing of the research encounter’ (Pink, 2009, p. 134). At the outset, seeing these settings as distinct was sufficient to reassure me that I required a distinct methodology and study design with which to approach the inquiry (see Chapter 4). I needed to see these settings in action and ask the opinions of those who play and work in these environments every day in order to be armed with evidence to balance and reflexively juggle my own biography and opinions with those of others. I needed to be open to new experiences.

Nan Shepherd says ‘the freezing of moving water is another mystery’ (Shepherd, 2008, p. 29). On the Helsinki seashore (see Section 4.1.2) I watched for the first time what Shepherd calls a fluctuating battle and the immobility of frost. I knew a lapping tide—its movement, its sounds. This shore, however, was unfamiliar, and reflecting on this led to the realisation that whenever and wherever outdoors, my

own dispositions and history came with me as too, and vital were my physical and psychological embodiments. As mentioned in this chapter and reflected upon in the concluding discussion, I was *there with* the participants, getting a sense of what nature kindergarten involves—sharing and participating in order to write this account.

1.3 Participating in order to write¹⁵

Academic writing has a typical form—a form that I struggled with for a good portion of my thesis journey. I have had the help of better writers and poets and have frequently turned to their beautiful, polished excerpts as a way to portray representational richness and reflexivity in this research and express feelings in a way that I struggle to do. Pelias (2004) believes that ‘an emotionally vulnerable, linguistically evocative, and sensuously poetic voice can place us closer to the subjects we wish to study’ (p. 1). I am no Sigurd Olsen or Nan Shepherd, whose value-laden writings give an awareness of nature environments that help to place their words in context and go beyond a description of the landscape to describe the effect on humans of being outdoors. The prose of others has helped me to appreciate is that ‘there is more than making a case, more than establishing criteria and authority, more than what is typically offered up—that ‘more’ has to do with the heart, the body, the spirit’ (Pelias, 2004, p. 2).

There also was help from children’s words—vivid, figurative language—that seemed to come effortlessly to them. Take, for example, the word ‘dappled’ to describe sunlight on the forest floor. While it does so perfectly adequately, the phrase ‘it looks like broken glass or a sort of street map’ evokes light through the trees in a way that encourages me, the adult researcher, to take another look and reconsider both

¹⁵ This heading is taken directly from Emerson, Fretz and Shaw (1995). Their section, within a chapter on taking fieldnotes, inspired thoughts of my issue with writing about a sensory and seasonal lens. Such matters are talked about in this section.

what is worth writing about, as well as how to express it. Ponder how, in another example (see Section 8.5.1), ‘Robin tomato-soup-down-his Breast’, works better than ‘Robin Red Breast’ when researcher and children are seated together at lunchtime in a place where the robin routinely comes to lunch—my immediate reaction was laughter. The Scottish practitioner added to my understanding by telling of a day earlier that year when the group had made tomato soup; some spilled down a boy’s sweatshirt and the bird’s new name originated in the children’s imaginative exchange that followed. Sibelius, the Finnish composer, was particular about sounds and nature and remarked that his Symphony No 3 ought to be played not just like a bird, but specifically a garden warbler. Dovetailing my words with the words of others will enrich my document as it gets specific about the use of natural environments by nature kindergartens. Philosophical foundations inform, but also are informed by, accounts of sounds, tastes and feelings to introduce layers into my description with the aim of capturing nature kindergarten in its wholeness (see Fetterman, 2010)—for my thesis, this hope is key.

Furthermore, I use children’s own words, metaphor, poem extracts and colloquial phrases in my doctoral writing to help conceptualise my writing. My written account draws on knowledge beyond academic texts to invest my thesis with individual and cultural significance (Kelly, 2011). By using participants’ own allegories, metaphor, poem extracts and colloquial phrases my account could attend closely to how they felt in that setting at that time and in their way, and the ethnographic description could note distinctions between the adult and child viewpoints. As a researcher, it was important for me to learn how these personal, sometimes alternative, descriptions were an invaluable resource through which to find meaning and ‘how members of settings invoke those meanings in specific relations

and interactions’ (Emerson et al., 1995, p. 28). Ethnographic writing is ‘a construction of the self as well as of the other’ (Stacey, 1991, p. 115) and, within my own researcher self, beliefs played a key role in creating this knowledge. My early visits to Denmark introduced me to other forms of nature-based provision that helped me to objectify my own behaviours and values (Alexander, Broadfoot & Phillips, 1999), and this brought into focus the possibility of a relationship between my own, situated beliefs and my behaviours as a researcher (Wilcox-Herzog, 2002).

1.4 Situating the researcher: an insider outdoors, an outsider outdoors

I have completed two progress reviews on my thesis journey.¹⁶ At the first, it was noted how this study came alive through its data—snapshots of other worlds. My thesis, however, would never have ‘stood up in court’ on data alone. Analyses, too, would need to be built in an iterative-inductive way in order that these glimpses of the everyday, these fragments of the whole, were recognised as just a few ingredients for the recipe—fallible, but essential. By the second review, the recommendation was that my work become more reflexive. For me, reflexivity had come to mean thinking carefully about *me* doing the research, gathering evidence and under what circumstances, but also realising that reflexivity involves thinking self-critically about how the account is written and its impact on the reader. The Edinburgh panel strongly advised I include ‘some serious reflexivity about [my] positioning as both insider and outsider, and as of a particular nationality and culture’. Adjustments made since (to my tone and writing style) were an attempt to do so, in response to feedback. To use reflexivity effectively, however, required sensitivity to appreciating that my point of

¹⁶ The First Year Review was completed at the University of Stirling (13.12.2010) with Dr. Greg Mannion, Dr. Christine Stephen and Professor Gert Biesta. The second was a Progress Review (29.10.2013), University of Edinburgh, when, alongside my supervisors Prof. Pete Higgins and Dr. Simon Beames were panel members Prof. Morwenna Griffiths, Dr. Andy Hancock and Dr. Jo Ailwood.

view is inherently narrow in that it depends on my experiences and my understanding of them. Experience is part of the process and what we gain in the immediate from an experience can be added to, broadened and embellished in many ways; including having our eyes opened through interaction and understanding gained from other contexts. In my thesis, narratives of experience were achieved by looking between multiple contexts and situations, sourcing insight and knowledge from the situated perspectives of others and recognising interpretation of my data as a reflexive, meaning-making exercise. Indeed, my interest in reflexivity has developed during my thesis in response to my increasing awareness of how limited my reflexive processes were at the outset.

One key lesson on my reflexive journey was to try and stay honest about who has what influence over my research. My reflexive account includes some consideration of wider structures of power, control and context in unison with autobiographical reflection, yet being confident of my own position in that context will help readers understand my perspective better and do more than just describe what I saw, heard, smelt, tasted and touched.

1.5 Thesis structure

My doctoral process, like so many others, is a journey from a broad idea to a particular focus that has offered me intellectual as well as emotional challenges. A structured approach to presenting this thesis provided me with a platform for meeting my PhD-related challenges and I set out that structure next.

My thesis comprises ten chapters with three additional appendices. Following my introductory chapter, Chapter 2 continues to establish my inquiry through a critical review of relevant literature from the field. My intention is not an exhaustive

critique of the early-childhood education nor outdoor learning fields—both already have an admirable corpus of empirical work. While I acknowledge a bias towards particular subjects that most engage my research interests, including risk-taking, first-hand and sensory experiences, Chapter 2 will tease out issues germane to the topic of when early-childhood education heads outdoors in order to bring to the attention of the reader existing limitations that require further investigation. In particular, I explore when and how the use of natural environments for ECE are imbued with socio-cultural meanings that can permit or limit practice.

Chapters 3, 4 and 5 set out the justification for my conceptual framework, chosen research methodology, methods and ethical considerations. As a preface to the methods chapter, Chapter 3 includes a discussion of how my conceptual framework, comprising my philosophical paradigm and theoretical framework, informed my decisions regarding methods. Space is given to recognising the limitations of the chosen methodology as well as the potential of alternative approaches. My methodology in Chapter 4 pays heed to the themes identified through the literature in unison with the research aims as well as my position as a researcher. Specific attention is paid to having my research interests guide the methodological approach, and not the other way around (van Manen, 1988). Chapter 5 is my methods chapter.

My four findings chapters—Chapter 6 ‘Air’; Chapter 7 ‘Water’; Chapter 8 ‘Food’; and Chapter 9 ‘Shelter’—come together to represent a picture of nature-kindergarten participants as they routinely carry out everyday practices. In my four findings chapters, I present the results of my data analysis. My findings chapters, more than any other part of this thesis, kept me, the researcher, in touch with me, the outdoor enthusiast. Conclusions across my study comprise Chapter 10 and possible directions for further research are also offered.

1.6 Chapter summary

Summarising the position of my thesis involves two steps. First, following Nightingale (1984), my thesis or ‘one big idea’ (p. 174) was to address my perceived gap in understanding by finding out what participants actually do at nature kindergartens across different countries in order to answer my two research questions. Mannion, Mattu and Wilson (2015) note how Beames et al. (2012) discern the emphasis on questions about outdoor classroom practices to have deviated from, ‘Does it work?’ to ‘How do we do it?’ (p. 6). There is evidence for the former question in early-childhood outdoor-learning literatures (see Chapter 2). The latter, however, has yet to be empirically satisfied for nature kindergartens. In order to gain understanding about nature kindergartens we have to first know what the practice looks like, as this is the precursor ahead of these two questions. My ‘one big idea’, therefore, was explicitly addressed by the study that follows by spending time in nature kindergartens in different countries and sharing with participants their everyday routines. In addition, my inquiry into what participants do at nature kindergartens will interrogate influences that may shape what is seen, including social, cultural and customary ways that appear to mediate how nature environments are used for early-childhood education.

Second, in summarising the position of my thesis, Chapter 1 has set the scene for my research with an introduction to the outdoor classroom that places nature kindergartens in context. Nature-kindergarten environments are differently prescribed and arguably less predictable than the majority of other preschool provisions, which makes them, in my opinion, distinct. Such flux establishes a particular learning environment and certain human–nature relationships within them, and any attempt to describe this provision is, therefore, undeniably multifarious and inevitably

contentious. Being open to recognising diversity across examples of nature kindergartens will allow my study to interrogate the complex interplay between adults, children and their relations with nature. My thesis, my ‘one big idea’, not only offers answers to what nature-kindergarten practice looks like, but also informs us as to what may influence practice to look that way.

Chapter 2

Nature Kindergartens: Seeking Characteristics, Seeking Influences, Seeking Outcomes

2.1 Introduction

My aim with Chapter 2 is to position my study in the existing literature. Silverman (2000) advises that qualitative literature reviews be critical and focused. Heeding Silverman's (2000) advice, however, when applied to my study of nature kindergartens, presented difficulties in that existing literature specifically on nature kindergartens is lacking. My aim, therefore, requires openness to the literature to build on the broad foundations of Chapter 1 and to pinpoint key topics to frame a more specific understanding of nature kindergartens. I draw, therefore, from two directions—early-childhood education (ECE) and outdoor learning (OL)—to connect my topic with wider, relevant debate. Literature from ECE and OL is further ordered by three threads that permit a critical focus on nature-kindergartens practices. First, seeking characteristics—attributes that distinguish nature-based ECE from other forms of ECE and OL, for example, risky styles of play. Second, seeking influences—selected capacities, relevant to the study of nature kindergartens, that typically have an effect on the behaviour of something or someone, for example, a practitioner's attitude towards say, risky styles of play. And third, seeking outcomes—aims, relevant to nature-based ECE, be they known or uncertain, for personal or societal gain, for example, values for childhood, later life and sustainable ways of living.

I carefully chose titles for sections of Chapter Two—‘Seeking characteristics’ (Section 2.2), ‘Seeking influences’ (Section 2.3) and ‘Seeking outcomes’ (Section 2.4)—as ‘seeking’ not only implies pursuit but serves to remind me to be open to other forms of practice that may help understand my research focus. For my inquiry into describing the foundations, features and boundaries of nature-kindergarten practices, such a pursuit helps respond to the question introduced in Chapter 1 (Section 1.2) ‘What is a nature kindergarten?’ by encouraging me to consider the multiplicity of approaches to ECE and OL: the variety of form, the labels (literal, figurative and lost in translation) that come to mind when we refer to nature-based ECE. In Chapter 2, as in Chapter 1 (Section 1.2.1), I interchangeably use terminology and labels for different forms of provision that share characteristics and ask the reader to accept such interchange and its ambiguous nature, rather than finding it fickle. At this stage in my thesis, a fixed definition would merely provide a screenshot or, in the view of Russell and Ryall (2015), a captured picture one cannot move beyond that comes to be seen as an immutable truth. Applying such interchange to my field of interest allows me to consider different forms of nature-based ECE and explore facets that are comparable to all, without assuming commonalities because of label alone. At this stage of my thesis seeking a definition for ‘nature kindergarten’ or label masks deeper layers of understanding. I opt to seek and hint, rather than state and define, in that the latter aim may be overly narrow.

Two fields of literature—early childhood education (ECE) and outdoor learning (OL)—are interrogated in pursuit of seeking characteristic features, typical influences and outcomes that may be considered to shape nature-kindergarten practices. In keeping comparable facets to mind, each section of Chapter 2 grows a matrix within which to decipher relevant similarities and differences when speaking

of nature kindergartens. The matrix comprises topics that are at points separate and that at other points broadly coalesce, by virtue of the complexity of the influences upon nature-kindergarten practices. As such, it was inevitable that several topics from the literature reoccur in sections. For example, risk-taking appears in Section 2.2.4 and 2.3.2. For clarity, at the end of each section, I summarise that section and highlight areas ripe for research. A full chapter summary (Section 2.5) collates gaps in the literature to elicit my research aim, ahead of my conceptual framework and methodology chapters.

Three sections now follow: Seeking characteristics; seeking influences; and seeking outcomes.

2.2 Seeking characteristics: features that distinguish nature-based ECE

My first section explores literature on ECE conducted when ECE practice uses outdoor nature environments and also draws on OL research relevant to young children. Taken together, the characteristic features explored below are considered distinct for the research context. However, in the absence of literature specific to nature kindergartens, my first section draws from wider literature of relevance to the present study; for example, the growing literature that includes Forest School (Section 2.2.2). In seeking characteristics, I begin by outlining the literature that suggests distinctiveness in environments used for nature-based ECE relative to mainstream ECE provision, in order to provide a context within which to explore nature-kindergartens' practices.

First, I consider it vital to explain the meaning behind the word 'nature', as relevant to my thesis. The rest of the section focuses on two facets of the physical settings in which nature kindergartens are situated in order to build a picture of these

settings: first, a description of aspects of the outdoor, natural settings for practice through the immediacy, unpredictability and ephemerality such settings afford (Section 2.2.2), including characteristic practices and behaviours (for example, foraging and risk-taking); and second, the specific contribution of trees, forests and woodlands (Section 2.2.3). These two facets were selected for their relevance to a study of nature kindergartens and because, while evident in the literature, I note opportunities for further investigation (Section 2.2.5).

2.2.1 Nature and culture: statements of meaning

‘Nature’ and ‘culture’ are two words for two concepts that call for a statement to clarify what they mean for my thesis—the word ‘nature’ is in my thesis title. Descola (2005) finds the word ‘nature’ problematic due to its strong association with the culture–nature dichotomy that sees nature as something external to humans. While such debate is far from new and beyond the scope of my thesis, what is achievable in this short section is an explanation of the topic relevant to my study. Once a succinct explanation of ‘nature’ is in place, then it becomes feasible to attribute meaning to ‘nature kindergartens’ and start to determine the efficacy of labelling this form of ECE.

‘Culture’ has attracted widespread attention in numerous disciplines and ‘is notoriously difficult to define’ (Spencer-Oatey, 2000, p. 3). I can relate to culture as

a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioural conventions that are shared by a group of people, and that influence (but do not determine) each member’s behaviour

and his/her interpretations of the ‘meaning’ of other people’s behaviour.

(Spencer-Oatey, 2000, p. 3)

In itself, for my thesis, this definition could be satisfactory and omit further consideration of the issue as it goes further than some traditional perspectives that see culture as a unified set of patterns (Clarke, Hall, Jefferson & Roberts, 1975). ‘Culture’ should always be understood, according to Spencer-Oatey (2000) as social groups interpreting the meaning of behaviours. Attempts, however, to see ‘culture’ solely as overriding patterns of meaning constructed without the integral role of social and historical influences may misrepresent it (Swidler, 1995). Everyday ways need to be explored through the ‘meaning’ that participants ascribe to behaviours, yet some emic picture ought not to be seen as a universal description of nature-kindergarten ‘culture’, for such a view may stifle the potential for understanding nature-kindergarten practices.

My emphasis on the components inherent to nature-kindergarten practices also requires consideration to be given to the premise that ‘culture is bound to dominate nature’ (Ingold, 2000, p. 135). If he is right, then I am prudent in further unpicking my understanding of culture. I strive to do so by looking to theorise how humans reproduce nature-based practices through a relationship that sees

culture not as a set of rules, but as deeply internalised habits, styles and skills
... that allow human beings to continually produce innovative actions that are
nonetheless meaningful to others around them. (Swidler, 1995, p. 29)

Swidler’s (1995) project expresses well my social constructionist position (see Chapter 3), but also, in his use of ‘deeply internalised habits’, I can reflect on my own

cultural position and my role as a researcher. I have no epistemological claim to justify my insider view of Scotland as truth, even while doubting my outsider view of nature-based practice in other cultures. For this reason, emic descriptions must always be placed within the historically constituted knowledge or ‘biographical blueprint’ (Section 4.1.1) brought by me, the researcher. I argue for the social and historical construction of nature and culture, as this view more accurately represents relationships *with* nature. My need to understand ‘nature’ relates to understanding different cultural groups’ relationships with nature when nature is used as a pedagogical environment, and also to understand my own relationship *with* nature when objectifying my research practice.

Taylor and Giugni (2012) see childhood as situated and differentiated rather than decontextualized and universal. My thesis, therefore, inquiring into nature-based ECE will be open to recognising that ‘nature’ and ‘culture’ are not a universal entity. Different groups confer meaning on different nature environments that reflect their cultural agendas (Greider & Garkovich, 1991) and such a stance—in line with my social constructionist epistemology—will help me to better explore children’s relationships with nature (Liefländer, Fröhlich, Bogner & Schultz, 2013) and the contradictions that arise when comparisons are made. For example, following Greider and Garkovich (1991), a tree may be the same physical thing regardless of the country it grows in, but a tree will carry different meanings emanating from the values that define those who use the tree and filter through culturally, socially, historically and locally situated beliefs. Taylor (2013), in her ‘common worlds view of childhood’ (p. 73), forwards a retheorising of childhoods that comprise enmeshed and entangled relations and possibilities. Her posthuman perspective (Taylor, 2011) deconstructs the natural childhood ideal and queers the dichotomy of nature and childhood. For my

thesis, this view allows seeing enactments of human-nature relations as afforded by participants in each of their ‘common worlds’.

My use of the verb ‘to use’ is not to think of nature as something for humans to control or that nature is an instrument for human interests in some negative portrayal of social constructionism. Rather, I use ‘use’ to cover the ways that govern how experiences are enacted in nature-based ECE. I stress humans have a responsibility, through their unique communicative moral awareness, for all that falls in the social domain, including a responsibility for nature. Ingold (2000) states ‘that nature is a cultural construction is an easy claim to make’ (p. 40) and advocates ‘environment’ rather than ‘nature’ in order to see humans as agents in environments with which they are involved both physically and sensorially. Equally, authors in the field of environmental philosophy support ‘environment’ over ‘nature’ to shift our focus away from saving nature to practices that will help build it (McKibben, 2006; Vogel, 2015). Vogel (2015) states that

to see the environment as *not* other than us but rather as something we shape and construct through our practices is precisely to see that our relations to nature are normative through and through. To view the environment as socially constructed is to see it as something for which we are *literally* responsible; it is in this recognition of our inextricable connection to and responsibility for the world we inhabit ... that the source of a morally justifiable ‘environmental ethic’ is to be found. (p. 86)

One point I take from environmental thinkers such as McKibben and Vogel is their attention to human relations with and dependency upon our surroundings. The

survival of our globe depends upon how we relate to nature (McKibben, 2006) and how we view activity that is not geared towards genuine human needs. Humans cannot help but ‘use’ nature as we are embedded in what is all around us and ‘wildness’ or ‘wilderness’ is a human creation (Cronon, 1995, 1996). There are, however, possibilities in our ways of living, including the ways we educate our children that will help us reflect on ‘culture’ and ‘nature’ and our sustainable relationship to them. Throughout my thesis, I use the terms ‘culture’ and ‘nature’ sparingly as it is my belief that ‘socio-cultural environment’ and ‘natural environment’ more accurately label the contexts under study.

‘Nature’, or more broadly the ‘environment’, for my thesis is a constant; for example, each setting has trees, rain, gradient, yet one difficulty in investigating ‘nature’ is the manifold traditions and values that are brought to bear on the subject. My interest lies in exploring the use of natural, physical environments for ECE as contextualised by human interaction and adaptive rules to see how these social constructions happen. To conclude, while ‘nature’ kindergarten is in my thesis title and the influence of ‘culture’ an unquestionable focus, I place importance on seeing ‘nature’ in a way that foregrounds subjectivities, while I see ‘culture’ as a social and historical construct with myriad rituals, traditions and values that it engenders, continually built on the needs of different people in different societies. Taking these perspectives, rather than seeing ‘nature’ and ‘culture’ as labelled, universal entities, my aim is to explore nature-kindergarten practice as locally constituted and transmitted through members of a locale.

2.2.2 Utility of unpredictable settings and immediacy

In 1969, Laurie Lee wrote *As I Walked Out One Midsummer Morning* to tell of his 100-mile walk to London from his rural childhood home. He describes a time before many lost touch with ‘living with the contours’ (Lee, 1969, p. 224) to recount how he in a ‘motor car, of course, could have crossed it in a couple of hours’, whereas, on foot the journey, took ‘the best part of a week, treading it slowly, smelling its different soils’ (Lee, 1969, p. 225). I re-read Lee after being reminded of his walk by Brookes (2002), who similarly expresses how walking

retains the qualities of contingency and immediacy that attend observant walking. A walker’s thoughts and mental associations are not neatly assembled like the topics of a syllabus, different plants are not encountered in textbook order ... but are guided by interests and intentions. (p. 74)

Both men, Laurie the autobiographical writer and Brookes the researcher, are on the same thread—nature comes to us better when first-hand and absorbed gradually by walking a landscape or from immediate sensory cues. I use their quotes not only for what they offer to my discussion of distinctiveness of nature-based practice, but also for the possibility immediacy has for one’s relationship with nature. Nature-based ECE is characterised by experiencing nature first-hand, collective with the uncertainty and ephemerality of the physical environments where such provision is sited.

Immediacy, uncertainty and ephemerality

Wilson’s (1986) definition of ‘biophilia’ is as a psychological and

physiological need that humans interact with nature, and his narrative—in unison with Louv’s (2005) notion of ‘nature-deficit disorder’¹⁷—is relevant to a discourse of a nature-based ethic that the developing child and nature are good together. Natural environments have long been referred to as having a beneficial impact on humans; including the sublime and simple aspects of nature (Stephen, 2004). There is widespread, empirical acceptance of the benefits of nature to the developing child and seminal texts establish a picture of child–nature connections as being beneficial to children’s physical and psychological development (Grahn, Mårtensson, Lindblad, Nilsson & Ekman, 1997; Gullestad, 1997) by virtue of its restorative qualities (Kaplan, 1995, 2001). More recent ECE literature further confirms experience of nature as important to children’s physical activity (Ergler, Kearns & Witten, 2013), and as important to mental health and well-being (Bohling-Philippi, 2006; Kellert, 2002) as food and sleep (Elliott, 2010). For nature-based ECE, ‘immediate and direct’ (Beames, Higgins & Nicol, 2012, p. 61) experiences afford participants the opportunity to interact with nature’s resources in dynamic ways such as climbing trees, digging holes, tasting berries straight from a bush (Nugent, MacQuarrie & Buchan, 2015) or catching fish (Nugent & Beames, 2015). Formative early childhood experiences have also been noted to foster caring attitudes for the environment (Chawla & Cushing, 2007; Cutter-Mackenzie & Edwards, 2013) and such attitudes are enhanced by social contexts that support pro-environmental behaviours (Clayton & Opatow, 2003; Crim, Desjean-Perotta & Moseley, 2008). While I explore this literature further in Section 2.4.3, I make mention here of enhancement of environmental awareness by a first-hand scenario, in contrast to that born of more

¹⁷ Louv (2005) coined the phrase ‘nature-deficit disorder’ to refer to human alienation from nature as measured by diminishing sensory experiences, attention issues as well as emotional and physical illnesses. Rather than being recognized as a medical diagnosis, the phrase has emerged as a way to think about human-nature disconnection.

abstract means (Morgan et al., 2009); for example, knowledge gleaned from the media of global warming or the conservation of tropical rainforests (Ghafouri, 2014). I return to the literature regarding the benefits of child–nature relations in various sections; for example, sensory advantages (Section 2.2.3), benefits to the developing child of risk-taking (Section 2.2.4) and of experiencing challenge (Section 2.4.2).

With immediacy of contact with nature environments come increased possibilities for chance events (Lester & Maudsley, 2007). Landscapes, seasonal change and weather combine to characterise these environments, above all, by their contingencies, their unpredictability and tendency to change. Likewise play, by its nature, is uncertain as unforeseen outcomes and unrestricted improvisation combine to constitute an essential element in a human’s development (Caillois, 2001). Where the natural environment and a playing child meet—for example, in nature-based ECE provision—one may consider what this may look like and why a child–nature connection is routinely considered beneficial and desirable.

Nature kindergartens are located in these relatively unpredictable classrooms where foraging, fishing and hunting—the activities ‘on the edge’ (Davies, 2011)—form a part of the narrative. Foraging is a quest for wild plants and other edible resources that is characterised by searching, gathering, occasionally cooking and, usually, consuming that which is found. Research into foraging has gained a footing in anthropology (Holtzman, 2006) but is seldom represented in ECE and OL literatures, as children familiar with foraging tend to live in subsistence societies where such skills are a necessary part of their existence (Hawkes, O’Connell & Blurton Jones, 1995). When foraging is considered in societies more generally, it covers a spectrum between survival guides to gourmet recipes. Only in the Finnish literature have I found a small handful of Finnish authors who explore berry picking

(Pouta, Sievänen & Neuvonen, 2007; Vaara, Saastamoinen & Turtianen, 2013), but evidence specific to ECE is lacking.

Fishing also rarely features in education literature, which is surprising given the role of fishing in many cultures and its reported benefit to environmental awareness amongst participants (Cottrell & Raadik-Cottrell, 2010). That said, a recent study noting the value of a context-rich analysis reflecting the uniqueness of youth participation in angling in England (Djohari, Brown & Stolk, 2016) is interesting for its framing of the pastime in a ‘Community of Practice’ (Lave & Wenger, 1991). I return to this notion later to consider fishing (Section 7.2), foraging (Section 8.2) and hunting practices (Section 8.3) as a ‘cultural apprenticeship’ (Lave & Wenger, 1991, p. 41).

It is safe to say that the role of hunting in ECE has never been empirically investigated. Macht (2010) embraces the educational value of hunting from an environmental standpoint and sets out the debate around practices in which it offers a route to strong human–nature relations through an intense connection with nature. While non-age specific, Macht (2010) supports claims that hunters respect nature and their position in it, enjoy sportsmanship and learning from elders that nurtures a sense of community. The assumption, however, that hunting leads to environmental stewardship, on such a personal level, has been met with critique (Holsman, 2000). In relation to my study, however, a broader perspective must be undertaken; a perspective that neither deliberately includes or excludes practices such as foraging, fishing and hunting. Instead, an open and responsive approach will allow activities as they occur within nature-kindergarten practice to be documented. In Western ECE and OL contexts, where there is no imperative to forage, fish or hunt, there is a

notable dearth of empirical inquiry that considers these behaviours.

While sources do comment on the sensorial aspects of early childhood pedagogy (Johansson & Løkken, 2014), discussions of eating, taste and olfactory cues in the ECE literature are rare (Kontopodis, 2013) or reported as a curiosity of society, such as the drinking of tree sap in northern and eastern Europea (Svanberg et al., 2012). Instead, in existing ECE and OL literature, the focus is on specific genres of food-related activities such as picnicking or campfire experiences, where processed foods are routinely consumed (Ridgers, Knowles & Sayers, 2012). Recently, in the UK, newspaper headlines¹⁸ expressed fierce disapproval of video footage of keepers from Odense Zoo dissecting a dead lion in front of Danish school children, yet the Danes saw nothing untoward in doing so and, for me, such contrast in attitudes warrants further investigation. There are authors who advocate an honest style of educating children in ‘the good, the bad and the ugly’ so as not to ‘sugar-coat’ information (Alexander & Sandahl, 2014), and this kind of authentic education creates, in their opinion, future understanding and well-being (Alexander, 2000) as children participate in the goal of a sustainable society (Sandahl, 2008) by learning about what is edible (Heerwagen & Orians, 2002) and about sources of and needs for food for humans and non-humans alike. The role of the adult in facilitating such practices will be discussed in due course (Section 2.3.3).

2.2.3 Forests and woodlands

Continuing my discussion of characteristic features of physical environments

¹⁸ See <http://www.telegraph.co.uk/news/worldnews/europe/denmark/11934130/Danish-zoo-dissects-lion-in-front-of-children.html>.

used by nature-based ECE, a focus on forests and woodland¹⁹ (Forestry Commission 2011) is apt, as such provision primarily use these spaces. This section is divided into two sub-sections as follows: first, sensorial simplicity and well-being and, second, rich, unbidden resources. One further feature relevant to my discussion of forests and woodlands, the literature around myths and childhood enchantment, comprises part of Section 2.4.4.

Sensorial simplicity and well-being

From birth through early childhood, our capacity to absorb information and learn from it exceeds all other developmental stages in life (Shonkoff & Phillips, 2000). The inclusion of sensory stimuli within early childhood education is regarded as good practice (Lynch & Simpson, 2004; Prestia, 2004) and is noted by the learners themselves (O'Neill, Astington & Flavell, 1992) as perception of sensory cues has a heightened value given the emergent language capabilities of children during this developmental stage.

This idea, given prominence by Edith Cobb almost forty years ago, highlights that 'nature for the child is sheer sensory experience' (Cobb, 1977, p. 29) and suggests that sensorial qualities offer immediate exploration for this age group. The special, multi-sensory qualities of forest and woodland have been noted (Henwood & Pidgeon, 2001; MacNaghton & Urry, 2000; Ward Thompson et al., 2004), and when ECE uses wooded, natural environments it is the overlap of young child and this natural resource that is interesting. What such analyses point to is that forest and

¹⁹ Throughout my thesis, reference to 'woodland' and 'forest' is based on the UK Forestry Commission definition of what comprises forest and woodland; namely, 'woodland' is land under a stand of trees with a canopy cover of a least 20 per cent (or having the potential to achieve this) including integral open space, and open areas awaiting restocking. See <http://www.forestry.gov.uk/website/foreststats.nsf/byunique/sources.html>.

woodland are distinct from other ECE settings, and my study can benefit from exploring a characteristic feature: trees.

In post-war France, Giono wrote a short tale in his aim ‘to make trees likeable’ (Giono, 1985, p. 8). He need not have fretted, as the benefits of trees as nature’s health service (O’Brien & Murray, 2007) to mental health and well-being have been reported in numerous fields, including urban forestry (O’Brien, Burls, Bentsen, Hilmo, Holter, Haberling, Pirnat, Sarv, Vilbaste & McLoughlin, 2010), landscape design (Kaplan & Austin, 2004; Lee et al., 2009; Nebelong, 2015), ‘green exercise’ (Barton & Pretty, 2010; Pretty et al., 2005) and ‘restorative environments’ research (Ottosson & Grahn, 2008). Specific to early childhood, the restorative potential of outdoor spaces has been referred to as ‘attention promoting settings’ (Mårtensson, Boldemann, Söderström, Blennow, Englund & Grahn, 2009). In Switzerland, developmental benefits stemming from attending *waldkindergarten* (Forest Kindergartens) are reported (Lindemann-Matthies & Knecht, 2011), and, equally, German authors note the advantages of wooded landscapes for the development of social and physical skills and the encouragement of students’ appreciation and understanding of the natural environment (Bolay & Reichle, 2007). The ECE and OL literature are increasingly populated with terminology that refers to characteristic features of natural wooded environments; namely, ‘rich’ and ‘risk-rich’ and a focused précis is offered in the sections that now follow.

Rich, unbidden resources: preparedness versus prescription

‘Rich’ means diverse and teeming with variety. In turn, a rich learning environment brings a medley of choices for both children and adults. For example, the weather or unbidden, non-prescribed resources offer open-ended possibilities and,

according to Lester and Russell (2010), can become powerful components in a child's learning. By 'unbidden', I refer to natural resources that can be manipulated by children, which have been termed 'loose parts' (Nicholson, 1971). Kylin's (2003) findings confirm that the building process holds special appeal to children and, in line with the findings of Fjörtøft and Sageie (2000), mixed shrubbery and woodland are ready resources for the building child. I want to explore the 'rich' and 'unbidden' characteristic through children's building of dens, dams and bridges.

Book critic, Dinah Hall, recognises a dearth of dens in contemporary children's literature, which I find surprising given evidence of their role in child development (Hart, 1979) and the use of literature to convey OL themes (Simpson, 1988). Studies of den building in the woodland grounds of a UK day nursery (Canning, 2013) and hut building in Norway (Karsten, 2003) describe imaginative and creative responses to settings and resources and the processes of 'possibility thinking' (Craft, 2001, p. 45), yet say relatively little about the mechanisms of den building. What Ward (1994) calls 'resourcefulness' has also been explained as encompassing (in contested measures) improvisation, originality, problem solving, imagination and making connections between different learning experiences (Craft, 2003; Prentice, 2000; Runco, 2003). Ingold's (2011) use of 'dwelling' and 'weaving', in place of 'building' and 'making', admits priority of process over product 'to define the activity by the attentiveness of environmental engagement rather than the transitivity of means and ends' (Ingold, 2011, p. 10). Ingold's (2011) dwelling perspective relies on the premise that:

The forms humans build, whether in the imagination or on the ground, arise within the currents of their involved activity, in the specific relational contexts of their practical engagement with their surroundings. (p. 10)

In this extract, a process of '*working with* materials and not just *doing to* them' (Ingold, 2011, p. 10: original emphasis) is emphasised as bringing form out from one's imaginations into being. If a group of kindergarten participants, for example, become engrossed in searching for an imaginary family of bears (Canning, 2010), one must question the value in such falsehood, how to maintain it and the pedagogical opportunities available to the bear-hunting youngsters. There may be pride in the kindergarten practitioner's reported comments regarding the children's 'fantastic imagination' as they lay sticks on the ground to form 'a ladder' and then pretend to climb it to the top of a tree. While the children in Canning's vignettes imagine they are climbing trees, two of her interviewed practitioners admit the 'climb' is what the children actually want (Canning, 2013), or as said above, to be '*doing to* them' (Ingold, 2011, p. 10). Mention made, however, of problem-solving skills and communication (Canning, 2010, 2013) suggests the possibilities may go beyond a child's language or scope to generate solutions. My point is that, whatever reasons we interpret and attach to children building (outlets for creativity, subterfuge, privacy or imagination), it is first-hand contact and that may be what counts.

Kylin's (2003) perspective, as an urban planner interviewing older children (9–13 years), is that the construction of special places with special meaning requires, in some form or another, manipulation of the physical environment. Hart's (1979) work, informed by environmental psychology, is relevant for my research as it explores how den building in Vermont revealed that modifying landscapes has

different meanings for different children, and these different meanings may only exist in that form for a short time, or offer a continuity of experience. Broadhead and Burt (2012), following their work on sociable and cooperative play between peers, coined the phrase ‘whatever-you-want-it-to-be place[s]’ (p. 2) and accept there will be a level of physicality as children manipulate environments, yet the actual building activity has been found to contribute only in part to overall experience (Chawla, 1992). Unlike research focusing on more prescriptive scenarios (Canning, 2010), Ingold (2011) allows a view of building, such as dens, as a forward movement that encompasses inherent uncertainty and ephemerality as outlined above (Section 2.2.1). He writes:

‘forwards’ entails a focus ... on *improvisation* (Ingold & Hallam, 2007, p. 3).
To improvise is to follow the ways of the world, as they open up, rather than to recover a chain of connections, from an end point to a starting point, on a route already travelled. (p. 216)

Thinking through what help Ingold offers involves a short aside. In a recent paper, Sandseter (2015) wrote about aspects of risky play that are evidenced in the Scouting movement, in one form or another. I move on to explore risk-taking shortly (Section 2.2.4), but, ahead of that, Sandseter helps me to entwine a section exploring building and improvisation to lead full circle back to my starting point of uncertainty and ephemerality in nature-based settings. The catalyst to my aside came from Sandseter’s use of the Scouting movement and Baden Powell’s motto, ‘Be Prepared’, as the latter speaks to me of preparation through previous thought, rather than preparation through prescriptive planning. In Section 1.2.3, I introduced Salomon’s ‘sloyd’ as a ‘process over product’ form of education, and a connection may be drawn

here between preparedness, improvisation and dealing with uncertainty. Building dens, akin to other characteristic features explored in this section, deserves a subtle shift in emphasis to explore if prescription disrupts improvisation. Exploring the use of unbidden resources in the contexts in which ‘they open up’ (Ingold, 2011, p. 216) can consider the locally situated nature of nature-kindergarten practice as participants work *with* materials. As nature is providing the toys (Ouvry, 2003), the materials *are* nature and participants are constructing *with* these resources; each participant constructing their experiences, in a social constructionist sense.

Considering risk as a characteristic feature of nature-kindergarten practice is apt, given the routine utilisation of fire, tools, heights and roam (for example, Sections 6.2, 6.3 and 9.4). For me, it is not difficult to understand, relative to more conventional early-years establishments, how unpredictable, nature-based settings and unbidden resources are referred to as rich in risk (Hayes, 2005). I note in the introductory paragraph of Chapter 2 that several topics span sections; risk and risk-taking behaviours are such examples. A description is offered next and returned to in Section 2.4.2 when looking at the role of adults. There is scope to see natural spaces, with their unbidden resources, as more than a *mise en scene* (Section 3.8), and I aim to unpack the underlying dynamics of nature-based practices in order to reflect on characteristics dominant in the ECE and OL literatures. Knowledge, not only of what interactions look like on the surface but also of what influences practice to be constructed to look that way, will be useful; then, I may be in a position to question situated drivers of the practices I see. This literature review now moves on to start to do just that by exploring risk and risk-taking behaviours.

2.2.4 ‘Risk the sting and overreach, for that best one’²⁰

Risk makes outdoor adventure education distinct from other forms of pedagogical practice (Brown & Fraser, 2009; Wurdinger, 1997). In ECE, ‘risky’ and ‘risk-rich’ have come to refer to situations in which young children, having recognised and evaluated a challenge, choose a course of action (Ball, Gill & Spiegel, 2012). Also, ‘risk-taking’ is a term applied to behaviour when the outcome of that behaviour is uncertain (Little, 2006), be those outcomes positive or negative for those involved (Little & Eager, 2010). My title to Section 1.1, ‘No karabiners were used in the making of this thesis’, was used to distinguish ‘risk’ in nature-based ECE as relatively less orchestrated than reported in adventure education (see Brown & Fraser, 2009) and my discussion of risk is based on this premise. While risk-taking behaviours in ECE do fit within a wider literature on the study of risk (Zinn, 2015), as the risk-taker, by definition, is in danger of harm, broader considerations are touched upon here to advance understanding of the concept of risk appropriate to nature kindergartens. In her blog, Sandseter (2016c) defends her use of the word ‘risk’ in her work to argue against recent debate in favour of trusting children to be safe while being adventurous (Allsup, 2016). I agree with Sandseter (2016c) that ‘risk’ not only appropriately labels practices in my study but admits differences in understanding that may stem from different cultures and languages. In her own words:

In the Norwegian daily vocabulary synonyms for risk(y) are both words such as danger, loss and threat, but also words such as responsibility, take a chance, to dare something, courage, opportunity, change ... So why don't we use adventurous or challenging? In fact, we can't translate "adventurous" directly from English to Norwegian because we don't have a good word for

²⁰ Taken from ‘The Art of Picking Blackberries’ by Kevin Crossley-Holland.

that in the Norwegian language ... Adventure and adventurous is, in the Norwegian context, more connected to the wild-life tourism/business or the great Norwegian history of explorers – not to children’s play. It would not make sense in the Norwegian language to use “adventurous” because it would be a very odd word with no good meaning in relation to children’s play ... people in any culture might want to use the word best suited for them to communicate what they want to communicate as long as they are conscious about what they gain or miss by using what they are using. (para 6, 7 and 8)

Sandseter’s (2016c) mindset allows me to see how situated factors can shape both practice and meaning. The aim of my section on risk is not to define it nor debate its worth in nature-based provision. Indeed, I am already confident in my use of the word ‘risk’ and convinced of the value of risk to developing children. I do accept, however, that debate will doubtless continue around the positive and negative connotations of the concept of risk until a more nuanced understanding is reached (Benwell, 2013). My aim in exploring risk and challenge is to see such childhood experience as a route to develop discussion of children’s engagement with a pedagogical environment ‘rich’ with dynamism, immediacy, uncertainty and ephemerality (see above). While risk-taking is judged as a characteristic feature of nature-based ECE, I strive for an account of simple, quotidian practices at an ‘everyday living level’ (Holland, 2009, p. 16) appropriate to kindergarten-age children. I seek to evidence how children engage in situations, yet the form their experience takes or the word used to label experience, will differ dependent upon numerous influences. Aspects of this debate serve to obscure, rather than highlight, the complex and context-specific relationships within which a discussion of ‘risk’ is often placed. The label ‘risk’ is tricky to define, and at this point of my thesis a

definition I shy from, as it points to different associations for different people in different situations; it can be viewed objectively and subjectively (Adams, 2001) and is open to cultural interpretation (Oltedal, Moen, Klempe & Rundmo, 2004). I review, therefore, in exploring ‘risk’ as a characteristic facet of nature-based provision literature on the reported benefits of risk-taking to the developing, learning child; and features of provision, including setting and resources, that make nature-based practice richer in risk. In Section 2.2.3, I turn to the role of the adult in the risk dynamic—a juxtaposition of caregiver and risk facilitator.

As part of my thesis, I wanted to think of risk as social and cultural construction (Brown & Fraser, 2009) and, to this end, I have a vignette about tree climbing that happened in Denmark. The Danish phrase ‘*is I maven*’ came from a Danish pedagogue who used the phrase to describe the feeling of self-belief during risk-taking behaviours (Nugent, 2008), and I have been sharing the phrase, as well as its premise, ever since. Together, the Danish pedagogue and I stood and watched a five-year-old girl who had reached approximately 15 feet up a nearby oak tree. I experienced a strong, subjective feeling of danger that was counter to the Dane who stood by my side. I was looking at what was happening through a different lens to the Dane. The phrase ‘*is I maven*’ translates to ‘keep calm’ or ‘to keep one’s cool’ or, in this specific context, when the pedagogue explained that ‘we must hold the nerve’ when approaching challenges and ‘trust that you are doing the right thing’, she was referring to both the climbing child and the observing adult alike. Later, conversation led to the pedagogue’s alternative and, for me, most memorable was her translation of this phrase as having ‘ice in the stomach’. I vividly remember her fellow colleague nodding knowingly as the phrase, for them, had come to mean acceptance to trust in the child’s knowledge and self-belief. Yet, my point is that the girl chose to climb,

and both she and her pedagogues understood the consequences associated with her actions. Shortly after this, I wrote an article describing this exchange (Nugent, 2008) as, for me, the tree-climbing episode in Denmark was a defining inspiration and cornerstone in seeking to understand differences in socio-cultural sensibilities towards nature-based experiences.

The poet who encourages us to ‘Risk the sting and overreach, for that best one’ (Crossley-Holland, n.d) provides an apt title for my exploration of nature kindergartens because this line encapsulates a mindset that learning outdoors may well be worthwhile, but may carry inherent positive and negative outcomes. At this point in my discussion of risk, it is useful to summarise the literature that supports the importance of risk for learning and development in preschool children. There is overwhelming evidence to suggest the positive outcomes for children stemming from risk-rich practice (Dweck, 2000; Little, 2006; Sandseter, 2009). Indeed, such evidence likely fuelled Bundy and colleagues (2009) to remark that the ‘risk is that there is no risk’ (p. 33). Young children’s competence and perceptions of assessing risk can be improved through a rich offer of opportunities for risk-taking in the learning environment (Lavryson, Bertrands, Leyssen, Smets, Vanderspikken & de Graaf, in press). Improvements, for example, in persistence can fuel children’s motivation to repeatedly try (Dweck, 2000; Tovey, 2010). It has been found that such motivation actually drives children to engage in risk, to master a skill or technique and feel pride in success (Coster & Gleeve, 2008; Stephenson, 2003). Further, skills acquired through risk-taking are a powerful way of preventing harm (Play England, 2007) as children judge, manage and apply strategies to protect themselves (Gill, 2007;

Guldberg, 2009). I sat²¹ with Tim Gill and Bernard Spiegel ahead of the launch of their co-authored guide to risk management (Play England, 2007) listening to the speaker advise the audience to place the benefit before the risk, and this is the point I make by telling the tree-climbing story above. As with the tree-climbing Dane, the child has autonomy and is intrinsically motivated to act (Beames & Brown, 2016). The child is not being pushed by the adult to be put at risk, nor is such practice a one-way form of instruction (Brown & Fraser, 2009), but rather the action goes ahead in order to reap perceived benefits of engaging with nature in that way and this is a key issue. Our current understanding of why nature-based ECE activities ‘on the edge’ (see below) are differently sought and mediated by adults suggests perceptions of risk-taking are entangled within layers constituted by social, cultural and historical associations. My inquiry is needing to consider the conceptualisation of perceived benefits—which are inherently difficult to quantify—and the outcomes of risk-taking behaviours, which maybe more easily identifiable for example, physical harm.

I move on now to the second characteristic in my exploration of risk in nature-based ECE: features of provision. I seek how risk and risk-taking behaviours, in the context of nature-based ECE, manifest by virtue of natural outdoor settings and the actions that innate features of these settings invite (Grahn et al., 1997; Kyttä, 2004); for example, trees that young children want to climb. In her doctoral thesis, Ellen Beate Sandseter (2009a) used observation and interviews to identify and categorise what entails risky play for Norwegian preschool children. Six categories of risky play and associated real or perceived risks were revealed: play with great heights risks danger of injury from falling; high speed risks uncontrolled speed and

²¹ At the start of my Doctoral journey, I attended Play Scotland Annual Conference in Stirling ‘Children, risk and responsibility: encouraging confidence in a risk-averse society’ (7.10.2009). Ronnie Hill, at the time Director of Children’s Services Regulation at the Care Commission, spoke during his presentation of the need for pedagogical approaches to ‘put the benefit before the risk ... and see ‘Benefit Risk Assessments’ in place of ‘Risk Assessments’.

pace that can lead to collision with something (or someone); dangerous tools risk injuries including wounds; playing near dangerous elements risks falling into or from something; rough and tumble play risks harm to self and others; and play where children hide or roam risks getting lost. These categories have been routinely used to guide comprehension of what risk-taking behaviours in ECE may look like (Tovey, 2010), while other features—for example, fire and moving water as a basis for knowledge—feature less. As such, conceptions of risk in ECE can be seen as part of what Fler (2003) calls a ‘specialist discourse’, where practices have evolved into traditions with labels and self-perpetuating, reified ideals attached.

Wilson (1986), in proposing biophilia, stressed the innate need for humans to interact with animals and plants—the alive and dead, the nourishing and stinging—as such experiences with natural environments are central to a child’s emergent knowledge and understanding of the world (Bourn et al., 2016). Literature abounds on the sociology of risk-taking. Lyng (2005) explores, through the concept of ‘edgework’, the emotional intensities including fear, excitement and anxiety combined with a high degree of mastery that we experience when voluntarily taking risks. Similarly, Tovey (2010) talks of ‘playing on the edge’ (p. 14) in an analysis of risk in which children test their capabilities, while other work emphasises simultaneous connections between feelings—joy and fear; in and out of control; risk and mastery; play and reality (Coster & Gleeves, 2008; Pramling Samuelsson & Pramling, 2013). Sandseter’s thesis (2010) went on to ask how children’s expressions of excitement and exhilaration bordering fear were fuelled by features of the outdoor pedagogical environment (for example, trees to climb, rivers to wade through, berries to reach for) as well as by subjective perceptions of risk. While studies of children ‘playing risky’ may share traits with facets noted in those engaging in edgework,

which includes having faith in their own ability, self-imposed challenge and mastery, rarely are preschool children adrenalin junkies or ‘control freaks’ (Lyng, 2005). Their actions and outcomes are mundane by comparison. To this end, attaching the adjective ‘rich’ to risk is useful in that it suggests excitement that the literature says exists. Yet, there is scope for a more nuanced insight into risk as, to date, definitions of risk are ‘uniform and narrow’ (Zink & Leberman, 2001, p. 5) labels like any other and, as such, may not allow for subjective conception of behaviours and contextual variability of practice.

Tovey (2007) touches upon an understanding of cultural perceptions of risk-taking in childhood in recognising how playing freely away from adults is inconceivable in the UK. She makes reference to ‘challenging environments, including deep snow’ (p. 91) and, for me, by doing so she affirms the key point: actions, which to some are routine and familiar, can be unfamiliar to others. In making a statement like this, Tovey (2007) is affirming her culturally situated beliefs that suggest exposing a child to risk in the form of ‘deep snow’ carries with it a high likelihood of harm. When research reassures risk is beneficial to the developing child, it raises an interesting question: what influences our attitudes towards interpreting nature-kindergarten participants who feel, for example, ‘ice in their stomachs’? Research has shown sensations from and attitudes towards certain activities are not universal (Brown, 2008). There is a need for existing research to be complemented by inquiry that will highlight risk to be largely subjective (Sandseter, 2016c) and acknowledge that ‘risk’ may be conceptualised in different ways (see Beames & Brown, 2016). Any definition or ‘screenshot’ of risk for nature-based ECE, therefore, requires consideration of how it may be framed by socio-cultural dimensions of difference in Western society, and my opinion that ‘risk’ is embedded in circumstance

is further discussed in Section 2.3.

Therefore, the debate on risk in nature-based ECE can be outlined thus: on one hand, there is widespread agreement that risk and risk-taking, in many respects, are valuable elements in child development; on the other hand, there are more risk-averse sentiments, and these I return to when exploring risk from the adult perspective (Section 2.3.3). Fundamentally, there is disagreement over the conceptualisation of ‘risk’ and the application of the word. Akin to other characteristics of nature kindergarten that I go on to discuss in this section, I see the issue not being about a definition or label that states it as a fixed entity, but rather each characteristic needing to be viewed within a locally contextualised frame.

2.2.5 Forest School and nature-based ECE transfer

In the UK, accessing woodland spaces for ECE are most frequently reported through the concept of Forest School. Jane Williams-Sieghedsen, my hostess in Denmark in 2009 (Section 1.2.2), was a member of the original party from Bridgwater College in Somerset that in 1993 took students to Denmark and returned home to share the notion of outdoor, play-focused kindergarten; they named it Forest School. In Section 1.2.3, I noted the transfer of educational approaches and concepts between countries to be problematic and Waite, Bølling and Bentsen (2015) recognise that adopted provisions ‘reflect and refract the culture in which they are embedded’ (p. 1). By devoting a short section to Forest School, therefore, I aim to use Forest School as an example of nature-based practice that has been transferred from its origins and how this may raise questions about the transfer of nature-based ECE. I believe there is worth in considering how an improved understanding of ECE provision, like nature kindergartens, may be informative in different contexts. My

research can begin to validate the notion of nature-based ECE knowledge as a situated project rather than as any predetermined ‘export’ between countries. Drawing on my literature review, I see consideration should include how and why elements of practice are culturally situated and historically constituted and any transfer involves addressing the situated context of learning, rather than just replicating a specific moment or format.

While routinely part-time or sessional,²² Forest School in the UK sees children and their carers using wooded, natural environments in ways that, in my opinion, mark Forest School as nature kindergarten’s ‘close relative’. Without question, therefore, Forest School literature is useful for forming descriptions and making sense of ECE that utilises nature environments, as well as affirming contrast to other forms of ECE and OL. Research into Forest School establishes knowledge of a provision that routinely uses wooded sites with preschool age children and, overwhelmingly, studies report Forest School as having positive effects on a child’s self-confidence and self-esteem, their abilities to work co-operatively, take risks, make choices and initiate learning for themselves (Borradaile, 2006; Ridgers, Knowles & Sayers, 2012; Swarbrick, Eastwood & Tutton, 2004). Further, authors’ Forest School rhetoric notes environmental stewardship and a connection to nature (Davis & Waite, 2005; Knight, 2013; Lovell, 2009; O’Brien & Murray, 2007). The visiting party from Somerset had seen Danish examples of ‘free-air life’, or *friluftsliv* (Section 2.3.2) as manifest in the Danish ECE system and at a time when that form of ECE was less common outside of Nordic nations.

I surmise that some, perhaps all, of the characteristics described above—

²² On the whole, Forest School is attended for 1–2 hours per week for, say, 6 weeks. While there is variation in this provision, Forest School differs from nature kindergarten in respect of the length of time spent outdoors.

richness, messiness, ephemerality, immediacy, preparedness, roam and risk-taking—awaited the Somerset group and looked distinct to practice they knew. It was from the stance of seeing difference that I became interested in a comparative approach to knowledge of nature kindergartens. Jane Williams-Siegfredsen is British and trained as a teacher in the UK yet, for several decades, she has been involved in early-childhood education and outdoor learning in a socio-cultural environment other than her own, which perhaps has altered her perspective of the ways of others. As she alludes to in her book (Williams-Siegfredsen, 2012), and reiterated in conversation: ‘It’s taken me the best part of 19 years to understand what I first saw when I came to Denmark.’²³ The theory that may underpin Jane’s sentiment, and my understanding of it, will be one that promises to understand the complexity of our relationships with nature in ECE practice and convey knowledge in a way that is relevant across socio-cultural environments. I aim to employ ‘habitus’ (Bourdieu, 1977) to consider conceptual linkage between socio-cultural mechanisms and observed practices (see Section 3.3.1).

By 1995, Bridgwater College had developed a course of further education in Forest School and was offering training to ECE practitioners together with a crèche provision based upon the practice seen in Denmark (Cree & McCree, 2012). The concept then spread nationwide, was taken up by others²⁴ and today, Forest School is widely known in the field as a specialist outdoor concept for 3–18 year olds. Where the concept has transferred to other countries, a description of the benefits of

²³ Personal communication with Jane (2.4.2008) after she picked me up from the airport and we talked about ‘feeling at home’.

²⁴ Several other UK local authorities, beginning with Oxfordshire and Worcestershire, followed Somerset’s lead in conjunction with local colleges of further education and, subsequently, with the Forestry Commission—the UK’s non-governmental body. A nationwide training programme for Forest School practitioners through the Open College Network was established. Since its inception, Forest School has grown to provide training for 10,000 practitioners (Cree and McCree, 2013). Accurate data on the number of children who have participated in Forest School are unavailable.

participation bear close resemblance to the UK examples summarised above. From an Australian perspective, for example, the approach was locally interpreted using bushland with primary-aged children to demonstrate participants' sense of place (Cumming & Nash, 2015), and, in Canada, children's enjoyment is a key claim (Power, Cree & Knight, 2015). The qualities of woodlands and forests, as I note in this section, may serve to facilitate the young child's first-hand interaction with natural environments (Dunlap & Kellert, 2012; Phenice & Griffore, 2003) and serve as a sustainable learning environment (Cree & McCree, 2013). Forest School literature makes broad inferences about ways in which participating in a nature-based provision benefits children's relationships with nature, although authors also focus on such benefits (Ridgers et al., 2012) and the quality and form of Forest School (Knight, 2013; O'Brien & Murray, 2007). One exception is Cree and McCree's (2012) discussion of Forest School as a social movement that is naturally evolving. Drawing on their earlier piece (Cree & McCree, 2012) and Blumer's staged typology (1969), they call for Forest School to be viewed in a wider frame, rather than as 'a panacea to the environmental stresses of modernity on children' (Cree & McCree, 2012, p. 33). My study may be informed by exploring the transfer, to date, of Forest School principles by seeking differences and similarities that occur in ECE practice when deeply embedded ways are 'transplanted' into another country, another culture. Leather (2013) acknowledges 'Forest School' is a social construction and critiqued its the import to the UK absent an understanding of the rationale that underpins it as a form of education. Nature-kindergarten practice across contexts is in similar need of further inquiry so as to empirically capture situated influences and locally-specific purposes from within the complexities of nature-based ECE provision and avoid the

label ‘nature kindergarten’ being, to borrow from Leather (2013) and Power, Cree & Knight (2015), lost in translation.

2.2.6 Characteristic features: summary and opportunities for my study

Section 2.2 has explored several characteristics of nature-based ECE: the utility of natural settings and generic resources; the special contributions of wooded environments; the rich, multi-sensory offer of experiencing these settings and resources first-hand; and the concept of risk. These are characteristics that make nature-based provision distinct to other forms of ECE. Both ECE and OL literatures widely note the physical, restorative and educative benefits associated with natural environments when used for ECE, and I have outlined young children’s access to these potential benefits through their use of natural environments during kindergarten. The role of the adult in a child’s accessing these benefits is addressed in Section 2.3.3, as I see control and agency as an influence rather than a characteristic feature. At that point, a gap in that literature is stated; namely, the need for a situated reading of different adults in different roles at nature kindergartens.

In Section 2.2.3, I made the point that my study can benefit from exploring the distinct characteristic of using wooded, natural environments. I aim to go beyond a solely descriptive account to question what it is that makes the child–woodland interaction look different when individuals from different locations use the same features. My research goes beyond expounding the benefits of the human–nature connection to an appreciation of these environments for the subjective potential they hold for nature-based ECE. With each export—for example, the British from Bridgwater in Denmark—cultural practice transfers away from heritage and ways of living, despite characteristic features of the physical environment such as trees and

mud existing in most locations. A valuable contribution would be made to both ECE and OL literature by research that interrogates practice as heterogeneously patterned and as diverse as the natural environments within which practice is situated. Jane's comments (Section 2.2.3) that on her first impression of Danish practice she was 'totally bowled over by what I saw' (Williams-Sieghfredsen, 2012, p. 1) are allied elsewhere in the literature with notions of a practice of 'stark contrast to what [one] would expect at home' (Wagner, 2006, p. 289), and herein lies an area ripe for research. In this light, therefore, scope exists for research to explore subtleties in the utility of natural, notably wooded, environments focused on a locally-specific agenda. My findings sections evidence layers in our relations with the trees and tree stumps (Section 9.8), our whittling of them for tool use (Section 9.4) and burning of them for fire (Section 6.2 and 6.3). The literature clarifies what makes nature-based ECE distinct by explaining commonalities in the characteristics of the physical environments in which nature-based practice is situated. In spite of commonalities in physical environments, characteristics or labels, there remains, to date, no research investigating young children's use of wooded, natural environments across different countries.

In addition, methods empirically documenting characteristic features and practices have rarely used approaches sympathetic to the unpredictability, ephemerality and sensorality of environments. I feel, following my review of characteristic features, there is merit and opportunity to apply methods that explicitly account for flux and sensory cues—namely the visual, taste, touch, auditory and olfactory while recognising the five-sense model (Howes 2013) as a useful means to reflect on social and cultural differences—and understand how comparable characteristics yield difference and resonance across examples of practice.

In my opinion, that ‘nature’ is ‘good’, or taking risks is ‘beneficial’, or time spent outdoors ‘works’, presents only a surface layer to understanding. I propose not to rely solely on the description of activities, or terms that label them, as the determining criterion by which practice is understood. My issue centres not on what practice is called, what practice looks like, nor derivable benefits from participating in it, but exploring perceptions, traditions and dispositions that are socially and historically constituted. There has been limited attention to how children absorb, participate in and understand ‘cultural rules’ (Munn and Kleinberg, 2003) that are comprised of hidden layers yet influence practice. I seek these influences next.

2.3 Seeking influences: typical ‘ways of living’ and constructing natural childhoods

This is my second section exploring comparable facets of nature-based ECE practices. My matrix continues to build as I look at ECE and OL literature through my second thread: seeking influences. This section covers capacities selected as relevant to nature-based ECE that typically have an effect on the behaviour of something or someone. In Section 2.3, I seek subtle, hidden layers beneath a description of characteristics—influences that have the potential to grow our situated understanding of nature kindergartens. There are inevitable overlaps of topics. I will return, for example in Section 2.3.3, to the discussion of risk in order to consider adult attitudes towards risk-taking behaviours amongst young children in their care. By ‘seeking influences’, my aim is to dig deeper, beneath a surface layer of description towards an answer to my research questions.

At the outset of this section, I reiterate my statement of meaning for this thesis for ‘culture’ that I made alongside ‘nature’ and for what both concepts mean to my

work (Section 2.2.1). This is important because my study is exploring how culture is embodied in the ways that children are raised and the environments where they develop. My section ‘Seeking influences’ then continues by primarily exploring the ways various societies use nature environments for ECE under the title the ‘ways of living’ (Section 2.3.2), and my discussion centres on constructions of childhood to include dimensions of difference and resonance in human–nature relations and interactions; by exploring the role of the adult (Section 2.3.3) I highlight the centrality of ‘gate-keeping’ or mediation within ECE.

2.3.1 ‘Culture’ as an influence

My discussion of ‘nature’ and ‘culture’ concluded that ‘culture’, and the traditions and values that it engenders, is continually built on the needs of people in local situations as locally constituted through their histories. Crotty (1998) sees ‘culture’ as the source (or influence) rather than the outcome of human thought and behaviour. Here, I want to reiterate and reinforce my statement of ‘culture’ to bypass a wider debate, but also to seek culture as influencing specific traditions and values, as they relate to nature kindergartens. Examples including folklore, woodcraft skills and seasonal foraging will be unpicked in due course (Section 2.4.5).

My starting point, in exploring culture as a source or influence, is to think about how nature-based ECE contributes to societies. Early childhood institutions are sites of enculturation (Gulløv, 2003) and sites for the socialisation of child participants into culturally specific practices (Wollons, 2000) during their preschool year(s). Viewed this way, societal desires to reproduce activities, practices and ways of living take a role in the dynamics as manifest in ECE. Indeed, early work by Ingold (1986) stated that, through ritual ways, societies revitalise their environments and

secure reproduction of traditions and values, while Tobin, Wu and Davidson's (1991) study acknowledged preschools in a role that reflects and affects societies. Other studies, to date, say little specifically about nature kindergarten as an ECE provision that is generated and upheld by the mutual, shared interests of social agents. My research, focusing on the socio-cultural constructions of nature-based ECE, will be a useful lens through which to empirically capture the ways identities are defined and redefined; for example, how child participants of nature kindergartens adhere to behaviours expected by adults of their same culture. A lens sensitive to wider influences will reveal the constitutive parts of a continuous construction and reconstruction of the epistemology of nature-based ECE.

Ting-Toomey (1999) employs the metaphor 'culture is an iceberg' (p. 2) to express that there are concealed beliefs, traditions and values beneath the surface which we cannot see and that are the foundations that give meaning to that which is visible. An interpretation of the 'visible', including routine ways and patterned behaviours, may contribute towards a better understanding of observed practices, but only if interpretation also considers that which is less apparent below the observed, surface layer. On this basis, Waite and Pleasants (2013) propose:

Cultural differences within and between countries are often invisible and yet awareness of and transparency about their influence are useful, perhaps essential tools that can help conceptualise and theorise ... outdoor learning.

(p. 162)

To this end, the literature outlined in Section 2.2, and here in Section 2.3, was selected to contrast ways in which nature-based practice is patterned within and

between different countries in regard to how nature is used for nature-based ECE. As my study is an endeavour to reveal subtle differences, rather than evaluate right and wrong between examples of practice, a perspective wherein ‘culture’ is seen to mediate human relations *with* ‘nature’ environments will help embrace diverse sources in socio-cultural constructions for the development of my questioning: ‘What is a nature kindergarten?’ and ‘What influences practices at a nature kindergarten to look like they do?’

2.3.2 Ways of living and cultural transmission in nature-based ECE practice

In his seminal text, *Distinction*, French sociologist Pierre Bourdieu (1979) illuminates some preferences of French people by examining the choices and judgments made during their everyday lives—choices and judgements that make those people distinct. The word ‘distinction’ means a contrast between things, peoples and places and accepts that human sensibilities and dispositions may influence decisions about choices we make and what we routinely do, to help us see that people live in ways that resonate or contrast with the ways of others. I drew attention in my introductory chapter (Section 1.2.2) to recent texts noting situated and culturally constituted facets in nature-based practice (for example, Waite, Huggins & Wickett, 2014). Here, I want to develop this notion that the use of nature across socio-cultural environments and across time may be influenced by socialised practices and ways of behaving.

Nordic countries each have their own monikers to express the different ways that access to, and relationships with, natural environments are conceived. Nordic identities may be conceptualised through outdoor ideals; for example, in Norwegian

identities such as *friluftsliv* (Henderson & Vikander, 2007; Nedrelid, 1991; Tellnes, 1992), which translates to ‘free-air life’, as well as in the Swedish *allemandsrett* (see Champion & Stephenson, 2010; Sténs & Sandström, 2014), which refers to a ‘freedom to roam’. Both ideals share facets with ‘Everyman’s Right’ which is the traditional Finnish, legal concept that permits free access to all land, albeit publicly or privately owned, for the collection of wild berries and other edible resources for personal purposes (Vaara et al., 2013). While beyond the scope of my thesis, I draw attention to the relevant literature as each way evidences the important influence of socio-cultural differences that regulate not only peoples’ rights of access to nature environments, but also label how countries think about nature-based ECE. At the foundation of Nordic traditions and beliefs is a perceived value in being empathic towards nature (Gurholt, 2014) and urging children to play outdoors characterises the image many Nordic parents have of a happy, healthy childhood (Halldén, 2009; Sandell & Ohman 2010). In Norway, Nilsen (2009), identifies *friluftsliv* as the inspiration for her nation’s *friluftslivbarnehagen* (literally, free-air life kindergarten) and recognises the contribution of these institutions to a cultural reconstruction of simple, outdoor living that encompasses time spent eating, exercising and relaxing outdoors. As intimated above (Section 2.2.3), the party from Bridgwater, ahead of their transfer of Forest School, saw (and were affected by) a Danish manifestation of ‘free-air life kindergarten’.

Gosetti-Ferencei’s (2007) modernist text won a prize for its title,²⁵ ‘The Ecstatic Quotidian’. In the book, she investigates, using modern art and literature, how attention to perception and the common qualities of ‘things’ can give way to experiences of *ecstatis*—that which may be extraordinary for one, may be ordinary

²⁵ Jennifer Gosetti-Ferencei won the American Library Association award in 2008 for Outstanding Academic Title.

for someone else. I see why a phrase that encompasses two ends of the wonder spectrum appealed to the judging panel. There is a dualism in what defines the ordinary with contrasting wonderment from that outside of our 'known'. The party from Bridgwater saw young children using wooded, natural settings and 'nature providing the toys' (Ouvry, 2003) at a time when elsewhere in Western societies, ECE provision was more indoor focused (Bauer and Ripahn, 2009; Dumas & Lefranc, 2010). That *friluftsliv* and *friluftslivbarnehagen* inspired nature-based ECE (Nilsen, 2009), and such ways of educating preschool children may contribute to environmental stewardship (Section 2.4.1), could inform and awaken visitors to understanding 'insiders'' constructions of, and relationships with, nature. As Maynard (2007) concludes, exposing commonalities and contradictions between different discourses while unsettling, may be helpful in interpreting practices and experiences comparable, yet different to, their own.

Seeing difference tests one's abilities to perceive the world in different or new ways and respond to the discourse of locally appropriate and socio-culturally constituted ECE. Viewing ECE institutions as arenas of cultural transmission (Gulløv, 2003) gives leverage to future research to reflect on the significance of patterned, socialised ways in structuring what practice looks like—to insiders as well as outsiders, in contemporary as well as customary and established ways. We know from Section 2.1 that the physical environments in which nature-based practice are located feature a variety of behaviours. My section, 'Seeking influences', has begun by looking at conceptualisations of 'culture' and 'childhood' to explore how customary ways may influence behaviours and shape practice. Before moving on, my thread of this chapter thus far can be acknowledged: a picture is forming of nature-based ECE

that is situated in and resourced by comparable natural environments yet contextualised by typical ways within societal, historical and local worlds.

2.3.3 Adult as policymaker, parent or practitioner: roles and influences

Adults have influential roles in children's experiences and learning opportunities (Little, 2010; Waller, 2011) and any inquiry into ECE calls into consideration the perceptions, attitudes, values, beliefs and behaviours of the adults who surround the developing child—be they policymaker, parent or practitioner. Previously, I have hinted at examples of culturally bound ways in which children's experiences may be tied to the support, guidance or mediation offered by adults (Nugent, 2008). These comments, however, made after my first visit to Denmark warrant further inquiry.

In Section 2.2.3, three roles are explored: adult as policymaker, adult as practitioner and adult as parent—and I explore these in turn next. To more readily focus on the roles of practitioners at nature kindergartens, I have separated their roles into two forms: adults as conduits and adults as caregivers.

Adult as policymaker

It is arguable that policies and manifestos market a viewpoint. At its inception, the timeliness of my thesis was underlined by UK policy documents such as the Learning Outside the Classroom manifesto (Council for Learning Outside the Classroom, 2006) and, specifically in Scotland, Curriculum for Excellence through Outdoor Learning (Learning and Teaching Scotland, 2010); both articulating the values placed upon outdoor learning. That said, only tacit mention is made of nature-based learning in either of these documents and, while there is reference in recent

commissioned reports (Mannion, Mattu & Wilson, 2015), these are often to field studies (CLOtC, 2006), outdoor learning programmes (Lovell, 2009) and ‘fieldwork in naturalised settings’ (Nicol, Higgins, Ross & Mannion, 2007, p. 4). Provision which is, ‘not rounded in its focus, regular in its timing, or inclusive for all pupils’ (Mannion, Fenwick, Nugent, l'Anson & Whewell, 2011, p. 1) may skew our understanding of the use of nature and hence curtail the possibilities for our use of such environments. Further, in the UK, numerous documents pledge to promote the distinct means of learning outside the classroom (Curriculum for Excellence through Outdoor Learning, 2010; Early Years Foundation Stage, 2014; Play England, 2007). Consideration is due, however, to how such viewpoints may be at odds with dominant socio-cultural influences within a society.

In Denmark in the 1970s, it is said that the rapid increase in the number of working mothers led to pressure on childcare institutions over available space and heading outside became an obvious option (Williams-Sieghfredsen, 2012); this was the practice observed by the Bridgwater party. A tenuous, but indicative, example is the way in which Nordic parents traditionally let babies sleep outside in sub-zero temperatures (Tourula, Isola & Hassi, 2008) and agree to their childcare institutions also doing so. The Danish people’s ways of living with nature were commonplace and to the Danish government an outdoor childcare option may well have been ‘obvious’. From the 1970s, similar childcare and accommodation issues arose in other nations with their own unprecedented rises in maternal employment (SIRC, 2011). In the United States, for example, a 26 per cent rise in childcare in 1978 led to government reducing space standards and increasing adult to child ratios (Bergmann & Wiggans Helburn, 2003). In essence, using local woodland or beaches as environments for ECE was less ‘obvious’ for the US government.

By exploring the influence of adults as policymakers, I make the point that emphasis and shifts in policy and regulation market a viewpoint that in the field of outdoor ECE, outdoor learning is a good thing. A viewpoint, however, may not serve to increase provision of using outdoor natural environments if drivers of practice are culturally bound. Added into the mix are liquid, changing times (Section 2.4.1), yet, we need not disparage modern lifestyles to lament childhood disconnection with nature (Monbiot, 2016). At issue is a need for informed clarity as to ways ECE can contribute to sustainable lifestyles (Hägglund & Pramling Samuelsson, 2009); a flux that requires a situated reading of ECE and an acceptance that (like most things) some (children and adults) will embrace, and some will not, at some times and not others.

Adult as parents

Parents are my second group of adults who may influence children's experiences with nature. Above in Section 2.2.4, I emphasise the benefits of risk-taking to the developing child, yet commentary in a recent report²⁶ for a British readership acknowledges how helicopter-style parents (Ginott, 1969) may be unhappy with their child's minor injuries, including grazes and falls (Blincoe, 2015). MacQuarrie et al. (2015) refer to the importance of the alignment of supportive attitudes between parental and institution attitudes. Similarly, a journalist reports that 'most of those involved in forest kindergartens rave about them' (de Quetteville, 2008, para. 3). Parental 'support' and the journalist's use of the word 'involved' is tied into a notion of seeing this form of ECE as part of a nature-based 'community'. Parents actively choose nature kindergarten for their child's preschool years, when

²⁶ *Play – A report by the all-party parliamentary group on a fit and healthy childhood*. Accessed at http://www.royalpa.co.uk/?p=the_appg_on_a_fit_and_healthy_childhood.

alternative options are available (Borge, Nordhagen & Lie, 2012), so the description and understanding of nature kindergartens I seek comes from a position that views the human as an individual within a ‘societal collective interacting with others’ (Hedegaard & Fler, 2008, p. 12). Adult conceptions of a ‘good childhood’ are anchored in the values that are interwoven in the different cultural traditions in the institutions where everyday ways are enacted (see Section 1.2.2). In essence, parents want nature-based experiences for their children.

Hedegaard and Fler’s (2008) work, taking a cultural-historical (Rogoff, 1990) stance, helps me to explore how nature-kindergarten practices are developing in different countries, thereby admitting consideration of wider social and cultural influences that may constitute a nature-based community (Section 3.4). From this perspective, adults may be seen as ‘developing an identity as a member of a community and becoming knowledgeably skilful as part of the same process, with the former motivating, shaping, and giving meaning to the latter, which it subsumes’ (Lave & Chaiklin, 1993, p. 65). Consistent with Lave and Chaiklin’s (1993) notions of developing and shaping collaboratively are examples of nature-based ECE being viewed as constituted in response to local physical environments and users’ needs. I aim to explore the continual process of participation that captures action *and* connection in social *and* individual contexts (Barab & Duffy, 2012). Pertinent to my inquiry is the notion that such participation creates meanings, connections and identities through relations with outdoor natural environments.

There is scope to see nature-based practice generally, and nature kindergartens specifically, as units within which the ‘commonly shared focal point’ (Fetterman, 2010, p. 17) amongst conduit adults is the connection or relatedness of children with nature—in line with their own strength of feeling for these environments. The goal of

the child–nature connection continues to receive attention (Louv 2012a, 2012b), focusing primarily on the benefits to children from interaction with and separation from nature. Yet traceable back to Froebel’s disagreement with Rousseau’s romanticism is the view that simply being in nature is enough in itself. There is evidenced that parental sentiment that the guidance of their children by trained, empathic educators augments their own efforts (Little, 2010) and relations with nature are nurtured through society’s engagement (Rickinson et al., 2004). Next, I set out my position on parents and practitioners as like-minded adults (Barnes, 2003), but the point I draw from the relevant literature is an alignment in adult sentiments where parents and practitioners share the goal of positive relations with nature in childhood. Further inquiry is needed into ways adults facilitate child–nature relations specifically in nature-kindergarten settings.

Adults as practitioners: conduits and caregivers

Both ECE and OL professionals are positioned in many different ways and job-title descriptions are broad; including both traditional terms and contemporary concepts such as 'nursery nurses', 'teachers', 'educators', 'instructors', 'pedagogues' and 'practitioners'. The distinctions between and qualities encompassed by such titles have been explained and include facets such as university qualifications and experience (Karlsson Lohmander, 2003). My rationale for noting this literature is that it maintains the notion that a job title labels a role and what needs to be explored is the deeper, 'getting others to love it too'²⁷ strength of enchantment and dispositions. Here is where I have separated the roles of practitioners into two forms: as caregivers and as conduits.

²⁷ Extracted from a personal communication with Troels Romby Larson of University College, Lillabælt (14.12.2011).

Practitioners as caregivers

In Higgins's (1996) opinion, practitioners dutifully strive to avoid physical or emotional harm to others in their care. Let me return to the girl climbing high up that tree in Denmark—I did not wish to see her hurt and cared about her safety. The Dane by my side cared too, but in different ways, and this led me to think reflexively about our positions as observing adults.

In risky scenarios, a child's resilient adaptation (Section 2.4.2) is maximised in relationships with confident, competent, caring relationships with adults (Peterson & Yates, 2013). Higgins (1996) finishes his point about authenticity stating, 'the learner must be involved and there must be something at stake. Fear and risk are real parts of life' (p. 5), and in taking this view, he introduces the notion that enmeshed in an adult's position is the agency, or autonomy (see above) in the child. The Swede, Ellen Key, in her landmark book *The Century of the Child* (1900), saw children as the future of all societies and emphasised the importance of exposing children to the 'realities' of each day. Key's (1900) thesis is that children must not only learn to create their own pleasures, but that adults ought to not stop children from suffering the natural consequences of their own acts.

Recently, a study of Icelandic teachers concluded that the educational potential of outdoor environments outweighed adult fears of potential dangers children could be exposed to (Norðdahl & Jóhannesson, 2014) yet, at the same time, called for further investigation into understanding the causes of difference in teachers' levels of fear between countries. I return here to my exploration of risk (Section 2.2.4) to reflect on the interesting interplay of the Danish climbing child and two by-standing practitioners when ECE literature establishes a picture of restrictive

regulation and adult perceptions of the possibility of harm to children in their care (Gill, 2007).

Boldly, Sandseter (2007) states it is ‘children’s right to do risky play’ (p. 237) and that adult practitioners have a ‘pedagogical responsibility of letting the children encounter risk and challenge’ (Sandseter, 2009, p. 5). Her sentiments reveal that culturally bound opinion may influence that which a child gets to experience (Section 2.3.3). Further, Sandseter, Little and Wyver (2012) empirically address how adult responses to risk-taking are impeded by regulation and impacted upon by the theoretical basis of pedagogies dominant in a particular country. Sandseter is Norwegian, observing in a Norwegian kindergarten and, akin to fellow Scandinavians who have written before and since her (Kaarby, 2004; Nilsen, 2009), their ‘authentic education’ lens is apparent. Sandseter (2007) implies her habituated ways in accepting that, elsewhere, children routinely and freely using knives, saws and axes is unusual. More recently, as noted above, commentary by Sandseter affirms her sentiments (Sandseter, 2016c), and her discussion within a symposium with a Canadian bias (Brussoni et al., 2014) is highly appropriate for my own thesis as she uses existing understanding to look outside her own habituated perspective. Although existing research explicitly notes that judgements of what is, and what is not, considered ‘reasonable and prudent’ (Martin, Cashel, Wagstaff & Breunig, 2006, p. 255) may vary on the basis of differing views about children and childhood (Hedegaard, 2005), understanding is needed of how professionals establish a balance between allowing children access to scenarios, including risky ones, and care. This is a good point from which to segue into what I see as the adults’ second role—practitioners as conduits.

Practitioners as conduits

In introducing this section (Section 2.3.3), I state that the notion adults may mediate and influence the use of nature is a dynamic that warrants further consideration. Nutbrown (2010) states how practitioners in outdoor classrooms adopt a ‘gate-keeper’ role to regulate or control information, attitudes and actions through consent. In a recent paper, attention was paid to biographies of the surrounding adults—that is, their own subjective habits and cultural dispositions—and the term ‘conduit’ over gate-keeper was used to recognise the significance of influences that guide children’s access to nature-based experiences (Nugent & Beames, 2015). Thus far, my literature review has explored the notion of conduit adults from several directions. In Section 2.3.3, while acknowledging rarity in ECE, my exploration of foraging, fishing and hunting practices evidences the roles of adults in constructing the conditions within which experiences take place (Ringer, 1999). In Section 2.2.3, through the idea of unbidden resources and den building, and inspired by Baden Powell’s motto, I mooted how adult-led prescription disrupts children’s improvisation. In Section 2.2.4, I explored the concept of risk from authors’ culturally specific stances (Sandseter, 2010; Tovey, 2007). I have also begun to explore preparedness and prescription and return to the importance of this literature next.

For Ingold (2011), it is the process of improvisation over prescription which gives rise to our relationship with our surroundings, and situations requiring human spontaneity will not pose a problem for the participant who is equipped (or allowed) to deal with contingencies and flux. Davis and Elliott (2009) determine that the ways in which children used their woodland environments and resources for den making demonstrates possible ways for practitioners ‘to plan’ future activities for the children. Planning and prescriptive activities are sadly commonplace in much early

childhood writings and it takes anthropologist Ingold (2011) to highlight a broader stance. He brings planning into his reasoning to explain the difference between it and preparation. To ‘prepare’ is to admit dynamism of the natural environments, whereas to plan is to follow direction. The tighter the plan, for example, the specification for the den, ‘the greater demands placed on practitioners to “get to right”’ (Ingold, 2011, p. 219). It is apt to question if adult practitioners who are adept in their approaches may better manage contingencies; for example, a child’s freedom to roam, not roam ‘wild’ (Bond, 2013), but roam more, relative to other ECE provisions (Gudberg, 2009). Reservations reported by novice outdoor educators (see Mannion et al., 2011) push me to explore if it is experience, qualification, passion or a complex combination of factors that makes practitioners adept at coping with contingencies?

Authors interrogate claims that positive outcomes rely on adult competencies and confidence in what they do (Ernst, 2013). Practitioners in the ECE and OL fields, who are well motivated by the ‘outdoors’, go so far as to incorporate local knowledge and experience of place to their roles (Brookes, 2002; Stephenson, 2003; Waters & Begley, 2007). In a Scottish-based study, building on earlier work (Mannion et al., 2006), Mannion et al. (2011) identified that teaching in nature is possible through an interaction of local factors—‘enabler[s]’ and ‘inhibitor[s]’ (p. 33). A key factor reported was teacher dispositions and knowledge, including their enthusiasm, spontaneity and flexibility (Mannion et al., 2011, p. 28), and Chawla (2006, 2007) highlighted the vital role that engaged, guiding adults have in kindling a child’s love of nature. Passion and love are emotive words; the latter is ‘a very loaded concept, and often an ambiguous one’ (Wistoft, 2013, p. 136). Wistoft (2013) writes of a

gardening project²⁸ in Denmark, yet warns of love as ‘strategic’ and ‘empty’. Hence, cautiously I use ‘love’ and ‘passion’ in my thesis in an aim to get across the depth of feeling about nature-based learning as Moyles’s (2001) feeling is that, without a ‘passionate’ (p. 81) commitment, it is impossible to work outdoors with young children. It is important, therefore, to frame any feelings that affect one’s devotion to a job in terms of how adults transfer their strength of feelings to get others to ‘experience the passion as well’ (Wistoft, 2013 p. 137). Research needs to consider the ways in which nature-kindergarten practice is hallmarked by conduit adults when these adults play a constitutive role in maintaining uncontested ‘common sense’, quotidian behaviours (Nugent & Beames, 2015). Further study may be richer for the insight it brings as to how practitioners situate themselves within a profession (and parents send their children to an institution) that endorses what they believe in, what they love.

Before moving away from looking at the influence of adults, one further aspect warrants attention: male and female practitioners. Interestingly, for my study, which is located at the intersection of ECE and OL fields, the number of males working in ECE when practice is based outdoors diverges from the female-dominated trend (Bredesen, 2004; Løge Hagen, 2005), and there needs to be a consideration of why this may be so. Allin and Humberstone (2006) explored outdoor education careers in the UK through exploring life histories to consider educators’ own socio-cultural contexts and note connections between a society’s nature-based orientation and the attraction that working outdoors presents. For example, the ECE sector average of three per cent male staff (OECD, 2015) increases to 19 per cent (Lysklett, 2007) in

²⁸ Wistoft (2013) studied the *Haver til Maver* (‘Gardens for Bellies’) project that supplements the school day for children with additional support needs. While cultivation of crops and animal husbandry differ to nature-kindergartens’ practices, their ethos holds a similar goal—connection between food, child and nature.

Norway—a nation where an increasing proportion of kindergartens are termed ‘outdoor’ (Bugge, 2006)—yet underlying explanations to empirically confirm such patterns are not yet fully understood (Peeters, Rohrmann & Emilsen, 2015).

Authors note alignments between career choice and personal values (Bogeholz, 2006; Chawla, 2009; Muller, Kals & Pansa, 2009; Wells & Lekies, 2006) as well as opposing types of interaction outdoors—rough, tough and risky—versus a view of ECE as caring, female-dominated stereotypes (Cameron, Moss & Owen, 1999; Nutbrown, 2011). Evidence suggests adults choose nature-based ECE careers because these ECE environments offer more freedom (Emilsen & Lysklett, 2005; Glaser & Storli, 2006) or the opportunity to escape mainstream female expectations (Bredesen, 2004; Emilsen & Koch, 2010). Sandseter (2014) has examined potential bias that can influence adult perceptions of children’s risk-taking to show how male practitioners’ preferences for excitement or sensation-seeking suggest that a ‘more liberal attitude’ (ibid, p. 434) towards children’s risk-taking behaviours stem from gendered commonalities in personality. Again, this is Norwegian data and, while Sandseter accepts cultural bias, there is room for further inquiry into the choices made by men (and women) to work outdoors with kindergarten-aged children as well as how gender disparity may impact on practice.

2.3.4 Typical influences: seeking summarised

By ‘Seeking influences’, my exploration of the ECE and OL literature has added to the matrix of characteristic features (Section 2.2). Thus far, I have explored children using natural environments in their preschool year, as encouraged and facilitated by their parents and caregivers, themselves agents of socio-cultural circumstance influenced by policymakers. That adults influence a child’s experience

is unquestionable, and in Section 2.3 my discussion of key ways that the adult's role manifests itself, notably around risk-taking, was explored. Research presents a perspective that is internally valid, or embedded, within the setting(s) being studied to beg the question: why do participants of nature-based practice, using what is objectively similar, physical environments, use them in different ways? The literature established to date may be due, in part, to research being conducted by researchers of the same cultural origin as the settings they explore. Beneath the surface layer and labels, there are considerations highlighted which are due to the social worlds that participants, and their researchers, engage in. Our knowledge of nature kindergartens lacks deeper understanding, and further interrogation of practice—for example, of phrases such as 'freedom to engage' (Brussoni et al., 2015)—is necessary to uncover any socio-culturally constituted premise upon which practices are built. For example, that opinions differ on when exposure to risk-taking may constitute acceptable or unacceptable practice, raises questions about how a practice that can be viewed as normal within some social groups is viewed with suspicion in others.

The extent to which transfer of practices (Section 2.2.5) interrupts participation in locally nurtured and accustomed ways is in need of scrutiny so that practices that resonate with local conditions will more likely be sustained. For nature kindergartens, a closer look at the significance of societal beliefs, motivations and judgements within the conduit adult, whatever hat they happen to wear— policymaker, parent or practitioner—is overdue. There is a need to resist categorising labels and phrases in order to consciously attend to this form of ECE.

2.4 Seeking outcomes: ‘Life comes from physical survival; but the good life comes from what we care about’²⁹

In my final section of my literature review, I galvanise the characteristics features (Section 2.2) and typical influences (Section 2.3) to complete the matrix that the preceding sections have formed. By ‘seeking outcomes’, my literature review continues to draw attention to unanswered questions: ‘What is a nature kindergarten?’ and ‘What makes nature-kindergarten practice the way it is?’ As literature continues to grow on nature-based learning, Forest School and the like, there is a need to continually validate why we do it. By exploring the reasons behind nature-based settings we may question what good they serve. In Section 2.3.3, I mooted that the ‘commonly shared focal point’ might be the goal of human–nature relatedness and nurture of a lifelong connection with natural environments. We have known for over a decade that there is a measurable impact of everyday outdoor experience on healthy child development (Bird, 2007; Mayer & Frantz, 2004) that is interdependent upon the health of our ecosystems and subject to the influence of the social construct of sustainable lifestyles (Moore & Cosco, 2000). More recently, an evidence-informed ‘Position Statement’ (Tremblay et al., 2015, p. 6475) states ‘access to active play in nature and outdoors—with its risks—is essential for healthy child development’ (ibid. p. 6475). From my social constructionist perspective of nature kindergartens (see Section 3.2.1) the construct of sustainable ways are ‘sufficiently shared as to be commonly understood’ (Schweisfurth, 2010, p. 407) and publications cited here place the onus for healthy children, developing with nature as a social responsibility.

To this end, Section 2.3 explores: shifting times, shifting childhoods (Section 2.4.1); resilience and approaches to challenge (Section 2.4.2); environmental

²⁹ This is a quote by existentialist psychologist, Rollo May.

stewardship through a love of the ‘great outdoors’ (Section 2.4.3); and finally, through exploring sense of place and sense of seasons I outline relevant place-based literature (Section 2.4.4), where ‘place’ comprises not only a series of attributes that make each nature kindergarten what they are, but also looks at participants’ attachments with these natural environments. Nature-based ECE places young children in immediate contact with our ecosystems and by seeking outcomes from this form of ECE, we may consider how local forces can shape the roles of quotidian nature and how conduit adults are constructed and enacted at nature kindergartens.

2.4.1. Shifting times, shifting childhoods

Constructions of childhood vary both within and across socio-cultural environments and time; indeed, Jenks (2000) states, ‘there is no essential child but always one that is built up through constitutive practices’ (p. 67). Key’s (1900) view of Nordic child-centredness (Kristjansson, 2006) has impacted on children’s rights (Therborn, 1993) and called attention to the significance of childhood for its future value to society (for example, Stearns, 2003). Specific to nature-based ECE, attention to cultural continuity is of interest for how values and dispositions towards nature environments will likely embed as young children grow to adolescence and adulthood.

I have outlined above (Sections 1.2.4 and 2.3.1) manifestations of the Nordic region’s affinity with nature. The literature, however, raises questions around whether such perceptions remain valid. Recent research (Sandseter and Sando, 2016) found shifts in traditionally relaxed attitudes of Norwegian practitioners towards children taking risks. A poll by The Danish Society for Nature Conservation reported parental opinions relating to their young children’s use of and attitudes towards natural

environments in comparison to opinions of a sample of grandparents (Paltved-Kaznelson, 2009). In three generations, a significant decline was found in the time children spent in natural settings, and while childhood experience in nature was perceived as positive and healthy, almost half the sample reasoned that the decline was the parents' doing. Similarly, in Norway, Skår and Krogh (2009) investigated changes in children's use of nature for outdoor play, and interviews revealed how use had changed from self-initiated, or free, play to more activities being planned, time-limited and controlled by adults. Nordic opinion on change in children playing outdoors is interesting as these Nordic studies are based on self-reported behaviours (Sandberg, 2003) and thus open to adult memories from when the reporting adults were children (Sobel, 1990).

Vadala and colleagues (2007) comment on Chawla's (2006) dismissal of links between how childhood play outdoors engenders environmental awareness in Norway on the basis that such pervasive human–nature relationships negate the need for further, overt provision. What I understand Vadala's critique of Chawla to mean is our (outsider) impression is that all Nords are outdoors all the time—doing 'that Scandinavian thing' (see Section 1.2.4)—so why do extra if a love of nature, its stewardship, is already embedded? The literature on a Danish form of OL, namely *udeskole* (outdoor school), while focused on children aged 7–16 years, adds to my argument that assumptions that countries comprising the Nordic region broadly share a positive ethos to the use of nature may be outmoded. Bentsen and colleagues (Bentsen & Jensen, 2012; Bentsen, Jensen, Mygind & Randrup, 2010) note how Scandinavian nations are perceived by others as pedagogical models in a European perspective (Rea & Waite, 2009) and as such have attracted international attention, yet there is also call for further research into the use of outdoor areas by Danish

teachers and their pupils. The Nordic region comprises separate countries and knowledge is needed by nation rather than assuming a universal, ‘Nordic norm’ (Section 1.2.4). In essence, shifting times and contemporary change could have more prominence in nature-based ECE research so as to affirm the view that people doing things differently in different places is inevitable and welcome and, in today’s liquid modernity (Bauman, 2013), I seek to locate nature kindergartens within the continual transforming and crafting of contemporary identities.

In Section 2.2.2, I used den building to explore unbidden, unstructured resources of natural, particularly wooded, environments. Hart (2012) returned to the site of his earlier study to find stark contrasts over time in both falling popularity and ‘freestyle’ designs less prevalent than pre-manufactured den kits. He concluded that contrasts were due to changes in family units, technology limiting available time and parental anxiety over safety limits of free play. Traffic dangers have also been reported as significant across several studies in Europe (Bringolf-Isler et al., 2010; Brockman, Fox & Jago, 2011a, 2011b), even when research is located in a semi-rural Norwegian locale (Skår & Krogh, 2009). Interestingly, Fraser et al. (2010) found in their survey of American opinions that American Indian and First Nations peoples, as well as older Americans, more strongly support the value of children’s nature experiences. Constructions of childhood, however, are a push–pull dynamic against and with technology, working parents and other family influences (Goldenburg et al., 2010). Such debate fuels my questioning that human–nature behaviours are rooted in socio-cultural practices and transmitted through people as much as through human–nature interaction. Contemporary research, in order to recognise any child as a child of its time and environment (Moll, 1990), must accept that today’s indoor and media-related attractions (or distractions) as inevitable (Monbiot, 2016). Research is needed

to explore outdoor unstructured activities, including risky challenges and den building in settings absent of other lures. By this I mean ECE research in ‘distraction-reduced’ (technology low) and ‘barrier-reduced’ (traffic and stranger-danger low) settings must occur to allay adult anxiety, and nature kindergartens offer this opportunity. Nature kindergartens are of interest for exploring how traditional values and dispositions towards nature environments may be introduced during contemporary, early childhoods.

2.4.2 ‘This is really tough and my finger is sore’³⁰: resilience and challenge

Resilience lies at the root of effective negotiation of challenge in that, in times of adversity, young children develop capacities to increase their developmental opportunities and coping strategies (Allan, McKenna & Hind, 2012; Masten & Reed, 2002). A view which grounds resilience in the foundational experiences of early childhood (Peterson & Tuppert, 2013) opposes psychologists who, by studying pregnant mothers, propose resilience in contexts of adversity which may come from prior generations (Siddiqui & Haggloff, 1999). This is an interesting angle for my study, which is open to considering the transmission of practices across generations. Doubtless, resilience derives from ‘a complex interplay of personal and environmental factors rather than a single quality of set of traits’ (Allan, McKenna & Hind, 2012 p. 10), and most recently, knowledge has advanced of this ‘interplay’ to address how reactions and recovery are influenced by contextual factors (Obradović, 2016). Studies, therefore, that explore both internal and external contributing factors to levels of resilience are of particular interest to me as such literature sees human as

³⁰ This heading is extracted from a conversation (7.4.2010) with a Scottish 5-year-old during her exertions in sawing a sizeable branch in two. The episode is discussed under Section 9.4.

inseparable from the environment and contexts (and previous generations) in which they act. In my study of nature kindergartens, the environments are ‘nature’ where man has had an impact (Kahn & Hasbach, 2013), for example, forests and woodland (Section 2.2.3), and my point is that human action cannot be separated from the physical environment in which such action is situated and, as such, can those physical environments contribute to observed outcomes?

In ECE, play in itself acts across several adaptive systems to contribute to resilience and the form of children’s environments is noted as key (Lester & Russell, 2010). Relationships—adult–child as well as human–nature—are a key focus in resilience research (Peterson & Tuppert, 2013). Strategies effective in enhancing resilience have been noted in youth development and social work in outdoor environments (Ungar, Dumont & MacDonald, 2005) as well as adventure education (Neill & Dias, 2001). One study in the field of youth work found that students, in contexts of adversity and challenge, developed ‘internal assets’ (Beightol, Jeverson, Carter, Gray & Gass, 2012, p. 318) when they felt emotionally and physically safe. While this characteristic of practice is well deployed in adventure and adolescent literature, the relative lack of research attention in ECE may be indicative of difficulties for researchers in getting the youngest members of society to express how they feel. By speculating that new knowledge is a methodological challenge for ECE, I admit to being inspired by a suspicion of links between past and present, surface and deeper layers, yet unveiling such linkages are fraught, in a study of my scope, with epistemological and methodological challenges.

There is much overlap evident in the complex debate around resilience, challenge (as both positive and negative entities in ECE and OL) and the concept of

risk-taking (Section 2.2.4). Policy directives for ECE recognise rich outdoor environments (Education Scotland Vision and Values for Outdoor Play), yet state that children must be kept safe and secure (Department for Education, 2014). In societies where young children are considered to be vulnerable and in need of protection from harm, authors argue persuasively from a control perspective (Loxton et al., 2010). Recently, literature mentions positive associations between ‘risky play supportive environments’ (Brussoni et al., 2015, p. 6447) and children’s physical activity, social interaction, creativity and resilience. I am attracted to the term ‘supportive environments’ in that they comprise characteristics of the physical environment explored in my discussion of risk (Section 2.1.4), yet ‘freedom to engage’ (ibid p. 6647) suggests permission and control. Sandseter’s (2007) early work concluded a need existed for further research into how adults’ attitudes influence or restrict children to support my view that the conduit adult is a component of supportive and restrictive environments. Little and Wyver (2008) comprehensively reviewed studies since 1990 and interpreted the findings in relation to ECE. These Australian writers stress the importance of considering concepts—and this applies equally to resilience and risk-taking—within the larger context of children’s development. Research specific to nature-based ECE needs to focus on identifying and fostering a balance that is appropriate and sensitive to each child’s circumstances. Such commentary invites consideration of how perceptions of childhood may be framed by adults of the same culture and whether we anticipate that children will adhere to behaviours expected by those adults.

Children’s security, whether emotional or physical, remains paramount. Children in their preschool years rarely fit the presupposition of being the ‘adrenalin junkies’ or ‘thrill seekers’ apparent and debated in some outdoor learning texts

(Brymer, 2010), rather, more likely, they are the berry pickers after my own heart: their challenges, for example, a branch to saw; their fear, a wasp's sting. My reason for including a separate section on resilience, when I could have placed it in my risk section, is that this facet can be viewed as a desired outcome of nature-based experiences. While some recent literature (Tremblay et al., 2015) offers explanation for why more resilient children are a desirable outcome, the nature-based ECE literature remains lacking.

2.4.3 'Words without experience are just words'³¹

In this section I explore the role of nature-based ECE in supporting and assimilating children's nature-based experience with their environmental ethics. Many environmental concerns are long lasting, significant and persistent (Carr, 2002; Higgins, Short & South, 2013), and there is a need to foster solutions. Nature-based ECE may be a modest step, but has genuine potential to contribute to locally relevant solutions by arousing children's dispositions and senses through direct encounters (Pink, 2009). I interchangeably use 'environmental awareness' and 'environmental stewardship' to refer to the 'land ethic'³² championed by Aldo Leopold (1949), which is relevant for humans' relationship with land we share with the non-human, including animals, insects and plants. Kahn and colleagues (Kahn et al., 2012) in a study of 'technological nature', argue that encounters with nature during childhood establish a benchmark against which they measure environmental degradation in later life. Each subsequent generation, however, establishes a diminishing benchmark resulting from damages inflicted by their previous generation. With my title to this section on environmental ethics, I am (once again) back to names and labels as simply words.

³¹ Title taken from Smith (2011).

³² Aldo Leopold's 'land ethic' defined a new relationship between people and nature to pave the way for the conservation movement of contemporary times.

Akin to Henderson and Parisien (2013), nature writer Robert Macfarlane admits his long interest in the connection between words and landscape has led him to compile a book of ‘nature words’ that have fallen from use and fallen from inclusion in the Oxford Junior Dictionary as technological words are more commonly found in childrens’ literature than nature words—newt, conker, bluebell, to list a few (Macfarlane, 2015a). He also notes, ‘For blackberry, read BlackBerry’ (Macfarlane, 2015b, para. 3)—my ubiquitous bramble (Section 8.2.1) pushed out of the dictionary by a smartphone. Our efficient, sustainable use of nature’s settings and resources, including the words we use to label them, needs rethinking as there are shifts in forms of human relations with nature.

Early childhood has been recognised as a key stage in the shaping of later dispositions and choices (Bixler, Floyd & Hammitt, 2002), and claims abound that time spent with nature in childhood pays dividend in positive attitudes towards natural environments in later life (Bogeholz, 2006; Chawla, 1998, 2007, 2009; Davies, 2010; Müller, Kals & Pansa, 2009), including increased knowledge of environmental concerns (Fägerstam, 2012a, 2012b), and by this premise, those children who have first-hand experience of nature will better appreciate what it means to protect nature and live sustainably (James, 2007; Müller et al., 2009; Vadala, Bixler & James, 2007; Wells & Lekies, 2006). There is also evidence, however, that the correlation between environmental awareness and action is not automatic (Rickinson et al., 2004), and concern is expressed about a dearth of attention to the ways ECE is involved in environmental stewardship (Hägglund & Pramling Samuelsson, 2009). Authors note the role of memory (Sandberg, 2003; Sutton, 2000) and historical associations with place (Gruenewald, 2003; Stewart, 2008) while Waite and Goodenough (2016) write of empathy. However, as mechanisms for the development of one’s care of the

environment, Chawla's (2009) work reaches an understanding of how a child's active care for nature develops by examining factors that contribute to such care. Of note for my study, she highlights the contribution of adult socialisers whom, within the context of their surrounding socio-cultural environment, are important in leading children towards pro-environmental commitment through beliefs in their 'personal or collective ability to execute action' (Chawla, 2009 p. 7).

Arne Næss, who coined 'deep ecology' (Næss & Rothenburg, 1989), says in Gurholt (2014) that his principles over humans' relationship towards the environment are rooted in his childhood observations of local marine life and mountains. Næss felt humans had the capacity to live in enduring, sustainable ways (Næss, 2002) through knowing nature intimately. For me Næss's philosophy, or Ecosphy T,³³ sheds light on the key potential for developing children's local knowledge in simple nature at an age when they appreciate 'the world-as-it-is more than a desire to change it' (Plotkin, 2008, p. 63). While important that today's children appreciate a global, rather than a solely local, perspective (Bourn, Hunt, Blum & Lawson, 2016), there are calls for careful handling of global, often abstract, environmental themes to avoid mere transmission of information. Henderson (2014) laments that 'Too often, all folks hear and read are stories of epic proportion' (p. 215) and environmental education through catastrophe may overwhelm young children, risk premature abstraction (Coffey, 2001) and serve to nurture pessimistic outlooks or anxieties rooted in ecophobia (Strife, 2012). It is beyond the scope of my thesis to debate the acquisition of environmental knowledge in childhood, but my nature-based ECE discourse is fruitful for looking at how young children acquire and cultivate positive attitudes towards their natural learning environments. Indeed Sobel (2008), who reminds us 'no

³³ Næss gave the name 'ecosphy T' to his personal philosophy comprising ecology, philosophy and Tvergastein, the name of his writing cabin in southern Norway.

tragedies before fourth grade' (p. 41) hints that, for young children, a more appropriate route to environmental awareness than premature abstraction is through the gradual introduction of concepts—start local; global afterwards.

Ahead of my teaching career, I was a Chartered Surveyor. My final job in that profession was in the London office of a multi-national company. The company's tag line—'Local knowledge, globally'—has stuck with me. The tag's meaning was intended to reassure clients of the local knowledge that the company's staff had of wherever in the world that client may be. In my short exploration of environmental stewardship, I wish to return to that company's tag line, as my environmental premise 'start local, global afterwards' stems from it. In previous writing, I used a version of the tag, 'local practice, global curiosity' (MacQuarrie et al., 2015, p. 7) to express the theme of inquisitiveness between adults participating in nature-based provision in different countries. My aim beneath that heading was to explain practitioners as each being local experts taking their knowledge further afield to construct and reconstruct it.

Gurholt (2014) interviewed Norwegian youth, and while her argument recognised the importance of human relations with 'local' nature, similar inquiry into kindergarten-age children has not been thoroughly explored. Despite a close alignment between Education for Sustainability (EfS) and early childhood pedagogies (Arthur et al., 2008), the wider sector 'has been slow to engage with EfS' (Davis & Elliott, 2009, p. 7). Nature-based practice, as I have justified above, is not the 'wider sector', yet the point to tease out from Davis and Elliot's (2009) opinion is consideration of what shapes the beliefs and attitudes towards 'nature' environments of those who use them. Environmental education in ECE attracts interest, yet research continues to highlight opportunities for deeper understanding in these fields (Cutter-

Mackenzie & Edwards, 2013). From their Australian standpoint, Davis and Elliott's (2009) call is for 'challenging the status quo', yet in Suomela and Parikka-Nihti's (2014) Finnish text, their benchmark is one of keeping sustainable ways the way they are. For my thesis, there is scope in such dimensions of contrast that indicate practice focused on local concerns and routines as an area of interest.

Rickinson and colleagues (2004) recommend children are provided with direct opportunities to engage with nature to develop memories of the outdoors (Brody, 2015) and develop mechanisms to understand environmental issues (Alexander & Hargreaves, 2007). I believe that nature kindergartens stand apart from mainstream ECE and that this form of ECE is uniquely positioned to meet such a recommendation. My situated, social constructionist perspective sees that if we are to cultivate 'a responsibility to conserve and restore our shared environments for future generations' (Gruenewald, 2003, p. 6) it will be through locally-specific circumstances. This is my sought final outcome.

2.4.4 Sense of seasons for sense of place

In reviewing seasonal and place-based literatures, one area of particular relevance was apparent: the amount and context of sensory experience. Colin Simms is a poet with two main foci: the observation of nature and the nature of observation. For him, *seeing* as opposed to *looking* is achieved via repetition or knowing accumulatively and this edict has him returning repeatedly to birds' habitats (Simms, 2015). The difference between *seeing* and *looking* for my study of nature-kindergarten practice is important, as in 'rich', nature-based learning environments, consideration is due of increased opportunities for participants to 'see' not only in a visual sense, but from olfactory and ocular perspectives too. Nature-based ECE, based

upon beliefs that an outdoor classroom enhances experiences as participants interact with nature first-hand, with all their senses (Jordet, 2007), is one form of ECE that can provide young children opportunities. Moore and Cosco (2000) see everyday ‘immersion in nature as a pro-health measure for children and the planet’ (p.6). There is literature to support the more direct experience with nature—that is, ‘actual physical contact with natural settings and nonhuman species’ (Kahn & Kellert, 2002, p. 118)—the better (Tremblay et al., 2015). What such repeated, direct experience adds up to is human attachment to a place. In turn, by having positive experiences — daresay, loving a place—at a local level during childhood, participants may cache qualities that are sustainable through their later lifestyles.

One outcome of human alienation from nature is what Louv (2005) describes as children’s diminishing use of their senses. From Louv’s writing I take the importance of sensory cues in establishing our sense of place. I reiterate here my belief in simple, quotidian nature—frost-nip and sunburn; rain; mud; fresh berries—that thread through my first two chapters (Sections 1.1, 2.3.2, 2.4) to draw attention to contrast as well as authenticity, close to hand, season-round. In response to increases in urbanisation, Maller (2009) urges schools to take responsibility for providing children with first-hand contact with nature and further work recognises value in everyday places (Maller, Henderson-Wilson & Townsend, 2009). Also, Kyttä’s (2006) ‘positive cycles’ concept of access for children to less structured playtime in natural environments impresses experiences upon children’s memories. A common element across the ECE and OL fields is that hands-on, direct experience is key. The amount of time available for contact with nature is significant and in relation to nature kindergartens needs empirical investigation.

For OL participants, Mannion et al. (2006) found significance in the duration of outdoor provision, while Phenice and Griffore (2003) found that ‘repeated visits to a natural place’ (p. 169) were capable of deepening a human–nature relatedness that accrues over time, and a young child’s ability to attribute meaning to natural places has been described (Mårtensson, 2004). As a researcher, my meanings were to be founded upon embedding myself in the environments used by others to see distinctness and singularity in their particular ways. Brown (2009a) foregrounds the role of the physical environment, saying, ‘to be “situated” is to be located in a place ascribed with social and cultural–historical meanings which combined with the physical features afford and constrain activity’ (p. 8). When taking a ‘situated perspective’, learning is considered as inseparable from its social, cultural, historical and political contexts. There is overlap here between situated, ‘authentic’ and place-based or place-responsive literature. For my study, I see place-based discourse as using features inherent to the pedagogical environments, namely, forests and woodlands (Section 2.2.3) in which nature kindergartens locate.

2.4.5 Have trees ‘cast their spell’³⁴: fantasy, folklore, fairies and fuel

Literature on place-based pedagogy continues to grow and encompasses place-based (see Sobel, 2004), place-responsive (see Wattchow & Brown, 2011) discourses. My exploration of place is from an unusual direction that is nonetheless a direction apt for a study of kindergarten-aged children: fantasy and folklore. Here, I also return to Ting-Toomey’s (1999) metaphor ‘culture is an iceberg’ (p. 2) to contextualise the cultural reproduction of traditions, values, dispositions and ways revealed by the ECE and OL literature. I choose to cherry-pick the literature to explore how the

³⁴ Giono writes of when amongst ‘young trees in their fullness of health, and they cast their spell’ (Giono, 1985, p. 6).

maintenance of traditions through folklore contributes to a sense of place. Place-based literature states outcomes including, capturing the minds (Beames & Brown, 2016) and achieving this in ECE through fantasy, creativity and storytelling (Simpson, 1988) and the like may increase the likelihood of instilling a love for, rather than fear of, the planet (Sobel, 2004).

Woodlands have significant impact on human emotion; evoking feelings of excitement, adventure and curiosity in children and what they might find (Henwood & Pidgeon, 1998) to release ‘the untrodden tanglewood of the imagination’ (Maitland, 2012, p. 5). Folklore and fairy tales contain elements of magic and enchantment to draw connections with woodlands that offer the opportunity for imaginative readings of physical locations in young children’s imaginations (Carroll, 2012). It has been noted how old Celtic literatures carried environmental teaching messages including the best wood for firewood (Anderson, 2013). In thinking about what trees offer a place-responsive reading of folklore and how each individual may utilise that offer, I return to Hans Christian Andersen’s fir tree (Section 1.2.2) and how it is chopped down for firewood. My point of a discussion of fantasy in my section on place is to accept that while these are highly contrived scenarios—for example, when fairies leave letters for the children to find or a fir tree grows sad—they ‘capture’ young children’s imaginations and connect them to a place. There is a need to see value in ‘karabiner-free’ nature-based ECE and appreciate ‘quotidian nature’ (Kahn & Kellert, 2002, *xvii*)—the extraordinary in the ordinary and elementary, and the direct and immediate (and the fantastical!) simply to hand (Section 1.1).

2.4.6 A summary of ‘seeking outcomes’: What’s the point?

By ‘seeking outcomes’, my intention was not to be outcome-focused per se, but rather my aim in interrogating the literature lay in considering outcomes both for participants and environments. Outcomes that are dominant in the ECE and OL literature have been explored. The literature identifies numerous constructions of nature-based practice, good childhoods and the value of the former to the latter. Equally, the mitigation of biophilia (Wilson, 1986) and nature-deficit disorder (Louv, 2005) and taking care of the natural environment through building first-hand relations with it are themes in the literature. I also sought literature around place and discussed traditions relevant to different socio-cultural environments and childhoods through folklore and fantasy.

Ingold’s (1996) use of Shweder’s (1990) ‘intentional worlds’ (p. 2) is useful in theorising the ways in which nature is used as an ECE environment. Following his reasoning, natural outdoor environments and objects within them take on culturally constituted meaning through the ways that humans interact with them to form a validated blueprint of how things should take place as continually transmitted from one generation to the next (Ingold, 1996). This aligns with recent empirical research demonstrating that nature kindergartens, while heavily influenced by what a site affords in terms of its natural features, climate and other situated elements (MacQuarrie et al., 2015), cannot be disjoined from the habitual interactions of subjects (Shweder, 1990).

What is the point? Education is the point. There is a need to deepen our understanding across contexts and across countries in order to capitalise on a situated understanding of nature-kindergarten practices and promote discussion of the ethos, foundations and desired outcomes in an informed response to, ‘What is a nature

kindergarten?’ Environmental stewardship is the point. There is a need to understand how nature kindergartens can contribute to cultivating wonder in and a love of quotidian nature in young children for ‘a future of hope’ (Dunlap & Kellert, 2012, p. 14). While anecdotal accounts suggest that continuity may serve to embed relations (Louv, 2012b; Monbiot, 2016), OL research that incorporates this perspective is acknowledged as lacking (Humberstone, 2009), and empirical nature-based ECE research devoid of it. If, in this inquiry, I am to think about situated contexts and discrete layers, what is the best way to do so? The ECE and OL literature has pointed to possible methods and methodological challenges that may lay ahead in my thesis journey and through my use of a scoping exercise (Section 1.2.2 and 4.3), informed decisions were taken.

2.5 Chapter summary

What has my ‘critical and focused’ (Silverman, 2000) review shown? A substantial and convincing literature buttresses an understanding of nature kindergartens from both ECE and OL fields and, while helpful in establishing the context for this thesis, there is a dearth of empirical understanding at their intersection. Under scrutiny, the literature has revealed facets that I chose to order into three sections: characteristic features; typical influences; and outcomes, as appropriate to this form of ECE. My use of the word ‘seeking’ in the section titles allowed my review to be informed from a broad literature, recognise comparable practice and affirm that any fixed definition of nature kindergartens is flawed (Section 1.2.1). A summary of these three sections is next.

First, I sought characteristics of the physical environment that make nature kindergartens distinct in order to consider nature environments as a context for the

present study. I aimed to connect my narrow field—nature kindergarten—to directly relevant concerns in the broader research community. The literature I outlined in Section 2.2 has increased our understanding of features characteristic across nature-based provision: natural environments that are used by participants, be they adults or children, variously disposed to facing risks that everyday use of these environments inherently brings. In particular, wooded natural environments invite actions—and relationships with trees—likely absent in more conventional early years establishments; for example, climbing trees, cutting logs with axes and saws, whittling sticks with knives, making fires to burn the logs. In concert with the use of wooded, natural environments come physical, physiological and other benefits. I recognise describing benefits to the developing child as important, but when viewed in isolation I feel that solely extolling benefits may obscure, rather than illuminate, subtle underlying reasons for what makes nature-kindergarten practice what it is. In Section 2.2, I sought characteristics and learnt from the literature a level of understanding—a descriptive level—of the physical environment. The literature says little about how actors come to use these environments in their different ways. My section ‘Seeking characteristics’ influenced my research design and methods chosen by referencing the intertwined layers beneath the surface that need to be understood in order to inquire beyond popular labels and terms. Research that describes nature-based ECE and OL is useful, yet if interpreted without a deeper understanding of what influences practices, we are restricted to comment on the patterning of human–nature relations within and across a nature-based community.

Second, in Section 2.3, the deeper layers that I sought were approached by appreciation of the natural environment as more than mere backdrop to practice. This search was important to my thesis as I propose that only by looking beneath the

label—beneath a descriptive level—are we able to appreciate the mechanisms that influence the practices we see. If we do not understand how and why actors in a socio-cultural network acquire and perpetuate knowledge, then commenting upon dimensions of differences and commonalities is futile. If we do not understand the reasons behind action, we struggle to comment on influences that may be driving nature-kindergarten practices. The focus of Section 2.3 meant that I became aware of possible influences that mediate and drive nature-kindergarten practices in order to empirically study them.

My third section sought outcomes of nature-based ECE: outcomes for human participants, as well as outcomes for our natural environment. From the literature, we know we garner meaningful relationships with nature in many ways and the outcome or product of human–nature relations can take many forms. By ‘seeking outcomes’, I pinpointed that the purpose of my thesis was to understand what nature kindergartens do and what may influence what they do. For my thesis, ‘nature’ is the ubiquitous ingredient, and it is the literature on our use of nature environments for ECE and OL that positions my research to clarify what successfully reaching the desired outcomes might entail.

I end Chapter 2 by outlining the areas that I have explored in each thread (Sections 2.2, 2.3 and 2.4) to reiterate four worthy opportunities to which my research contributes, as follows:

1. There is a need for empirical description of the common core that epitomises nature-kindergarten practice and seeks to confirm it as a distinctive form of ECE through season-round, sustained relationships using local nature environments;

2. There is need for evidence of how patterned behaviours and socialised practices (embedded in adults and emergent or developing in children) can play a constitutive, rather than solely causal, role in nature kindergarten practices;
3. Our understanding of nuances, in the social, cultural and physical environments, that influence what is seen is under-represented in the ECE literature generally and nature-kindergarten literature specifically;
4. A record that truly looks, rather than simply describes, the utility of natural, notably wooded environments, has not been empirically evidenced in a way that systematically explores season by season, country by country, a nature-based community.

My early path to my thesis presented a broad set of questions: ‘What is a nature kindergarten?’ and ‘Why does nature-kindergarten practice look the way it does?’ and these two questions guide the principal aims of my study: to empirically describe nature-kindergarten practice and understand the reasons that practice might look the ways that it does. The literature I have reviewed in Chapter 2, as guided by these questions, focused on what has already been found regarding nature-based ECE and OL. Locating nature-kindergarten research for review was challenging, since this is a fledgling field, but the wider literature helped me identify issues that are under researched, namely, the first two opportunities numbered above (1 and 2). Existing literature has also helped reveal that methodologies and theoretical framings appropriate to my study will be those that consider nuances in social, cultural and physical environments (3). Further, I now know that my study design and methods call for approaches—methodological, theoretical and procedural—capable of

informing the multi-layered structure of nature-kindergarten practice across seasons. Aspects of context and practice call for a longer-term approach, between settings as a lens across seasons and across countries will likely have a more valid impact on our understanding (4). My methods chapter (Chapter 4) describes my observation protocol, applied over a 16-month period alongside interviews, conversations, visual and other peripheral data that most appropriately address the four research opportunities I identify.

Henderson (2007) thanks Scandinavian colleagues for words that help him understand human–nature relations. The visit that gave me the phrase *is I maven* (my favourite translation being ‘ice in the stomach’) also gave me so much more. When a word, name, label or phrase is used for what it communicates and when use comes before meaning, as according to Wittgenstein (1953), it is worth more than its literal translation and goes on to serve a situated understanding or ‘ways of knowing—and being’ (Charmaz, 2006, p. 396). Indeed, for me, recognition is key of how words—as colloquial phrases, as categorising labels and definitions—have different uses in different situations by different people and this realisation has served well the reflexive element of my thesis journey, and I return to this discussion as part of Chapter 3. In seeking to describe and understand risk, for example, the concept will be intrinsically passed through my cultural lens, and in doing so will call for an awareness of my own response to evidence and, thus, impact upon new knowledge. A reflexive approach is aligned with my interest in contributing to the nature-based ECE knowledge as reflexivity offers meaning appropriate to contexts. I see reflexivity as a methodological issue in that my awareness of my relationship to the field will add to my study’s authenticity.

My thesis now moves on to Chapter 3 to cover the ontological and epistemological beliefs that have guided my research of identified issues. In Chapter 3, I blend my stance as an inquirer, from one social world, with wider methodological considerations as required for reconstructing understandings of other social worlds and take into consideration my own contribution to my study—my own reality of meanings found in the subjective interpretations that I bring to this thesis. Having explored the relevant literature and the opportunities for my research, I present theoretical views that apply to ECE and OL which could be used for my research to explain, ‘What is a nature kindergarten?’ and ‘Why does nature kindergarten practice look the ways it does?’ I draw from social constructionism and Bourdieu’s (1977) concept of habitus, before moving on to Heft’s (1988) affordance theory and refer to other theoretical tools including Lave and Wenger’s (1991) *Communities of Practice*, to form a conceptual framework that will help to answer my research issues by teasing out nuances in the social, cultural and physical environments in which nature kindergartens are situated.

Chapter 3

Conceptual framework

3.1 Introduction

My first two chapters, Chapters 1 and 2, have made a contribution towards establishing the conceptual framework of my thesis by setting out the rationale of my study and positioning it in the existing literature as well as situating it and me within its context. As identified in Chapter 2, we have a grasp of how outdoor learning is enacted in ECE, however, the same cannot be stated for nature kindergartens. Empirical studies focused on nature kindergartens are scarce and consequently there are limits to our understanding of how and why nature kindergartens go about practice in ways that they do.

In Chapters 3 and 4, I develop the conceptual framework for my thesis by presenting my epistemological, ontological and methodological choices. I start with introductory comments (Section 3.1), including clarification of the terms that label my epistemology and ontology, which comprise my philosophical paradigm. I will also present my two research questions that stem from the existing literature and show how my questions are linked to that literature and my philosophical paradigm (Section 3.2). By explaining my choices of the theoretical tools (Section 3.3) that will help me to understand nature kindergarten practice, I show how my choices of theoretical tools suit my research of nature kindergartens and the ‘interpretive nets woven by individuals and groups’ (Marshall & Rossman, 1994, p.484) through social interaction (Silverman, 2011). For my study, I draw attention to how practices are differently shaped in relation to Bourdieu’s habitus (Section 3.3.1) and Heft’s

affordance theory (Section 3.3.2) to place my research enterprise within wider socio-cultural contexts. I have peppered other related theory and perspectives throughout my philosophical paradigm and theoretical framework sections to strengthen my position as well as account for my ‘ponderings’. I summarise the explanation of my conceptual framework to synthesise the ways that I use my philosophical paradigm and theoretical understandings to look at my data—that is, interpret what was seen, heard, smelt, tasted and touched across different examples of nature kindergartens—and summarise these ahead of my methodology in Chapter 4 and methods in Chapter 5.

3.2 Philosophical paradigm

I acknowledge that my worldview or philosophical paradigm is the bedrock of my thesis and profoundly impacts on my research enterprise (Corbin & Strauss, 2015; Denzin & Lincoln, 2000). I outline here how my study has been conducted within the philosophical paradigm comprising my epistemology (social constructionism) and ontology (my view of reality and being).

My research is seeking to describe nature-kindergarten practices to better understand what influences practice to look the ways it does. Of particular interest is how practices might be socially and culturally situated. My thesis is investigating dimensions of variation between examples of nature kindergartens in different countries that share a label. Waite and colleagues (2015) caution against a depiction of outdoor learning as a ‘homogenous entity’ (p. 2), warning that doing so is to accept one-dimensional descriptions of practice. In other words, I seek understanding of practices that are unique and singular rather than the more general and universal (Burrell & Morgan, 1979). To this end, I saw a social constructionist lens as one that

would accord with the multiple realities which depend on the social worlds of the nature-kindergarten participants who hold the constructions.

I pondered the myriad of available perspectives from which to look at my research and upon which to base my knowledgeable assumptions and predictions. From confusion came a gradual clarity that there is no ‘correct’ paradigmatic position to be ‘found’, and the particular lens through which I view the social world often holds ‘a distinct vocabulary, preferred research methods and shared explanations and conclusions’ (Walker & Loughland, 1998, p. 5). Epistemological and ontological reflection holds a central role in my conceptual framework, yet having to think in such terms was daunting. Time was well spent, however, in thinking about how to describe the way I, as researcher, saw the world. I thought about how I believe knowledge on relevant topics is created and shared; how I believe truth is defined; and consequently, how I interpreted my data.

3.2.1 Social constructionism and my research questions: ‘No man is an island’³⁵

My study of human action and human experience at examples of nature kindergartens is taken from the point of view that participants are subjects, situated in socially, historically and culturally constituted worlds. I see the social origin of meaning and accept that ‘meanings are constructed by human beings as they engage with the world they are interpreting’ (Crotty, 1998, p. 43) and recognise that the different worlds that different people inhabit constitute, for them, ‘diverse ways of knowing, distinguishable sets of meanings, separate realities’ (Crotty, 1998 p. 64). As a title, Donne’s line appealed to my social constructionist epistemology in that it

³⁵ Taken from John Donne’s prose work *Devotions upon Emergent Occasions*, published in 1624.

encapsulates the complexity of the development of nature-kindergarten practices relative to their contexts. 'No man is an island' emphasises our human connection both to the natural and social environments that we live in.

I found it useful to look at the terms, labels and 'distinct vocabulary' (Walker & Loughland, 1998) that define and explain the beliefs that guide my research, as it is the overlap and ambiguity of terms and labels that were at the root of much of my philosophical confusion. I start with the terms that label my epistemological approach, what I understand by it and what implications my social constructionist position has for my research.

Constructivism and social constructionism are labels for epistemologies that although different, are often used interchangeably (Crotty, 1998) and classified generically as 'constructivism' (for example, Charmaz, 2006). Indeed, some writers occasionally use 'constructivist' as an adjective (for example, Schwandt, 2007). I briefly reflect upon the different claims of these viewpoints, as understanding the core concepts is important for their impact on my methodology, methods and how I view my data (Crotty, 1998). Both constructivism and social constructionism see knowledge as constructed or created rather than discovered (Schwandt, 2003). While both constructivism and social constructionism claim relativist ontologies (Guba & Lincoln, 1994), constructivism sees individuals mentally construct through cognitive processes. Relevant to contemporary ECE, the field in which my study is located, Gergen (1985) recommends constructionism over constructivism for the latter's reference to a traditional Piagetian perspective on meaning construction by individuals. A rejection of Piagetian theory matters to my thesis because in the field of contemporary ECE, social interactions are seen as drivers of what young children learn (Anning, Cullen & Flear, 2009). Constructivism is typically accepted as a

psychological construct and social constructionism as a sociological construct, which is an important distinction for my research task in that the paradigm raises my awareness that ‘at different times and in different places, there are very divergent interpretations of the same phenomena’ (Crotty, 1998, p. 64).

Social constructionism proposes a social rather than individual focus (Young & Colin, 2004). A constructionist view of knowledge embraces a subtle realism (Hammersley & Atkinson, 2007) in that reality is socially defined in the subjective experience of everyday life by individuals interacting within society (Schwandt, 2003). Rather than acknowledging any objective reality of the natural world, social constructionism will allow my study to make sense of different groups using outdoor environments by embracing ‘the way things are’ (Crotty, 1998, p. 64). My belief in social constructionism over constructivism is no glib claim, and I turn next to reflect on the epistemological significance of social constructionism and ontological realism on my research and the implications I stand by.

‘How will we know it’s us without our past?’³⁶

Guba and Lincoln (1994) raise the question ‘What is the nature of the relationship between the knower and what can be known?’ (p. 108). In response to their epistemological issue, I turn to exploring three key assumptions of social constructionism as, in doing so, I can consider whether knowledge is something that can be acquired or has to be personally experienced to justify the relevance of such reasoning to my study. The first key assumption of social constructionism is that our ways of knowing are founded in everyday lives (Shotter, 1993). Second, as an

³⁶ Taken from John Steinbeck’s *The Grapes of Wrath* (Steinbeck, 1939), this heading is a quote from a displaced, migrant farmer heading from Oklahoma to California. Steinbeck’s novel was written at a time when Dewey was seeking to reform education in light of societal change in America and the rejection of his views by conservative Froebeliens.

epistemological viewpoint, social constructionism is one permeated with values and constructs that are part of one's worldview and not readily visible to ourselves (Schweisfurth, 2010). Third, and finally, I explore the context of experience. Just as the nature-kindergarten participants under study are each part of a context Flyvberg (2006), regarding case study research, states

research itself constitutes a context and the researcher [is] a part of it. The researchers' self-understanding and concepts do not exist in a vacuum, but must be understood in relation to this context. Context both determines and is determined by the researchers' self-understanding. (pp. 32–33)

My title to this section is used to exemplify the roles of the contextual and the agential in my study. Steinbeck portrays how an individual's connection to a place can shape identities to constitute who we are. Steinbeck's quote also speaks of a social connection, and I believe nature kindergartens live by this philosophy of community and I, myself, am a part of it through my research. My study is one avenue by which we might better understand nature kindergarten by looking between examples for commonalities and differences that highlight socially constructed facets of this form of ECE. I see it necessary to deconstruct nature-kindergarten practice in order to foreground conjecture to a universal, 'one-size-fits-all' conceptualisation.

First, the everyday. I believe people and place are interconnected in their everyday circumstance, where all knowledge—including of taken-for-granted everyday realities—derives from and is perpetuated by social interaction (Berger & Luckmann, 1966). For my study, seeing social constructionism as the name for an epistemology that draws on an 'everyday, uncontroversial, garden-variety

constructivism' (Schwandt, 2007 p. 197) made my acceptance of it straightforward. Understanding how social, cultural and historical aspects amalgamate to surround nature-kindergarten practices and appreciating how people and place are interconnected is important in acquiring knowledge about this form of ECE. From a social constructionism stance, as I suggest in my introduction, 'no man [sic] is an island'.

The second key assumption of social constructionism is that knowledge is permeated with values (Rouse, 1996), and my own values play a part in the dynamic as my epistemology informs all dimensions of my research task. My love of the outdoors and my belief in its beneficial value made my interest in researching nature kindergarten straightforward. At this point, however, it is important that my own biases—and my social constructionist views inherent to my own personal values and the relationship that I have with the object of my study (Gergen, 1985)—are clarified. My social constructionist view, and my research designed from this mindset, is one that extols neutrality by respecting the complexities of human experience. I think of my thesis as the culmination of many enjoyable years using the outdoors, at times alone, at times with others, that have contributed to my epistemological ways. That said, my thesis requires research outcomes that are useful, credible and transparent. I want to recognise and celebrate multiplicity, and social constructionism allows me to do so without compromising the personal foundation on which my study is built. Even as a reflection of my personal biography, my attitude towards nature never felt as though it ran so deep as to be part of my cultural norm, and herein lay an opening.

Shepherd (1997), in arguing around nationality, says, 'who denies that the geography of the land they inhabit holds people together and makes them what they are?' (p. 116). I understand his words to mean practices are rooted in relationships

between people and the physical environments. Shepherd (1997) adds, ‘you can stand in the up-and-down country of Wales and sing to the mountains and listen to the echo coming back, and feel as clever and emotional as a Welshman’ (p. 117). I want to disagree. Shepherd is not a Welshman, yet he claims he feels Welsh, just by being there. Such sentiment is opposed to how I felt when living a year in Snowdonia, North Wales, as well as how I felt during visits to Nordic countries. Thinking, and living, relationally with our physical environment is central to understanding observations in relation to the socio-cultural positioning of events (Grenfell, 2008).

Indeed, the value for my study in comparing examples of nature kindergartens rests upon a juxtaposition of new, strange, known and exotic. My explanation here is helped by an aside. A recent book *New Finnish Grammar* (Marani, 2011) is an English translation of a manuscript by an amnaesiac Italian soldier who was mistakenly identified as a Finn. The tale helped me understand how observed actions and practices can be more than simple manifestations of others’ experiences and opinions. The following paragraph expresses the depth to which nature is rooted in Finnish culture; in this example through the country’s language:

The forms of a language inevitably have repercussions upon the speaker, it is they which mould his face, his land, his habits, where he lives, what he eats. The foreigner learning Finnish distorts his own bodily features; he moves away from his original self, may indeed no longer recognise it. This does not happen studying other languages, because other languages are merely temporary scaffolding for meaning. Not so for Finnish: Finnish was not invented. The sounds of our language were around us, in nature, in the woods, in the pull of the sea, in the call of the wild, in the sound of the falling snow. (Marani, 2011, p. 53)

The extract from Marani supports my disagreement with Shephard (1997) as the sentiment I interpret from it is that being from a country may be more than a visible (or audible!) manifestation. Thinking this way is also useful in that it helps to understand why my study, in taking a description of nature kindergartens beyond a surface layer, is vital. The final sentence of Marani's extract is a metaphor to express the dialogical process between me, as researcher, and what I encounter in the socio-cultural as much as the natural environments where nature kindergartens and nature-kindergarten participants are situated.

Thus far, I have described two key assumptions of social constructionism to justify the relevance of this lens to my study. First, a view of nature-kindergarten practices in the everyday terms. Second, social constructionism is a worldview that can see nature kindergarten practices as permeated with values. The importance of the context of experience is the third key assumption of social constructionism that signals its epistemological suitability for my study. It is important to widen discussion to the physical, natural environments where practice occurs as context of experience is often adopted within outdoor-learning research that 'promotes the intrinsic value of all life, now and into the future' (Davis & Elliott, 2009, p. 14), and that we must not overlook that our lives today are 'lived amidst that which was made before' (Meinig, 1979, p. 44). Behaviours are acquired and internalised, becoming 'normal' or conventional, as Bourdieu (2000) states, 'caught up in it, bound up with it, [and] feels at home in the world because the world is also in him, in the form of *habitus*' (p. 143). Equally, Ingold's (2000) use of Jackson (1989) is salient in that:

By using one's body in the same way as others in the same environment one finds oneself informed by an understanding which may then be interpreted

according to one's own custom ... yet which remains grounded in a field of practical activity and thereby remains consonant with the experience of those among whom one has lived. (p. 135)

A way that sees difference and commonalities in our interpretations of nature environments is important regarding nature kindergartens as such patterning has not been reflected in ECE. I believe Bourdieu's '*habitus* is not expressed in practice, it rather *subsists* in it' (Ingold, 2000, p. 162), and with this theoretical tool my thesis was able to move ahead and will be described in due course (Section 3.3.1).

I choose to acknowledge the Froebelian origins of kindergarten education (Section 1.2.3) and the progressive thinking of Dewey (Section 3.4) as both these educationalists have played their part in the institutions that are today's ECE and OL systems. The key ingredients of ECE and nature-based outdoor learning are relevant, yet my thesis aims to understand differences and similarities between examples by capturing variation in practices and asking *why* children and adults at nature kindergartens actually do what they do. To do so from a social constructionist perspective, knowledge cannot simply be based upon what was seen, heard, smelt, tasted and touched by comparing 'what are the children *doing*?' as to do so is merely the facade, the visible—the 'tip of the iceberg'. Everything that nature-kindergarten participants, as well as me as their researcher see, hear, taste and touch is tested against our prior knowledge to form new knowledge or strengthen our existing knowledge. There is no, one truth or valid interpretation (Crotty, 1998), as different, accustomed dispositions and cultural nuances passed between generations influence what is observed. Social constructionism helps me to see how shared sensibilities when using nature for ECE, while embedded in socio-cultural processes, are specific

to particular times and places as revealed at different nature kindergartens, season round.

I began my PhD with the aim to better understand ‘What is a nature kindergarten?’ and as part of my introductory chapter (Section 1.2), stated my research questions. Thus far, by reviewing relevant literature and by introducing my conceptual thoughts, I have presented reasoning from which two research questions follow to meet my original aim. My first question (RQ1) asks,

- How do nature kindergarten participants use nature environments for everyday practice?

Then, building on this descriptive account of what practice actually looks like at nature kindergartens, my study investigates why practices may look the way they do (RQ2) by asking the sub-question,

- What are the influences that shape the participants’ use of each nature environment?

For my research, as framed by my two research questions, I am aiming to investigate how participants at examples of nature kindergartens, across the seasons, spend their days, which means that different participants in different circumstances might hold different understandings. I accept that multiple realities exist within the mental frames or constructs and, as researcher, my role is to interpret these constructions to establish an informed construction that will include my own, etc construction (Schwandt, 2007). I can approach my research in the widest, holistic way that such answers demand because my social constructionist worldview allows a focus on: ‘quodidian everydayness’ (van Manen, 2013, p. 139) and value-laden contexts. Hence, my research questions could not have been arrived at without having established my social constructionist epistemology.

A social constructionist epistemology will help me to consider how everyday actions and pedagogical practices may be a consequence of a multi-layered combination of the individual, the social, the cultural and the physical environment that an individual lives with. My use of ‘everyday’ is purposeful in that it invites me to view how scenarios can manifest in varied and accustomed ways. Of particular interest to me is recognition of the ordinary, quotidian ways that set my study apart when such practices are seen as the combination of human–nature relationships in an outdoor classroom. From a social constructionist position, I can pursue an understanding of nature kindergarten practices which support the provision of opportunities for direct interaction with outdoor, learning environments as the sensory cues those environments afford nature kindergarten recognises participants construct their own meanings in their own ‘common worlds’ (Taylor, 2013, p. 73) that I was with them to interpret.

3.2.2 Ontological commitment to uncertain and dynamic relationships with nature

As stated above (Section 3.2.1), in questions of epistemology, Guba and Lincoln (1994) ask, ‘What is the nature of the relationship between the knower and what can be known?’ (p. 108). Regarding ontology, Guba and Lincoln (1994) ask, ‘What is the nature of reality?’ (p. 108). I see that realities are multiple and constructed, as reasoned above, but recognise realities as regulated by underlying structures or situated influences (Bryman & Teevan, 2005) where ‘*all* meaningful reality is socially constructed’ (Crotty, 1998 p. 55). In my aim to investigate how different participants of different nature kindergartens across the seasons spend their days, I need to look at these situated influences and meanings generated from them.

What I hope to find in the interpretations of different constructions of different participants are answers to my research questions. I want to reach answers, however, not through the description of some singular reality but rather through the investigation of competing and resonant circumstances of situated stakeholders with myriad realities (Robottom & Hart, 1993).

By way of explaining how I might achieve my investigation it is helpful to understand that the social realities in social constructionism refer to ‘the mode of meaning generation’ rather than being about ‘the kind of object that has meaning [and] the object involved in the social constructionist understanding of meaning formation need not involve persons at all’ (Crotty, 1998, p. 55). Usefully, Crotty (1998) explains his remark in terms of the objects in the natural world stating while ‘natural these objects may be, it is our culture ... that teaches us how to see them—and in some cases *whether* to see them’ (p. 55). My response to Guba and Lincoln’s (1994) question of the nature of reality is that my generation of the meaning of reality is always social as meanings ‘arise in and out of interactive human community’ (Crotty, 1998, p. 55). My nature-kindergarten participants and I will develop meanings together about the social phenomena we share and of particular use to my multicase study is to remind myself of its purpose by asking, ‘So what?’

Gergen (2001) encourages social constructionists to ‘participate actively in the interpretive conventions and practices of a particular culture’ (p. 5) and, as my study’s purpose is to offer an interpretive account of three examples of nature kindergartens, there is no intent to define, generalise, explain or seek a ‘truth’. Each interpretation is valid and has meaning when understood in relation to the cultural, institutional and historical contexts of experience as they are ‘created by means of a community narrative, itself subject to the temporal and historical conditions that give rise to the

community’ (Denzin & Lincoln, 2000, p. 178). The importance of this point to my thesis will involve consideration of how my inquiry will not only gain access to such narratives, but also of why is it important to our understanding of nature kindergarten that I do so (see Section 4.1.2).

Of advantage to the aims of my thesis was my belief in the proposition that outdoor experience is beneficial to the developing child as my love of ‘the great outdoors’ and recognition of its worth to humans, underpins my thesis. Within a social constructionist framework, it is important I stand back in order to reveal nature kindergarten without bias and ‘without contaminating the results with “leakage” from [my] own personal involvement’ (Burr, 2015, p. 171).

3.2.3 Summarising my philosophical paradigm and biographical blueprint

Constructing meaning is learning—there is no other kind of meaning. Constructionists have been termed anti-foundational for refusing to agree there are permanent standards by which truth can be universally known (Lincoln & Guba, 2000); yet, this paradigm, in recognising my view of the world, offered opportunities to intertwine theoretical resources into an appropriate framework (see Section 3.3). Social constructionism gave my thesis scope for knowledge to emerge through interactions with physical environments in the course of each participant’s experience in different societal contexts. Recognition of this view of knowledge is important to a thesis within education in that epistemological views play a part in one’s pedagogical views.

Social constructionism in education focuses on the construction of knowledge that fits our knowledge from existing experiences, rather than the discovery of a truth

‘out there’ to be discovered. Understanding is as individual as the participant *and* the context. In other words, there are multiple realities within a constructionist paradigm (Denzin & Lincoln, 2000), where individuals may construct different meanings or hold different values in relation to the same experience (Crotty, 1998).

In summarising my ontological orientation, I reflect on how my own biographical blueprint includes socialised practices, behaviours, beliefs and dispositions that characterise me. Doing so helps me to recognise how my own positionality will fundamentally influence the methodological procedures I utilise in my research. My positionality includes nationality, gender, marital status and upbringing. In particular, my positioning as a British researcher comparing nature-kindergarten practice across different countries rightfully attracts scrutiny. Aspects, including who I am and what I have grown up knowing and doing and thinking, may restrict my appreciation of those aspects outwith my social and cultural experience. Equally, given my own outdoor experiences, I, as researcher, must not assume, as highlighted by Mills (2004), that my position is identical to that of the participants. A Bourdieusian (1992) methodology recommends ‘redoubled epistemological vigilance’ (p. 92). His intention is to alert the researcher to situation-specific issues when describing and understanding the knowledge produced. Bourdieu’s perspective implies I approach my research not only mindful of preconceived notions taken from my own habitus, but also aware of the ways of the three societies when researching in those three societies. I, therefore, approach the description of each example of nature-kindergarten practice aware of my own habitus and am able to objectify my position, without having an objective view, in the research encounter.

With my purpose in sight and my philosophical paradigm settled, I turned my consideration to theoretical perspectives that would be useful in deciphering the web

of social realities and cultural considerations pertinent to my study. I sought a theoretical framework that could look at day-to-day practices while keeping sight of how such practices are patterned by social and cultural aspects that, in turn, may mediate the use of nature settings. It was essential to use a framework that would embed, rather than separate, the description of ‘how’ from ways of thought that may drive those actions—the ‘why’—as these thoughts and actions are interrelated and thread through my thesis. The next sections explain and justify the route I have taken: namely, Bourdieu’s habitus (Section 3.3.1), Heft’s affordance theory (Section 3.3.2) and some of my pondered theoretical possibilities (Section 3.4) of how to think about nature kindergartens in relation to my epistemological position. The theoretical resources that engage with different parts of my research are described in turn.

3.3 Theoretical framework

Theoretical tools were considered for how they admit the knowledge of others as well as my own in order to deepen my capacity for making sense of pedagogical practices at nature kindergartens. Principally, two theoretical tools help my study to answer its research questions: Bourdieu’s theory of practice, in particular his concept of habitus, and Heft’s theory of affordances. In my opinion, these were not choices but rather realisations of my social constructionist epistemology, as each nestle within a paradigm that sees knowledge and social action go together and are sustained by social processes (Burr, 2003) rather than being separate. With these theoretical tools, I will make sense of differences and similarities in nature-kindergarten practices that are situated in natural, physical environments and are the product of socio-cultural influences.

3.3.1 Finding Bourdieu

To better understand practice across countries, my thesis needed to attend to both the contextual (social and nature environments) and agential (human) in the worlds of both participant and researcher. For me, sociologist Pierre Bourdieu's reflexive and critical approach to social inquiry was a worthwhile discovery. Elements of Bourdieu's work, notably 'habitus' (Bourdieu, 1977), as applied to my educational context of nature kindergartens, could be relied upon to account for the possibility that social and cultural narratives may mediate how children and adults, situated in different socio-cultural environments, differently and similarly use nature environments.

While Bourdieu wrote extensively on schools and education (see Bourdieu & Passeron, 1977)—specifically how habitus is shaped and helps shape pedagogical practices in schools (Webb et al., 2002)—he has a weak presence in early childhood research. Current understandings of nature-based practice ECE may be missing a valuable opportunity for research by overlooking his concepts within its broader agenda. I cherry pick theoretical tools from Bourdieusian theory for what these aspects offer my study in comprehending nature-kindergarten practices as singular and distinct, and in particular, by rejecting an absolute and universal reality.

The origins of Bourdieu's work lie in kinship and relations that are 'continuously practiced [sic], kept up, cultivated' (Bourdieu, 1977, p. 38). Rather than being one defined path, ways of 'being' are kept open by regular use. Bourdieu's (1989) understanding of knowledge, his keystone, is the 'two-way relationship between objective structures (those of social worlds) and incorporated structures (those of the habitus)' (p.vii). These conceptions are well suited to my theoretical framework as they introduce a theory of action. Indeed, Bourdieu's (1989) 'two-way'

conception of the social and the habitual help me to focus on analysis of differences and similarities in practices that are enacted and are of particular relevance to a study across different societies (Susen & Turner, 2013). Bourdieu and Passeron (1977) theorised individuals as actors embedded in the generation of practices and reproduction of social worlds, and this perspective can be used as a vehicle to look more implicitly at the complex layers beneath the observed surface. Hence, it was to Bourdieu's concept of habitus that I turned as it provides a framework to make sense of objective social structures by considering what people do in such structures and why they do it (see Webb, Schirato & Danaher, 2002). I chose to dissociate habitus from capital and field—the two other concepts in Bourdieu's theoretical triad—in order to use habitus specifically as a theory of practice. I did so because I was interested in how nature-based education contributes to human-nature relations rather than its role in any political movement arguing the government or reform of ECE.

Habitus

Habitus can be seen as 'the way society becomes deposited in persons in the form of lasting dispositions, or trained capacities and structured propensities to think, feel and act in determinant ways, which then guide them' (Wacquant, 2005, p. 316). What is apparent from this quotation is the accord between the concept of habitus and how it helps my thesis to investigate nature-kindergarten practices across different societies. The concept has drawn attention from various disciplines and within this body of literature exists a conceptual spectrum taking shapes and forms too numerous to detail here. A brief synthesis, however, of the concept is useful as it helps understand how Bourdieu arrived at the notion that humans inherit, through experience, societal concepts which they then modify and generate into new versions appropriate to respective situations (Hillier & Rooksby, 2005).

Habitus refers to socialised and internalised tendencies towards certain behaviours and stems from the notion that human dispositions are social and generative to their core (Hillier & Rooksby, 2005). Sweetman (2003) expresses that habitus ought to be recognised as an adaptive rather than fixed construct; experiences generate information that is acquired and incorporated into ourselves and which stimulate and feed into our patterns of behaviour.

While there is some critique of habitus, namely, its lack of accounting for agency (Elder-Vass, 2007), this appears to stem from a misunderstanding of how habitus fits into Bourdieu's broader explanations of social worlds. It is not that Bourdieu's subject is 'a determined subject, devoid of choice', as Griller (1996, p. 21) suggests. Everyone is, of course, free to choose; it is, however, what agents are *able*³⁷ to do within the constraints of objective structures that actually counts.

My thesis is concerned with an understanding of social and cultural contributions to nature-kindergarten practices, and there was potential in Bourdieu's theoretical concept of habitus to reflexively meet this purpose. In part, the appeal for me stemmed from how Bourdieu deals with reflexivity. Laden with my own biases, beliefs and assumptions my research called for a self-critical approach, when my own instinctive tendencies towards certain behaviours were party to sharing and interpreting the socialised 'norms' of others. It was pivotal not only to find a route for my research to recognise such influences but acknowledge my own dispositions as previously mentioned (see Section 1.4) and as moved on to next through a discussion of my own habitus.

³⁷ I italicise '*able*' for a reason and will explain more fully below (see Section 3.3.2). In essence, to potential affordances, I choose to add 'able' to denote the option in the user of that affordance to actualise it or not. For example, tree sap is drinkable, but not all three cases chose to drink it (see Section 8.2.2).

The habitus of the researcher

During this research, I have seen an increasing determination in celebrating and disseminating nature-based practices and perspectives other than my own (MacQuarrie et al., 2015). Indeed, my own inquisitiveness and habitus have served my thesis journey well. Having studied for a degree and early career in outdoor education, followed by moving to Scotland and working in a nature kindergarten—what habitus has this provided me with? How steeped am I in nature-based ECE? What does this biography provide me with in terms of a route to understanding more about nature kindergartens?

My aim, by engaging with Bourdieu and utilising his concept of habitus, is to use the leverage it offers to add a new layer of understanding of situated practices and relationships with nature. Reay (2004) refers to ‘the most deeply buried structures of the different social worlds that make up the social universe’ (p. 431). Respecting such complexities positions my study to address examples of nature-kindergarten practices in, as Reay (2006) would say, their wider social identities comprised from both the past and present, the structural and agential. I would have personal reactions to what I experienced, but an awareness of the implications for my research of subjective judgements, rooted in the values that characterise me, was never lost by situating each observed situation, each participant account and all my own beliefs and values in the broader context. At the outset, I did not realise how little I knew about nature-kindergarten practices. At the same time, being open to knowing more was what mattered, and I knew my starting point.

Bringing together my theoretical framework thus far, it is clear that ‘knowledge’, however gathered, needs to be understood in relation to the context in which it is sourced. On its own, however, Bourdieu’s habitus does not adequately

encompass nature nor how the use of nature, as a pedagogical resource, might have cultural value. Nature-based contexts do not have a separate existence from the practices that reproduce the meanings associated with such behaviour (Ingold, 2000), hence viewing participants as actors isolated from context is not an effective strategy for a better understanding of nature kindergarten. When the research subject at issue is a nature kindergarten, there is an extra dimension—the natural environment—and this context calls for specific consideration. There is a need to explore behaviours at a nature kindergarten associated with cultural practices at a societal rather than ‘point of practice’ level. Wood (2000) asks that we accept that ‘physical and social environments are not simply “places” in which people act: they remain an integral part of their knowledge and action’ (p. 278). By taking the view that human knowledge is not independent of context, my study can examine the combination of person with context that results in everyday routines and practices. It is not my aim to describe ‘the peculiarities of some national character’, rather my interest is in ‘the particularities of different *collective histories*’ (Bourdieu, 1998, p. 2, original emphasis). Such everyday practices may then be considered, not as better or worse than other examples of practice, but as informing our understanding of how ECE using nature environments functions differently in different situations, so we may better judge new possibilities regarding nature-based education of young children. Partnering Bourdieu with affordance theory helps me in this aim.

3.3.2 Affordances: a path alongside Bourdieu

Combining Bourdieu’s concept of habitus to affordance theory is a supportable means for my description of human engagement with natural environments at nature kindergartens. My thesis is not to explain nature-kindergarten

practices solely through social practices, thus affordance theory allows a more precise analysis of nature-kindergarten participants' behaviours in my three examples. There is value in this marriage. Ingold (2000) successfully brings together contributions of Bourdieu with Gibson's work and argues that both men use, as a starting point, action or engagement between humans and their worlds to permit different ways of understanding how we perceive and use nature environments for ECE. I contend that affordance theory conceptualises the nature-kindergarten environments at a more subjective and situated level than a Bourdieuan analysis alone. Next, my thoughts on affordance theory and habitus are synthesised to demonstrate how a combined theoretical framework is more productive than a framework relying exclusively on one perspective.

The word 'affordance' and its meaning are open to considerable debate (Stoffregen, 2000). Both concept and debate stem from the late 1930s when James J. Gibson set out, from an 'interactionist' perspective, to understand how visual perception deals with and informs the brain on environmental objects. He viewed perception as a process of picking up information through action and exploration in a process that is, 'the looking, listening, touching and sniffing that goes on when the perceptual systems are at work' (Gibson, 1982, pp. 397–398). Gibson established the term *affordance*, from the verb *to afford* as 'a specific combination of the properties of its substance and its surfaces taken with reference to an animal' (1977, p. 67). Yet it is this definition, from an earlier version (Gibson, 1977) of Gibson's seminal text (1979) that left his work open to extension and development (Jones, 2003).

Gibsonian affordances have received a large volume of attention and have been widely used and on occasion misapplied and misinterpreted (Jones, 2003). It was

important, faced with such a contentious topic, to focus my discussion on work relevant to ECE and OL. I, therefore, outline the background behind the interpretation of Gibson's original ideas that have shaped the way interaction and play are viewed when observing young children. It is Heft's (1988) use of Barker (1968) that adjusted Gibson's position into a version of affordance theory that looks to have most salience to my thesis. In effect, Heft (1988) extends Gibson's theory to social behaviours and group settings and this could be used to emphasise how nature's contribution to practice can be mediated in its roles as setting, as resource and as educator within locally situated pedagogical practices.

The ways that Heft (1989) argued against the basic, theoretical stance held by Gibson is beyond the scope of my study. What is of relevance is how Heft (1989) extended Gibson's basic concept of affordances by distinguishing between *potential* and *actualised* affordances. *Potential* affordances are defined as the 'potential functional properties of an environment' (Heft, 1989, p. 25), whereas *actualised* affordances are those perceived, used or transformed by an individual (Heft, 1989; Kytä, 2003, 2004). Gibson covered potential and actualised in his own way, but Heft's (1989) position is useful when seeking to describe and compare the use of nature environments by different social groups because wider influences are not marginalised and held apart (Heft, 2013). I believe that human intentional action is, for the most part, imbued with socio-cultural meanings (Heft, 2003) in a viewpoint that appreciates that processes of cultural and historical significance play a constitutive rather than solely a causal role in human-environment relationships. In this interpretation of affordances, the 'climbable' tree, for example, is not viewed as a universal natural feature common to each nature kindergarten. Rather, the 'climbable' tree is a potential resource or singularly constituted feature in the environment that

will afford climbing subject to the perceiver's, and their caregiver's, culturally situated 'history of engagements with the environment' (Heft, 2003, p. 158) and the human–environment relations that that history has contributed to.

Ingold (1992) posits that only humans perceive *and* design from raw materials and, using the example of a stone, he says an animal may perceive a stone for one distinct purpose, whereas a human 'will perceive a stone, which can be [many] things and much else besides' (Ingold, 1986, p. 3). This is a useful view of affordances in that it extends each participant's perceptual experience beyond mere awareness of an object to its functional significance. Features of nature environments are, in effect, a canvas awaiting use for pedagogical purposes and are 'not defined in terms of perception per se, but in terms of action' (Stoffregen, 2000b, p. 94) or behaviours that the use of that feature is influenced by. This is not to suggest that the feature is neutral, nor the canvas blank, but rather takes a situated view of affordance as an open invitation that means what each individual does with it is uniquely dependent upon that person in that situation.

For my thesis, there is value in combining Bourdieu and Heft in that both pursue analysis of the structural and agential worlds. Through these two theorists, the relationships of different groups with different natural environments is foregrounded. Seeing affordances through a Bourdieuan lens will allow my research to explore socio-cultural aspects in participants' perceptions of their nature-kindergarten environments.

3.4 Other theoretical tools

My research can benefit from other theoretical tools. I use two 'Other theoretical tools' that, rather than central to my theoretical framework, support its

endeavour through their various lenses. First, I use Merleau-Ponty to support the idea that sensory ethnographic experiences are embodied (Pink, 2009) and therefore attend to a limitation in the concept of habitus and affordance. Merleau-Ponty (1945) saw the foundational role of perception in our understanding and engagement with the world, and for my thesis, his sensorial turn does so while giving further agency to the natural environment. Second, Dewey's concept of habit is recognised through its relationship with Bourdieu's habitus.

My theoretical framework has been written, rewritten and tightened after data collection and with a reflexive eye. By thesis submission, my experiences as a researcher will have combined with my experiences as an outdoor educator and enthusiast, and I present a reflexive account that appreciates the views and ways of other people living in other climates who have helped me through the length of my thesis journey. By thesis submission, I will have come through conditions of -35°C in the Finnish winter, the midge-infested woodlands of a Scottish summer and a dose of giardia contracted through muddy Danish water that had my body 'cannibalising itself'.³⁸ I have shivered, itched and ached my way through this thesis. By thesis submission, my experiences as a researcher will have resonated with that of the participants—variously shivering, sweating, feeling hungry and heading home in clothes infused with wood smoke, and that our shared practices are embodied signalled a clear need to review and pay heed to the corporeality of nature-kindergarten practice. It would be churlish, therefore, not to consider Maurice Merleau-Ponty—the philosopher of the flesh (Evans & Lawlor, 2000)—and I question why, given my thesis speaks of a sensorial lens from its outset, I had not paid attention sooner.

³⁸ Becca Cahall: www.youtube.com/watch?v=4NJE3hUgqQ

Embodiment, for me, thereby came to be valued in a way that could have had application to this research. Merleau-Ponty's notion of the habit-body suggests that through 'sensory comprehension, the body is impressed and modified by the world around it, and thus acquires a system of dispositions attuned to surrounding regularities' (Twigg, Wolkowitz, Cohen & Nettleton, 2011, p. 181). Past experiences etch upon the body a blueprint that predisposes participants and researcher alike to react to new experiences relying on previous experience to guide our responses. Merleau-Ponty's work is fruitful to my thesis for what it offers when interpreting experiences of participants. Merleau-Ponty's phenomenology grasps my ontological position forwarded in social constructionism through seeing embodied practices within a culturally, socially and historically shaped space.

Traditionally, perception is analysed via Cartesian dualism (see Phipps, 2006), which Ingold's dwelling perspective overcomes by seeing that the world only becomes meaningful through being inhabited, through activities and through practical engagements (Ingold, 2000). Ingold dissects the distinction between biology and culture in his attempt to

recognise that such processes as thinking, perceiving, remembering and learning have to be studied within the ecological contexts of people's interrelations with their environments ... the mind and its properties are not given in advance of the individual's entry into the social world, but are rather fashioned through a lifelong history of involvement in relationships with others. (p. 171)

As Ingold (2000) recognises, it is important to interpret my data within a cultural, social and historical backdrop. Sensory ethnographer Pink (2009) talks of how our sense—as mediators between object, self and environment—are constructed and lived differently across situations and time. She posits perception as cultural rather than solely as an individual’s cognitive mechanisms, and accepting perception as culturally specific would help my inquiry by helping the reader to experience as I have. Myself as the means to the end in this research endeavour would be, ‘Relying on all its senses, thoughts, and feelings, the human instrument is a most sensitive and perceptive data gathering tool’ (Fetterman, 1989, p. 41). Ingold pays attention to perception as well as experience and positively evaluates Bourdieusian theory for its focus on humans’ practical activity (Ingold, 2000, p. 162). Indeed, a turn to Bourdieu allows my inquiry to understand sensory engagements between participant and nature environments in a way that might appreciate socio-cultural influences.

John Dewey’s work had a profound influence on understanding thought as a product of active interaction with environments (Reese, 2001). His broad insights have been seen as ‘the ultimate tool, a do-it-all Swiss army knife ready for any job at hand’ (Shook, 2009, p. 61) and, appropriately for my ECE focus, his work shows affinity with that of Froebel (Provenzo, 2009), whose ‘children’s garden’ metaphor was the origin of the kindergarten. Dewey’s (1899) vision for schools was inextricably tied to his notion of the good society (Ravitch, 2001) and his theoretical principles on experience and education regards habit can be applied to my thesis in one specific way; namely, his view of the centrality of social interaction to experience (see Ord & Leather, 2011) in the world that that learning takes place in and this supports the notion of adults as conduits (Nugent & Beames, 2015). Crossley (2013) compares Bourdieu’s (1977) concept of habitus with the concept of habit, as

formulated by Dewey. In essence, Dewey's habits are 'cultural resources displayed in the conduct of individuals' (Garrison, Neubert & Reich, 2012). For Bourdieu, the habitus is in the foreground to understanding the reproduction of practices both at a societal and subject level. The two concepts invite comparison, however, unlike others (Colapietro, 2004) for whom exploring affinities between the two concepts suffice, Crossley's (2013) purpose is to draw out the difference between habit and habitus as unimportant. For my thesis, and important to my social constructionist stance, is a view that nature environments are in dialogue with humans. The role, therefore, of the non-human and the climate are prominent considerations, but also I see humans as linked to their pasts, including through their cultural and social make up.

3.5 Moving along the path from theoretical framework to methodology

My study of nature-kindergarten practices required a bespoke conceptual framework as questions were being addressed regarding humans, their learning environments and their socio-cultural worlds. My bespoke conceptual framework draws simultaneously from the philosophical paradigm of social constructionism and theoretical tools of Bourdieu's habitus and Heft's affordance theory to help me to closely attend to all aspects of my study within one framework. Together, social constructionism, habitus and affordance theory offered a way to inform methods with which to pursue my empirical endeavour. I believe that nature-kindergarten practices and their meanings are continually constructed and re-constructed through social interaction (Silverman, 2011) in ways that have not been empirically explored. A social constructionist lens permits my study to undertake such exploration. A Bourdieusian view of social life allows me to overcome positivism and any 'one label

fits all' understanding by uncovering socio-cultural aspects that explain why the evaluation of affordances may differ amongst different groups. My application of Heft's version of affordance theory admits the physical environment, including climate, as having a structuring impact on nature-kindergarten practices. Using affordance theory helps me to frame cyclical, repeatedly reconstructed experiences as well as ephemeral moments for interpretation. My chosen theoretical tools of habitus and affordance theory are fundamental to my study's eliciting of socialised ways embedded in the adult practitioners and emergent in child participants.

Beames and Telford (2013) pose 'How do cultural practices develop to the point of being unquestioned, and, perhaps more importantly, unquestionable, social norms?' (p. 80). From this starting point, Bourdieu's theory indicates a means of explaining variations in practice between nature-based settings that appear to use similar natural resources. Quotidian ways are often unmasked when comparisons are made with practice from other cultures (Fetterman, 1989), and Bourdieu's habitus helps my work create a 'space of distinction' (Bourdieu, 1984, 1998, 1999), whereby the reality of the social world is perceived, experienced and evaluated by individuals in different ways that relate to their social position (Barlösius, 2006; Fogle 2011). Reflexivity concerning 'space of distinction' is warranted, as it strengthens new knowledge by revealing value in the distinctiveness of its insights (May & Powell, 2008) and opening up discussion of socialised practices at nature kindergartens.

My inquiry has progressed to a point where 'the continuous interaction between the theoretical issues being studied and the data being collected' (Yin, 2009, p. 68) come to the fore. An explanation, therefore, of how my conceptual framework informs both my methodology and methods is the next logical step. Having established my beliefs as founded in social constructionism and developed my

theoretical propositions, principally Bourdieu's habitus and Heft's affordances, I am in a position to have these beliefs and tools guide data collection, analysis and verification. I consider my methodological choices (see Chapter 4) as the bridge between my social constructionist worldview and the epistemological and ontological beliefs that underlie my study design and methods (see Chapter 5). The actual procedures I employed to collect, manage, analyse and verify my data have congruence with social constructionism by being conducted in the everyday and focusing on the value-laden contextual character of the knowledge derived from my research. Social constructionism informs my multicase study methodology and sensory-ethnographic methods by embracing the reporting of how nature-kindergarten practices 'are seen and reacted to, and thereby meaningfully constructed, within a given community' (Crotty, 1998, p. 64). My research will describe nature-based practices at three examples of a nature kindergarten (RQ1), and my hope is that the description is more than a straightforward representation of reality as, in a social constructionist narrative, it is 'the voice of our culture—its many voices, in fact— that is heard in what we say' (Crotty, 1998, p. 64). More so, in a nod to Crotty, adopting sensory ethnographic methods will help my account represent not just that which is seen and heard in the realities of nature kindergartens, but that which is seen, heard, smelt, tasted and touched. Further, my study will empirically investigate what might influence such a description by looking between the three examples (RQ2) for influences in the natural and social environments.

Chapter 4

Methodology

4.1 Introduction

Chapter 4 comprises four sections outlining my methodological approach to addressing the aims of my thesis and, within one of those four sections, a further description of scoping that I introduced in Chapter 1. The philosophical paradigm and theoretical framework under which my study has been conducted have been established in Chapter 3, so following a short introduction my methodology chapter first describes my multicase approach (Stake, 2006) and its value to empirical understanding in my study's exploration of multiple examples of nature kindergartens. My social constructionist orientation has informed the methods I chose to use to collect, interpret and verify data, and I weave my theoretical framework with my empirical aims of understanding what nature kindergartens do and why the use of potential affordances at examples of nature kindergartens may be shaped by socially, historically and culturally situated dispositions. Ahead of Chapter 5, which deals explicitly with my methods, the final section of my methodology chapter shows how decisions taken were informed through scoping, in particular, the trialling of observation methods.

My foundational beliefs underpin the decisions made regarding my methodological approach and research methods. In Chapter 3, I have established my belief that nature-kindergarten practices are diverse and profoundly influenced by situation. I intend to empirically understand nature-kindergarten practices through an approach that tests my beliefs but also to provide robust grounds to speculate on similar practices in other situations. The next two sections describe a multicase study

approach (Section 4.2) and scoping phase (Section 4.3) that comprised a significant element of my study design. Mine is a complex study—three cases in three different countries, with each visited in each season. I found it necessary to refine my study design through an exercise I called scoping. In Section 4.4 I set out not only details of the rationale and necessary decisions made in scoping for selecting cases, but also how refining observation protocol was vital for capturing the aforementioned complexity.

4.2 Multicase study approach: seeking to understand the quintain

Use of the multicase study approach (Stake, 2006) for my study of nature kindergartens was introduced as part of Chapter 1 (Section 1.2.4). There I stated that seeking multiple examples or a ‘target collection’ or ‘quintain’ (Stake, 2006, p. 6) of nature kindergartens was preferable for my study, and I reiterate my preference in more detail here.

Thomas (2011) advises that any case study approach starts with one’s research questions as, ultimately, the aim is to answer these questions and do so in the best, most interesting way. Thomas’s view allows discussion of my reasons for the multicase study approach, in conjunction with the aims that my particular study strives to answer. I aim to better understand nature kindergarten by building a descriptive account, asking: ‘How do nature kindergarten participants use nature environments for everyday practice?’ In addition, I am investigating why nature-kindergarten practices may look the way they do by asking: ‘What are the influences that shape the participants’ use of each nature environment?’ My research, in seeking answers to my research questions from a social constructionist standpoint, aims to not only describe the dynamic interactions between participants and nature in the chosen

nature kindergartens, but also to better understand social and cultural contributions to practice. First, therefore, with regard to the aims of my study, the multicase approach was apt as there was value in investigating more than one case, as ‘in multicase study research, the single case is of interest because it belongs to a particular collection of cases. The individual cases share a common characteristic or condition’ (Stake, 2006, p. 4). Here, Stake is stating that a single case of nature kindergarten would, to an extent, be meaningful only in terms of other cases. In other words, achieving meaning requires me to inquire across cases.

In conceptualising my study, I have positioned myself in key methodological assumptions of social constructionism as they relate to nature-based ECE, and the philosophy that I stand by has influenced my thesis. In marrying Bourdieu with affordance theory (Section 3.3.2) within my theoretical framework, I can investigate differences and commonalities in the contextual and agential layers of nature-kindergarten practices to argue a potential explanation for why different examples of nature kindergartens differently evaluate and use nature environments. Bourdieu (1998) writes that to understand the social world requires us to

[plunge] into the particularity of an empirical reality, historically located and dated, but with the objective of constructing it as a “special case of what is possible”, as Bachelard puts it, that is as an exemplary case in a finite world of possible considerations. (p. 2)

To me, his words mean a description of nature-based ECE practices, as evidenced at examples of nature kindergartens, are mere examples of what is actually out there. Stake’s (2006) labelling of a group of cases that are bound together by common characteristics or core as a ‘quintain’ permits the collective to be studied as

individual cases for ‘complexity, and situated uniqueness’ (p. 6). By recognising each case as a ‘bounded system’ (p. 436) or, in other words, a ‘complex entity located in its own situation’ (p. 12), my study was designed to be ‘not so much a study of the quintain as ... a study of cases for what they tell us about the quintain’ (p. 7).

The multicase study approach has advantaged my study by enabling naturally occurring events in each setting to be studied under natural conditions (Denzin & Lincoln, 2000; Miles & Huberman, 1994), thus permitting an intricate examination of manifold interactions and relationships (Yin, 1991). A multicase study approach has facilitated my ‘interrogation of intricacies’ (Hantrais, 1996, p. 5) and satisfied the need ‘to gain a greater awareness and a deeper understanding’ of their features (Hantrais, 1996, p. 5). Indeed, in her work, Vasconcelos (2005a) describes her multiple case study of different early childhood settings as a process which “‘zoomed” into four settings ... to describe and “see” the issues’ (Vasconcelos, 2005a, p. 329). She notes that findings from that study evidenced details that could only have been found through a multiple case study approach (Vasconcelos, 2005b) because, despite common features, each case was intrinsically different (Stake, 2006). My section will now build upon such notions of intrinsic difference and singularity to detail how my application of multicase research can understand the phenomenon or ‘quintain’ by examining nature kindergartens in a manner that supports knowledge between cases.

That my study ‘looks between’ examples of nature kindergarten, however, requires clarification and this brings me to the second reason for using Stake’s (2006) multicase approach in pursuit of the aims of my study. Stake (2006) is clear that his multicase approach is not a design for comparing cases; rather selected cases are examples chosen for better understanding of the quintain. Stake (2006) states:

Comparison is a competitor to the probing study of a case. It is a grand research strategy, a powerful conceptualization, usually fixing attention on one or a few variables. In doing so, it obscures the situationality and complex interaction of case knowledge. (p. 83)

My evidence might report, but not give emphasis to, ‘attributes for comparison’ (Stake, 2006, p. 83), yet my sensory ethnographic methods (see Sections 5.2 and 5.3) will gather sufficient detail for my readers to make a comparison. Early on, out in the woods, I realised that there needed to be more to my account of nature kindergartens than merely describing actions and interactions. I realised that there was more to my inquiry than having dates in the diary to visit settings. There were undercurrents that suggested strata of social and cultural environments may influence observed practice and behaviours just as much as the dynamism of the natural environments where practice was located. I wanted undercurrents and influences, differences and commonalities to be embraced rather than compared in any assessment of right and wrong. In using Stake’s (2006) multicase approach, I accept that the selected nature kindergartens under study are special, exemplary cases in a field where flux is inherent; and my intention, congruent with my social constructionist view, is to increase understanding of the selected cases rather than make ‘some grand comparison’ (Stake, 2006, p. 83).

Lock and Strong (2010) see social constructionism as ‘a work in progress’ and ‘a broad church’ (p. 6), both of which suit my research—including the scoping element—as they admitted the opportunity to work with an unclear, emerging grasp of understanding until clarity develops. For my study, as outlined at the start of the present section, scoping and selection of cases comprised ‘a work in progress’, and I

move on to justify why scoping was necessary and what the process involved.

4.3 Scoping: country selection, case selection and refining observation methods

In this section I set out the elements of scoping relevant to my multicase approach: the choice of three countries and subsequent selection of one Danish, one Finnish and one Scottish case. In Appendix A is a detailed description for each of the three selected cases. As introduced in Chapter 1 (Section 1.2.2), I took three months to scope six countries and fifteen settings before deciding upon which cases to select within those countries. Country and case selection needed to be addressed with rigour, as the choices made were fundamental to the validity of my study (Stake, 1995). Scoping was an exercise established on the principles presented in my conceptual framework as the best strategy to answer the research questions through refining what I wanted to look at, how and when. For example, during scoping I arranged to trial observation, as observation was to be my principal method. However, unclear of an appropriate protocol, I wanted to look at the feasibility and efficacy of observation and I explain these trials below.

4.3.1 Initial scoping: country selection

Initial scoping was used to screen for candidate cases (Yin, 2009) and, as a first stage, narrowed my search from six countries: Denmark, Finland, Germany, Scotland, Sweden and Switzerland to three: Denmark, Finland and Scotland. Initial scoping also concerned gathering information on the logistics and feasibility of a multi-site, multi-season approach ahead of case selection. Stake (1995) shows prudence in suggesting that 'if we can, we need to pick cases which are easy to get to' (p.4), hence, I allotted

time to travel arrangements and costing my options. Rather than setting out with pre-ordained specific goals, I let a path emerge in line with my social constructionist belief as introductions and opportunities came my way. I am confident that, constructing as I went along, adds rather than detracts from my enterprise.

For five reasons my choice of Scotland was an obvious one. First, my choice was for logistical reasons as I lived one hour's drive from the Scottish case. Second, having studied *The Secret Garden in Fife*, I had prior knowledge of Scottish provision. Third, Bronwen Cohen's words (Section 1.2.2) and the *Learning Outside the Classroom* manifesto (CLoTC, 2006) heightened my attention to Scotland as an adjunct to Rea and Waite's (2009) Scandinavian countries of reference. Fourth, my voluntary work and studies built on interest in ECE and OL at home: working with the Scottish Pre-school Play Association,³⁹ completing my Level 3 Forest School Leader Award; and sitting on the Forestry Education Initiative⁴⁰ committee. The final reason that clinched Scotland's selection for my thesis was the country's role in my lifelong love of the outdoors. I was aware from the outset that my pre-existing reasons and relations would impact on my interpretation of practice. I would not, however, wish to remove the implications from my account and aim to show how my inquiry is the richer for their contribution.

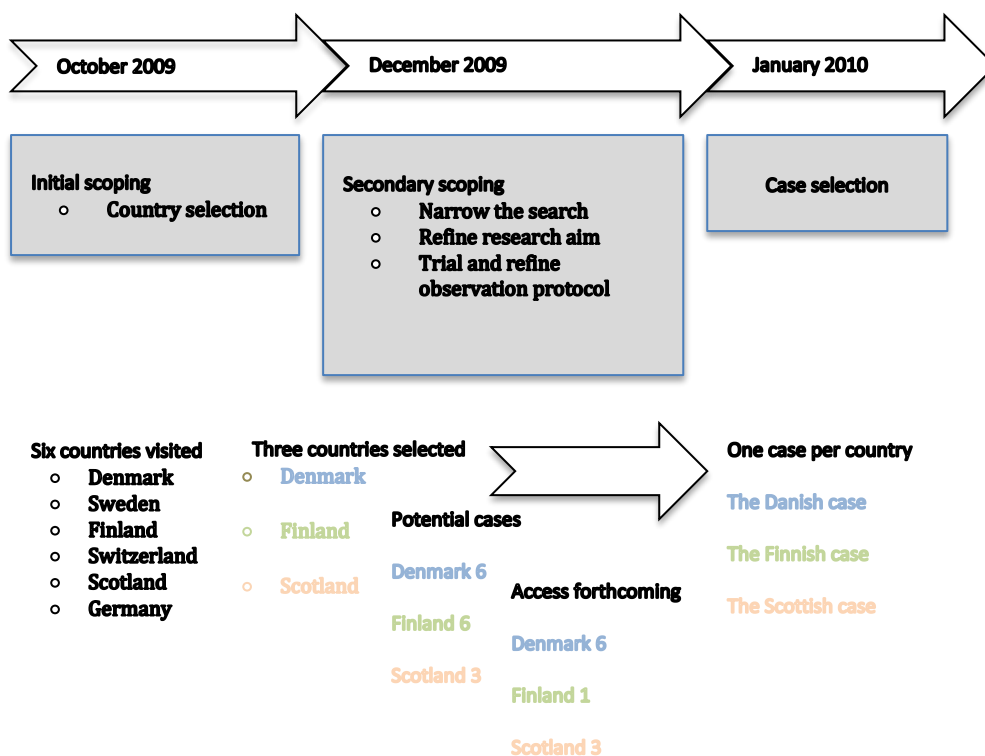
My choice of other countries posed more of a challenge. It was soon apparent that numerous nations could have been included in scoping, as introductions and invitations to visit were forthcoming. Indeed, such variety created the temptation 'to observe lots of cases superficially' (Geering, 2007, p. 1), and overcoming temptation required staying focused to my inquiry's aim. Scoping was intended to uncover the

³⁹ I was a member of the Scottish Pre-school Play Association (SPPA) charity between 2001–2007 and latterly Chairperson of their Board of Directors (2005–2007).

⁴⁰ The Forestry Education Initiative (FEI) was a non-government body within the auspices of the Forestry Commission. Forest Education (FE), formed in 2013, replaced the FEI and continues to promote Forest School across the UK.

potential for looking between cases of the use for ECE of natural environments. Literature was enlightening and hearsay was valuable, yet only visiting each setting would help selection of ‘exemplary case[s] in a finite world of possibilities’ (Bourdieu, 1998, p. 2). To this end, I travelled to five other northern European countries—Denmark, Germany, Switzerland, Finland and Sweden. As can be seen in Figure 1 below, this part of my scoping falls under ‘initial’ and ‘secondary’ scoping, and the process is described next.

Figure 1: Timeline diagram to show initial and secondary scoping



The five countries I visited were determined by introductions that came to fruition⁴¹ and, lest there be any misunderstanding, the countries scoped were not

⁴¹ Key introductions came from: members of the Forest Pedagogics Europe network; Magnus and Siw Linde, the founders of the *I Ur och Skur* concept in Sweden; Sally York at The Forestry Commission in

intended to be exhaustive and as such is recognised as a limitation of this study. My visits included both state-funded and privately owned settings, in rural and urban locations, with large and small numbers on the roll—a myriad of forms of provision that confirmed the diversity of ‘nature kindergartens’. My initial scoping, meetings (and musings) brought forward issues and insights that ultimately strengthened my research design in pursuit of its goal.

I met two Swiss from two *Waldkindergärten* in Zürich and St. Gallen. From them, I learned more about *Waldkindergärten* (Sections 1.2.1 and 2.2.3) using nature for early childhood education. I learned how the concept of *Waldkindergärten* marks a return to the Froebelian roots of German education that was to be later transferred to Denmark by Ella Flautau. Indeed, Zurich—self-proclaimed as *Grünstadt Zurich* (the Green City of Zurich) with its 4,400 hectares of public green space and forests, and the by-line, ‘where we work, Zurich blooms’—was a most attractive proposition. While, however, the Swiss pedagogues were happy to talk informally, neither were adequately confident as non-native English speakers to commit to taking part in this research. Having only schoolgirl German, my level of access to these Swiss cases would have been compromised. In Germany, a *Waldkindergarten* in Stuttgart looked most promising. Sadly, a German case was difficult to secure as one pedagogue was due to go on maternity leave and her colleague showed reluctance in getting involved with my research at a time of administrative uncertainty. Sampling in qualitative research is a complex issue (Morse, 1991) and by this stage of scoping, I was thinking critically about the importance of the adult practitioners at cases I hoped to study. While the adult practitioners introduced a personal element to my sampling, it was vital to ensure scoping remained theoretically grounded. Thinking through my

Scotland; Sirpa Kirkainnen of the Finnish Forestry Association; Berthold Reichle of *Haus des Waldes* in Stuttgart and; Jane Williams-Sieghfredsen of Inside Outside Nature in Denmark.

theoretical priorities I was constantly aware of ways to access the situated narratives of the individuals that I met which might help my interpretation and understanding of practices across cases and seasons. While there was an element of convenience sampling (Patton, 1990) in my logic of not selecting a Swiss or German case, my purposeful selection was intentional and tailored according to the needs of my multicase study. Had my scoping presented me the opportunity to meet with, for example, English-speaking practitioners in Switzerland and Germany, then those countries may have been relevant.

It was hard to ignore the attraction of the Nordic nations—their reputation as pedagogical models of practice (Rea & Waite, 2009) went before them—yet, prejudice necessitated that adopting two cases from different Nordic nations could challenge the conjecture of a Nordic norm (Riddoch, 2011). Scoping, therefore, continued with the intent to determine the choice of which Nordic countries could ‘maximise what we can learn’ (Stake, 1995, p. 4). My reasoning behind decisions made is described next.

4.3.2 Scoping for and selection of Nordic nations

Following visits to Denmark, Finland and Sweden I chose to select cases from Denmark and Finland. I use this section to show the potential and constraints placed on my selection of Denmark and Finland to justify the decision made.

A Swedish girlfriend led me to Sweden with her interpretation of the slogan *Uta på tur, alder sur* which she translated to ‘Let’s go outside, all will be well’. How could I not visit a nation whose people abide by such a mantra? Juliet Robertson⁴² had spoken of the *I ur och skur* (‘rain or shine’) kindergarten concept in Sweden and

⁴² Founder of Creative Star Learning.

arranged for me to meet the founders of that organisation, Liv and Magnus Signe. A Swedish case was temptingly fascinating, but sadly, the logistics of getting to Sweden combined with shortcomings in professional connections meant Sweden, on the grounds of convenience and accessibility, was not selected.

As noted above (Sections 1.2.4 and 2.3.2), the UK's Forest School concept has its origins in Denmark (Knight, 2011), hence, Denmark deserved a closer look. In addition, Denmark is the Nordic country with a climate most similar to Scotland, and I hoped that meteorological subtleties might add an interesting dimension to my consideration of the natural environment in nature-kindergarten practices. My time with Jane and Keld Williams-Sieghfredsen (Section 1.2.2) was fruitful and Denmark offered my thesis a way forward.

A Danish university lecturer, Troels Romby Larson, earmarked Finland as the Nordic 'odd one out'. There was no intent to mark Finland as desirable or undesirable; rather, to my understanding he was referring to both common misunderstandings around geographical terminology (Section 1.2.5) as well as insinuating cultural rivalry. His genial remark sowed the seed for me to look at Finland. Scoping continued and I made my way to Helsinki in southern Finland. There, watching frozen saltwater of the Baltic Sea lap the shore (Section 1.2.5) felt profoundly different to my experience of nature in Denmark. Finnish 'nature' to me was a stark and deeply unfamiliar 'nature'. Finland, as a choice of Nordic contrast, offered climatic extremes with potential to reveal the contribution of nature in ways that may demonstrate similarities and differences across cases and give a firmer basis to the representativeness of my study. I read how Finland has approximately 180,000 lakes and 69 per cent of its area is forest (Bird, 2006), and the Finns I met told of holding nature, particularly their forests and lakes, in extremely high regard. There is

much to commend Finnish scholastic performance (Ylä-Jääski, 2013), and success has been attributed to *how* young Finnish children are taught practical, problem-solving skills and ways of thinking that call for logical, real-world knowledge that lays foundations for approaching learning in authentic ways (Pascal & Bertram, 2013). Such factors of first-hand, practical and authentic forms of education highlighted the salience of Finland, in preference to any other Nordic nation, alongside Denmark.

On reflection, except for the choice of Scotland, the first stage of choosing countries was not as straightforward as the case selection stage that followed it. I deemed an in-depth study in a fewer number of countries preferable to what would have undoubtedly have been a more superficial look had my scoping net been cast wider. I struggled to deny the allure of studying more countries (and more potential cases). In the name, however, of rejecting cursory knowledge a narrower focus took precedence. My selection of three countries was befitting and respectful of a seasonal lens and it was logistically and economically feasible for me to get around three countries each season. The final choice of three countries, as Patton (1990) states was a judgement call and I asked: Can I achieve this? Can I afford this? Will I be able to travel here in the depths of winter? These questions were entered into as scoping continued.

By the end of November 2009, initial scoping had distilled my search from five to three countries and I was clear in my research aim to understand the quintain ‘both in its commonality and its differences across manifestations’ (Stake, 2006, p.40). I resolved to study the quintain in three countries: Denmark, Finland and Scotland, and it was time to narrow the list of potential cases in each country by fixing upon criteria for choosing cases.

4.3.3 Case selection

While my initial scoping had considered the identification of countries, my secondary scoping focused on identifying cases that matched certain criteria and this process is described next. There were a variety of possible cases in my three chosen countries. My purpose in scoping and sampling was to find a representative subsection and within that subsection explore similarities and differences across them. Ahead of looking across cases, however, I needed to select the cases and be critical of my selection.

Patton (2001) identifies critical case sampling as a process of selecting a small number of important cases that are likely to ‘yield the most information and have the greatest impact on the development of knowledge’ (p. 236). Still, there were tensions in establishing a comparable foundation while maintaining distinctness from which to describe and interpret experience. It was convenient to select my Scottish case on grounds of accessibility and prior knowledge. My selection, however, of further cases required reflexivity to show awareness of, and indeed be explicit about, my rationale for selecting the cases I did, while excluding others. In agreement with Thomas's (2008) critique of Yin (2009) that ‘typicality is not a reason for studying a case’ (p. 92), I fixed upon criteria that would allow careful, purposive sampling of cases to provide rich and unique information. The characteristics of potential cases were examined on their merits in my aim to systematically select cases representative of what my study wanted them to be (Bernard, 2012) in order to reflect the diversity of the nature kindergarten ‘quintain’, yet maintain distinctness.

Denmark had the widest choice of potential cases ($n=6$) with two settings near the town of Vejle, and a further four in the Aarhus and Fyn regions. In Finland, there

were relatively few settings known by the name ‘nature kindergarten’ as features of nature-based ECE practice were more routinely embedded in mainstream provision. That said, the early search for a case looked fruitful ($n=6$), with five privately owned nature kindergartens in Helsinki and one state-run Finnish setting about two hours’ drive to the north of the capital. By contrast, in Scotland ($n=3$), potential cases were fewer in number. One was The Secret Garden in Fife that had been studied for my Master’s degree and two others were privately owned settings in Perthshire. Initial contact was made by phone or email to the administrative head of each of the fifteen settings (Denmark $n=6$, Finland $n=6$ and Scotland $n=3$) and all showed interest in participating in my research. Access was not forthcoming, however, from the parent company of the five privately owned settings in Helsinki, and the potential Finnish cases reduced to just the one setting. At this point, I looked again at the remaining ten potential cases (Denmark $n=6$; Finland $n=1$; Scotland $n=3$) against practical considerations of travel costs and logistics, as well as other parameters listed as selection criteria in Table 1.

Table 1: Selection criteria and application to my inquiry: a summary

		Denmark (n=6)	Finland (n=1)	Scotland (n=3)
Selection Criteria				
Criteria for child participants				
1	Preschool year	Da, Db, Dc, Dd, De, Df	Fa	Sa, Sb, Sc
2	Full-time attendance	Da, Db, Dd, De,	Fa	Sb, Sc
Criteria for adult participants				
3	English speaking	Da, Db, Dc, Dd,	Fa	Sa, Sb, Sc
4	Same country of origin	Da, Db, Dc, Dd, De	Fa	Sa, Sb
5	Outdoor specialist/enthusiast	Da, Db, Dc, Dd,	Fa	Sa, Sb, Sc
Criteria for settings				
6	Same location	Db, Dc, De	Fa	Sa, Sb, Sc
7	Wooded with watercourse	Da, Db, Dc, Dd, De	Fa	Sa, Sb, Sc
8	Indoor space	Da, Db, Dc, Dd, De, Df	Fa	Sb, Sc
Other criteria				
9	No special measures	Da, Db, Dc, Dd, De, Df	Fa	Sa, Sb, Sc
10	Parental and community support	Da, Db, Dc, Dd, De, Df	Fa	Sa, Sb, Sc
	Selected case	Db	Fa	Sb

I applied ten selection criteria to my potential choices of nature kindergarten in Denmark, Finland and Scotland in order to arrive at my final selection from the possible population of cases (Geering, 2007) in the different countries. Selection criteria were compiled for both child and adult participants, the physical environments they used in each of the three chosen countries and other criteria. Selection criteria included both practical and research-based parameters. The ten potential settings were scrutinised in relation to my selection criteria and their application to the potential cases is described next with reference to Table 1.

Of my ten selection criteria, five relate to participants (1–5), three to the kindergarten environments (6–8) and two classified as other (9 and 10). First, regarding the child participants, provision was to be ‘full-time’ and, although the definition of full-time may vary case to case, this criterion (2) ensured children attended for a whole day and attended no other childcare institution to fill their day or week. While the age at which a child started school varied between the countries, this was to be each child’s preschool year (1) so that any variation in child age could be justified, as none had experienced formal schooling. Additionally, all the children attended for the entire academic year.

Second, regarding the adult participants, having English speakers was imperative (3) in order that my lack of Danish and Finnish would not compromise data collection. By choosing cases where adult practitioners were nationals of that country (4) I aimed to reduce cultural bias. It was assumed that nationals were more likely to adhere to culturally specific, taken-for-granted ways as upbringings in ‘similar conditions and subjected to similar conditionings ... therefore have every chance of having similar dispositions and interests, and thus of producing practices that are themselves similar’ (Bourdieu, 1989, p. 17). Criterion 10 was applied to highlight the importance of active, parental participation in the nature kindergartens as well as the support afforded by each wider community. Parental involvement, evidenced throughout my findings, took various forms—volunteer parent helpers, visiting craftsmen and local hunters—and I was open to all that my data collection might capture. Finally, I resolved that sessions were to be delivered by specialists who, through experience or qualification, had a rich knowledge of the outdoor learning field (5). My justification for criterion 5 lay in my determination to focus my study on outdoor provision. By selecting cases where the adults were motivated by the outdoors, I avoided this potential barrier to using the outdoor classroom.

Of my ten selection criteria, the three that relate to the kindergarten environments (6–8) were applied to determine both the natural and human-made physical environments. Routinely, a main kindergarten building or indoor space (8) formed part of a nature kindergarten and variously comprised a kitchen, indoor play area(s), changing rooms and mains toilets. Additionally, the built physical environment included permanent or semi-permanent constructions in the forest or woodland used during sessions. Such facilities were used for gathering, preparation, storage, administration and, on occasion, for activities at the start, during and at the

end of sessions on a daily basis by children with their parents, adult practitioners and ancillary staff. Each nature kindergarten was to use an outdoor, nature environment—either adjacent or within easy walking distance (less than 1 km) to the main kindergarten building. Sites were predominantly forest or woodland and each had a watercourse (stream, river, lake or pond) on site or nearby (7) that was again easily accessed without the need for transport. The need for my study for there to be a daily return to this same wooded location (6) was important in establishing a relationship with place over time and has been noted (see Section 2.4.4). There were to be no special measures scheduled (9) for during my visits. In Scotland, for example, Her Majesty's Inspectorate of Education (HMIE) inspections or EcoSchool assessments may alter routine patterns.

A nature kindergarten, matched against the criteria in Table 1, meant it was considered a potential case setting as it had comparable participants and physical environments available to them. Of the six potential Danish settings, one (Da) used public transport while another (Dd) travelled by bus to different locations on different days of the week, as determined by weather conditions and foci of their curriculum. Movement between, and use of different, natural environments on consecutive days introduced a choice unavailable to the other settings and potentially affected the continuity of experiences, hence, both Da and Dd were discounted on this criterion. The six Danish settings were predominantly staffed by Danish nationals who spoke English to a high standard; however, one (De) was staffed by non-specialists who did not move the group far beyond the kindergarten fence, and one (Dc) met the selection criteria except in regard to its natural environment, as the majority of each day was spent in cultivated farmland and with livestock. Only one setting in Finland (Fa) was willing to participate and, fortunately, this case met each of the selection criteria. In

Scotland, one case (Sa) did not have any indoor space and only part-time provision was available, (Sc) was staffed by a Slovakian and a Polish national. Both these settings (Sa and Sc) were not selected for these reasons. The third potential Scottish setting (Sb) was unquestionably an example of local knowledge (Thomas, 2011) as I was familiar with the case through being, at that time, an employee of the company that owned it (Section 1.4). While I initially feared such prior and special knowledge was inappropriate, Thomas (2011) sees such knowledge as ‘a ready-made strength’ (p. 76), and I saw such knowledge as an avenue to a depth of inquiry that potentially may have not have been accessible had I not had an existing relationship with the setting. I reasoned that, in Scotland, any case was to be ‘within my local knowledge’ (Thomas, 2011, p. 94), while both Nordic cases were outside my local knowledge—balancing this interplay would bring its own challenges.

Scoping had presented me ten potential case settings. A systematic process of case selection narrowed the potential sample to three cases and, by spring 2010, the vital process of case selection was complete. Three examples of nature kindergartens (Db, Fa and Sb), one in each of my three chosen countries, met all the selection criteria and agreed to be involved in the research. From here on, the three are referred to as the ‘Danish case’, the ‘Finnish case’ and the ‘Scottish case’, and while each is emblematic of practice in that country, the selected cases do not aim to illustrate ‘national practices’ per se. Likewise, participants at each setting are collectively referred to as ‘Danes’, ‘Finns’ and ‘Scots’, yet, are in no way intended to represent an entire population. At each of the three cases, access was requested and forthcoming for the preschool groups within each kindergarten. There was an epistemologically led need to have faith in the selected cases and their personnel and a belief that ‘their

rendition or construction of the constructed reality' (Yazan, 2015, p. 137) would equip my inquiry for success.

When not referred to by name, the labels I use for adult participants, for example, 'practitioner' and 'pedagogue', are incorporated on a case-by-case basis as it was important to me to recognise cultural divergence and retain the uniqueness of each setting and practitioners' own professional identities. I refer to all adults working at and children attending the three cases' nature kindergartens as 'participants', and the use of 'participant' is intentional in that it implies these people are part of my research: that is, research is not done 'on' them but rather 'with' them (Clark, 2005; Graham & Fitzgerald, 2010; Kjørholt, 2002). I felt there was *always* more to be learned about what mattered to participants for whom these sites were their everyday places and thus paid attention to the ways power relationships may shape my research (Christensen & Prout, 2002). I considered *how* participation was enacted rather than *how much* participation was achieved (Holland, Renold, Ross & Hillman, 2010) through reflexive awareness.

As reasoned above (Section 4.2), my research does not propose 'some grand comparison' (Stake, 2006, p. 83) as, for example, different policy systems, curricula and other situated considerations hindered such an approach. The three cases, while similar in their core specification due to matching the selection criteria, each displayed local, social and other influences that would allow rich descriptions (RQ1) and evidence the impact of such influences upon the uses of their nature environments (RQ2) in order to make a contribution to knowledge of 'What is a nature kindergarten?' My methodological approach carries Stake's (2006) 'multicase' tag; for what that approach gives my study is that it allows me to delve deeply and 'build in variety' (p. 24). 'Multicase' encapsulates the methodological essence of

comparison, yet focuses on differences and commonalities to bring about in-depth knowledge of several examples of a phenomenon in different countries. My study had the opportunity to intensely focus an investigation of nature kindergartens through a sample of three cases within a multitude of different expressions.

4.3.4 Scoping to refine sensory-ethnographic observation protocol: trials (and tribulations)

With three cases selected, the need arose to devise an observation protocol for data collection; my quintain under study required a systematic protocol that I could not find in the methodology literature. Scoping was the right time to devise the protocol, agree access to trial and refine it as well as develop what I term an ‘observation shorthand’ (see Section 5.3.1).

To satisfy my two research questions, I chose to devise an observation protocol to record what I saw. The protocol included a schedule completed by hand during three-minute observation or ‘scan windows’ with notes added, if necessary, during the 27-minute interval ahead of the subsequent observation. I see the benefit of a bespoke protocol being the adjustment of an established ethnographic method to the demands of the nature-kindergarten context. A sample of the schedule comprises Appendix B;⁴³ the protocol, as used in data collection, is described in Section 5.3.1, and my development of the observation protocol is justified next. I saw refinements and trials of observation methods as a prerequisite to data collection, as by actually getting into the field I could find what worked and what did not. The observation protocol that I devised for data collection differs from the trialled scoping methodology in two key ways: scoping was an exercise in honing a systematic observation protocol and

⁴³ An extract from the same observation schedule, analysed with process coding (Corbin & Strauss, 2015) comprises Section 5.5.

scoping was also a time to devise a concise way of completing my schedules using my ‘observation shorthand’, as devised (see Section 5.3.1).

As a starting point, two established observation methods—event sampling and time sampling—were tested for their efficacy and practicality⁴⁴ in the complex outdoor settings under study. Event sampling (see Rolfe, 2001) aims to ‘narrow down the focus of the observation’ (Mukherji & Albon, 2010, p. 111), to particular events. I found that a structured, event-focused lens captured some scenarios at the expense of others taking place concurrently, thereby compromising a holistic description of nature kindergartens. I use my event-sampling trial at the Scottish case as a typical scenario. One girl happened upon a dead mouse and bent down to look more closely. Simultaneously, two boys, uninterested in this discovery, ran on ahead through the woods and, in doing so, one of them tripped and fell. One practitioner attended to the injured boy, while the other practitioner kneeled next to the dead mouse and talked about it to those children who were inquisitive. At the same time, a further three children were scrambling over a fallen tree in a separate part of the woods, while one adult and four children were ahead of the main group and already at the fire site. For my trial of event sampling, I focused on risk-taking behaviours and recorded the boy falling from running on uneven ground and the climbing children and thus limited my observation by overlooking the rich mixture of other events occurring meantime. An alternative observation option was time sampling, which I trialled on a scoping visit to Denmark.

Time sampling differs from event sampling in that it records the frequency of episodes within a period of time. Although straightforward to record, this form of observation was found wanting for lack of detail or contextual description. That said,

⁴⁴ It was arranged for during two of the secondary scoping visits abroad and one visit to the Scottish case to trial observation techniques.

a useful feature of time sampling was the repetition of observations at predetermined intervals which informed the design of my observation protocol including the feasibility and efficacy of how often, and for how long, to observe. My trial of time sampling showed the need for a balanced, systematic protocol. I learnt that observation 'windows' could comprehensively capture all events while not being untenable, and this aspect is in line with my understanding of my 'epistemological safeguard' (Wacquant, 2004, p. 397). By choosing an observation protocol that could be sensitive to participants and context, I could attend to possible aspects of the physical environments where actions take place and, at the same time, account for possible ways that context may trigger everyday practices and dispositions; in other words and through a social constructionist lens, 'the way things are' (Crotty, 1998, p. 64).

My prior experience as part of my Master's degree (Section 1.1) had highlighted where recording observations outdoors might be potentially problematic due to contextual factors and practicalities (Christensen, Mikkelsen, Nielsen & Harder, 2011) inherent to nature-kindergarten practice. To the fore was the tendency for participants to roam, smaller groups to spread out across large areas, be concealed inside a den or even camouflaged 20 feet up a tree. I trialled different lengths of observation 'windows' and intervals between windows basing my alternative durations on recommendations (Simpson & Tuson, 2003). A one-minute window was too short, particularly in circumstances where children were spread out across a site and I could not cover the distance in the available time. A five-minute window was too long and I found myself, invariably, with time to spare. The observation protocol I was devising was advantaged by small group sizes and trialling clarified what was

physically feasible in the context. A target child⁴⁵ trial, for example, showed a 26-minute average rate of change between different activities or points of interest. Short bouts of observation with relatively long intervening periods in which to draw breath and write notes were found physically achievable and apposite to group size, rate of change between episodes and terrain. Completing one observation in a three-minute window, every 30 minutes was found to be optimal.

I was able, within three-minutes, to note actions and interactions, yet there was a need for flexibility in my protocol to account for the unpredictability of the outdoor environment and respond to the fluxes of seasons and climate (Fjørtoft, 2004). For example, during trials I took panoramic 360° photographs to coincide, as closely as possible, with the timing of the three-minute observation windows for use alongside the observation data. During scoping, however, I found little efficacy in the 360° shot as the use of the camera during the observation window proved to be a distraction that compromised the quality of the observation data and this form of photograph was not taken following scoping trials.

Wacquant (2004) notes the risk of ‘rushed reporting instead of systematic, first-hand observation’ (p. 369) and maintaining a flexible strategy posed a challenge, as I aimed for a systematic account rather than any ‘hasty collage’ (Wacquant, 2004, p. 369). Following my observation trials, there was no doubt that observation was the best method, yet I had considerable doubt in my ability as a sole researcher to capture the picture sought to a comprehensive standard. Emerson et al. (1995) comment that while observation may be first-hand it ‘approximates rather than absolutely replicates

⁴⁵ During refinement of my observation protocol, a ‘target child’ (Sylva, Roy & Painter, 1980; Sylva, Melhuish, Sammons, Siraj-Blatchford, Taggart & Elliot, 2003) observation was carried out to determine the potential of this method popular in ECE research. A target child was selected and observed at the Finnish case for one day using scan intervals each of 15 and also 30 minutes to satisfy my concern that the 30-minute interval compromised comprehensive capture. The method, however, did not support building a holistic picture nor contribute beyond a focused appraisal of one child. There may be something here for future research. Target child observations were not continued, therefore, and the data from this one observation day were only mined during initial analysis (Section 5.5).

... experiences' (p. 218), and recognition of this was key. Indeed, I resolved not to capture *everything*, and adhered to this maxim in devising my observation protocol. In support, I note Merriam's (1998) statement that 'the interest is in the process rather than the outcomes, in context rather than a specific variable, in discovery rather than confirmation' (p. 19). Her sentiment is particularly apposite for my study with its thread of inquiry centred on *what* as well as *how*, and on singularity as rather than generalisability. I see Merriam's approach to observation as one that might frame my protocol in a way that could bring additional insights to my study without damaging participants' naturalist interactions with the physical environment and each other. Equally, by thoroughly trialling my observation protocol, I sought to overcome any risk of haste that might reduce the quality of my principal data source.

Observation trials drew my attention to the issue of my own position during data collection to consider how the physical—the place I chose to stand—impacted (metaphorically) on my position as a researcher. Physically, where was I to position myself during observation? Pink (2012b) responds to this dilemma by suggesting methods that would allow me to 'literally do research in movement – through an embodied and sensory engagement with the practices and places of those people and things we are doing research with' (p. 33). Physically, I had to be on the move. Standing in a single, static vantage point proved ineffective, and I adopted the role of a 'mobile sentinel'. In other words, the extent to which I moved and observed participants across each site during each window was determined by participant actions during each window. My movement facilitated a non-authoritative stance to record participants in their everyday environments, yet allowed sensitivity to being a guest and limited disruption to routine activities. I moved around, wrote the observation schedule and captured data for the full three-minutes of every observation

window. Still, what was I hoping to ‘see’ through observation of the participants and, of course, what would I not be able to see and therefore need to seek elsewhere? A concern was that my gaze would be a monitoring, judgemental one within a panoptic space (Blackford, 2004; Perryman, 2006) and, as I was there to seek rather than check, I did not wish to be in a restrictive position. Waller (2011) cautions of the ‘adult’s gaze’ in the research of children, and I was mindful to be unobtrusive and avoid potentially influencing behaviour by overtly close interrogation or interference (Angrosino & de Perez, 2000).

During trials, however, factors conspired against me maintaining such a stance, and I struggled to negotiate a role that could be held consistently. Seated against a tree at the Scottish case, I strove to observe at a distance, as a non-participant. Children approached, unprompted, to show me and ask opinion of their artefacts. A practitioner brought me a cup of tea! Equally, at two of the three cases, there was a language barrier between researcher and child participants. I spoke neither Danish nor Finnish. I had a responsibility to ethically and adequately address the needs of participants who were non-native speakers of English and, as I return to later (Section 5.3.2), I placed importance on meeting participants’ expectations regarding translations. While a language barrier could be argued as being a limitation (Koulouriotis, 2011), in the context of outdoor settings I feel an absence of talk proved an asset to my research. The Danish and Finnish children chose to use non-verbal means to communicate with me or asked the English-speaking pedagogue to translate their messages. Reflecting on my position altered my behaviours on return to the Scottish setting, where I did speak the language, and my temptation to talk rather than wait to be talked to was heightened. It was difficult not to ask the Scottish participants their opinions or seek verbal explanations for their actions, but I became

mindful that there was a time and a place for such dialogue and took care to watch, listen and await rather than initiate or control interaction (Evaldsson, 2003; Stake, 2000). Proffered artefacts and hot drinks all served to build the ‘map’ (Hedegaard & Fler, 2008) of everyday practices, and I resolved to have an open disposition towards all events. Indeed, Guba and Lincoln (1981) comment:

In situations where motives, attitudes, beliefs and values direct much, if not most of human activity, the most sophisticated instrumentation we possess is still the careful observer – the human being who can watch, see, listen, question, probe and finally analyse and organize his direct experience.
(p. 213)

Rather than toil over whether observational objectivity needed more attention, I resolved to have an open disposition towards bias. In both my Findings and Concluding discussions, I return to this notion to further explore my position as a ‘careful’, semi-participant observer.

While scoping had secured my access to selected cases (Section 4.3), Walford (2001) reminds researchers that access is provisional, not total, and may be withdrawn at any time. I welcomed such prudent advice during refining my observation protocol. Upon arrival at each case each season, therefore, time was devoted to establishing and developing relationships and trust or reacquainting myself with adult and child participants. I arrived one or even two days before a data collection session and allowed time to meet with adult participants away from their settings. These times were a vital part of every visit and took the form, for example, of meals or sharing photographs ahead of adopting my role as researcher. I also spent time with both adult

and child participants as a group, both with and without a camera, video recorder and notebook—helping in daily routines and activities such as changing clothes, drawing and cooking. At these times, I used field journals as a tangible way to note my experience, improve and clarify my thinking (Janesick, 1998) and begin to evaluate how events and other contributions may inform sensory ethnographic discourses on my role as researcher.

In sum, my sensory-ethnographic observation protocol comprised a full day's session—the length of the session was determined by the season—of completing observation schedules during a three-minute observation 'window' every 30 minutes. It is my refining of my observation protocol that is described in this chapter. The actual application of my observation protocol during data collection will be explained in Section 5.3.1.

4.4 A summary of scoping and methodological choices

Ahead of my methods chapter, I want to take a reflexive look at the implications of my methodological choices and summarise my scoping, from which I learnt three lessons. First, I learnt about the relationship between the researcher and the participants. Second, I learnt about observation methods suited to these dynamic case settings, and finally, about cognizance of how I, as an 'insider outdoors, outsider outdoors' (Section 1.4) was not an objective entity somehow separate from the research. Scoping helped me to recognise my relationship with the research process. I summarise these three lessons in turn below.

During scoping, and pertinent to my case selection, I realised that the adults responsible for the delivery of practice had an impact on my choice of case selection and these individuals were, in a sense, data sources (Mason, 2002) but also part of a

reflective realisation that adults stood to play a leading role in data generation. My relationship as researcher with the adult participants would be vital to a successful inquiry. The professionals I had met were as different as the settings they were based in and as different as the children in their care. My field journals written when I met practitioners at potential cases comment on qualities such as competence, articulation, enthusiasm, passion and ‘has a belief this organisation ... both context and concept ambassador’. Not only was it important to select individuals enthused by the outdoor classroom, but also, for the success of my study to get relationships right as gathering data from people, as Thomas (2011) notes, represented a very different proposition from gathering data from documents. My choices proved to be positive ones and good relationships endured beyond data collection.

I trialled two observation methods—event sampling and time sampling—to find neither wholly suited to my purpose. I realised, therefore, that a key requirement of scoping was to develop an observation protocol appropriate to capturing nature-kindergarten practices. I chose to design a bespoke observation protocol including a schedule devised to record, in code, features of the physical nature environment and actors’ use of the space at the time of each observation. As participants roamed, hid and climbed at the same times across a site, the capture of events on to observation schedules was completed once every half-hour during a three-minute ‘window’. I knew I needed to see first-hand, and observation was to be principal method, yet it was the trickiest of my methods to get right, procedurally. Interview and other methods (see Sections 5.4.2, 5.4.3 and 5.4.4) were more ‘off-the-shelf’ techniques that I saw no requirement to trial. Scoping and refining my observation protocol made me confident that I was in a strong position to systematically record first-hand future encounters, as encouraged by a constructionist stance. Sensory ethnographic methods

are capable of responding to emergent demands and unpredictable events as and wherever they occurred (Howe, 2013). However, my observation protocol and sensory ethnographic methods would also need to be adaptive to changes of pace, circumstance and weather, even when these nuances were difficult to record.

Work appeals to me when it requires the researcher to be responsive. I felt equipped for a field full of inherent unpredictability and ephemerality and had realised by this point that applying a social constructionist epistemology, using Bourdieu and other theoretical tools, does not stop with Chapter 3. Social constructionism cautioned me to be ever suspicious of the assumptions of how the world appears to be (Burr, 2015). My conceptual framework and relationship with the research process is continually considered as I turn to the empirical chapters of my thesis journey. The following chapter outlines the specific methods chosen to collect, manage, analyse and verify data.

Chapter 5

Methods

5.1 Introduction

In Chapters 3 and 4, I have introduced my conceptual framework and methodological approach on which rest the methods used in my research to gather, manage, analyse and verify data toward my research aims. I now move on to detail the research process itself and how, when and where my chosen methods were ‘put into practice in the research project’ (Bourdieu, 1999, p. 607).

My Methods chapter has 9 sections. Following my introduction, the first section of my methods chapter explains my ethical considerations (Section 5.2) ahead of entering the field for data collection (Section 5.3). I explain the five methods used for my data collection that are established methods of an ethnographic tradition: observation (Section 5.3.1) using the bespoke protocol described in Chapter 4 (Section 4.3.4) and my keeping of field journals; interviews with adult participants and conversations with child participants (Section 5.3.2); visual data (Section 5.3.3); and other mute and peripheral contributions (Section 5.3.4). In the two sections that follow my account of data collection, I present the techniques I employed to manage and analyse my data (Sections 5.4 and 5.5). I cover data verifications and generalisations in Section 5.6 and then reflect on my data collection, management, analysis and verification in Section 5.7 to confirm how these procedures are embedded in my social constructionist paradigm and theoretical framework. Ahead of explaining the structure of my findings chapters (Section 5.9), I summarise Chapters 4 and 5 as a whole in the form of a ‘methodological abstract’ (Section 5.8) and, by

doing so, aim to show the interconnectivity of my methodological approach and conceptual framework—two elements of my researcher journey from which I may ‘begin to comprehend the impact’ (Grix, 2004, p. 68) that my position may have on what aspects and how I decide to study nature kindergarten.

My discussion of ethics is positioned ahead of my explanation of any involvement with participants through data collection (Section 5.3), as it is both my belief and obligation to act ethically. I move on to ethics next.

5.2 Ethics: a tarp over access and relationship building⁴⁶

In October 2009, prior to my scoping visits, a staged application was made to the Ethics Committee at the Stirling Institute of Education where my study began. A second application was completed in June 2010, after scoping, when the study design had been finalised. Approval was forthcoming for this multicase study regarding its scoping and data collection protocols to be used in three different countries. My discussion of ethics begins with two factors decisive in fieldwork: access and relationships. My ethics section then moves on to address aspects of sensitivity.

For three cases in three different countries, diverse views on ethical procedures needed to be addressed. Ethical considerations led me to question what happened to my personal ethical beliefs when tensions arose with institutions that held different views and policies to my own. The management at the Danish case, for example, showed apathy in regard to returning consent forms for my research that had been both emailed to the centre and talked through face-to-face. My insistence for the return of the forms began to alter the good relationship formed during scoping. In my opinion, participants had a legitimate interest over the future use of the data that they

⁴⁶ In Section 4.3, I noted ethical considerations specific to my scoping of my observation protocol and return to discuss further ethical considerations here.

were supplying and I wanted to reassure of my adherence to confidentiality. The Danes' disregard, relative to the Finnish and Scottish cases, was better understood by a comment from the Danish university lecturer that, 'Inspectors left Denmark 25 years ago ... we just trust each other'. As a novice and wanting to do the right thing, I looked to relevant literature for support. The need for development of culturally sensitive, qualitative research methodologies has been identified (Broadfoot, 2000). While Knight et al. (2004) recognise the issue of cultural relevance in their discussion of ethical research, the gamut of cultural relevance is left unclear. Hudson and Taylor-Henley (2001) understand how cross-cultural research ethics cannot be singly defined due to different conceptions of ethics and, in their work with First Nation cultures, position cross-cultural research relationships within a dynamic of power. The ethics literature fuelled my desire to do my study ethically across different countries.

While I built close, trusting relationships with participants through taking part in their days including by eating and staying with them, I was continually mindful of the complexity of researcher-participant relationships. My study's ethnographic approach relished the close involvement with participants, which included trust building and developing friendships (LeCompte & Schensul, 1999) but was accepting of variation in researcher-participant relationships between different social situations (Spradley, 1980).

I see ethics as a tarpaulin—an umbrella to shield and protect all those beneath, regardless of where and how they live. There needed to be a synthesis of the ethics process, as relevant to my study, to consider how to approach ethics as specific to each case. Special attention was paid to where variation in national research standards may sabotage the entire study (Oyen, 1990). In the first instance, my ethics

procedures met Economic and Social Research Council professional guidelines (ESRC, 2010) as my research, at the time, was funded with an ESRC studentship. The ESRC guidance has met with critique regarding having a lack of explicit attention when research does not have ethnicity, religion or culture as its focus (Boddy, 2014). In search of a resolution to the issue, I looked to national guidelines in both Denmark and Finland and wider EU documents, including CESSDA⁴⁷ and the European Educational Research Association (EERA). CESSDA state that a basic consideration in cross-national research is heightened sensitivity to social and cultural difference and conflicting interests. While this is vague advice, the position is in line with the EERA, who guides its member organisations in their respective nations.⁴⁸ The search for ethical guidance sensitised me to potential concerns and made me mindful not to abuse ethical principles when outwith the UK to ensure that my research was conducted responsibly at all times, in each setting. My intent was to inquire within an ethic of respect for all those involved, wherever and with whomever I was conducting research. It was of personal importance to know that the participants agreed to me recording their days and understood what I planned to do with the information.

Moving on to sensitivity, the second aspect of ethics, my research comprised three parameters to guide research with young children: informed consent; protection from harm and confidentiality; and special precautions for participants of a vulnerable age (Christensen & James, 2000). Each is outlined in the sections below.

⁴⁷ An informal umbrella organisation for social science data archives across Europe.

⁴⁸ For example, BERA (2012) for British researchers.

Informed consent

I emailed all parents of all child participants a letter giving information about my research to help parents to understand its mode, purpose and content and their part in the study. Letters were translated into Danish and Finnish by professional translators whom I paid to do so, and copies in English and Finnish are included as Appendix C. All parents returned a signed agreement, in the form of a reply slip on the letter, for their children. I felt the length of the study and repeated data collection visits called for affirmation of consent (Siedman, 2006). At the start of each seasonal visit, therefore, I reassured child participants that only what was seen and heard would be reported as written and visual data. I reminded them that participation was voluntary and emphasised that they could withdraw their consent or refrain from participation at any time (Christensen & James, 2000; Morrow, 2001) by telling me, their parents or their practitioners.

I also talked to the practitioners and pedagogues about the proposed mode and content of the research. One was concerned about the comparison of his setting to other cases. We talked about how the research was an interpretative study concerned with emergent meanings, differences and resonances between cases rather than it being any investigation into, say, right or wrong (see Section 1.4). Following our discussion, I redrafted consent letters so that this distinction was made clear. The informed consent of all the children, their parents and staff at the selected cases was forthcoming with one exception—the parents of one Finnish girl requested that she not be included in any photographs and this was respected.

Protection from harm and confidentiality

In my research, I was sensitive to protecting participants from harm and protecting their privacy. Regarding the child participants, pseudonyms were used in my Findings chapters when reporting conversation extracts. Regarding the adult participants, there was no intention to stigmatise any of the adults working at the three cases, akin to the child participants attending them, and much deliberation was given to adults' confidentiality.

Anthropologist, Nancy Scheper-Hughes, studied and wrote of village life in rural Ireland. In a later account of her uncomfortable return to the village (Scheper-Hughes, 2000), she acknowledges that much both in her field and about herself may have changed in the interim, yet holds that 'anonymity makes us unmindful' (p. 128). The eight adult practitioners who agreed to be included in my study understood what data referring to their own experiences would be used for and who else would see it. We spoke about the use of pseudonyms and whether that which could not be written openly should be written at all. The removal of the technique of identifiers (Frankfort-Nachmias & Nachmias, 1992) was available, however, each adult participant understood my aim was not any assessment of right and wrong (see Section 1.4). Hopper (2003), in reviewing the work of Scheper-Hughes (2000), notes that the trust between researcher and informant, 'goes beyond the documentary commitment to faithful representation' (Hopper, 2003, p. 119) and that the courtesy, empathy and friendship extended in the field be mimicked in writing up. I asked each adult participant how they felt about having their real names visible, attributed to their accounts and revealing of 'best-kept and worst kept secrets' (Bourdieu, 1977,

p. 173). Each adult participant chose to openly share their stories and are, therefore, referred to by name in my findings, having acquired consent to do so from each of them.

Special precautions for participants of a vulnerable age

I took some additional measures to safeguard the child participants I was researching. In Scotland, for example, I completed enhanced Disclosure⁴⁹ checks to ensure compliance with the legal requirements in relation to contact with children. A copy was held on file by the Scottish case, and I referred to the checking process in a letter to parents ahead of data collection.

All participants were given chances to review my data each visit and make alterations to written accounts or delete visual data before I left for home. Overall, the impact on the participants' lives was considered above 'exciting new data and insights' (Einarsdóttir, 2007, p. 208). While the implication was that some data were not usable, this was necessary to protect young participants. Barbour (2010) criticises ethnographic researchers in classrooms who bracket off any disturbing and uncomfortable data, and such concerns can be thought of in terms of observing the tree climbing, risk-taking behaviours in Denmark that I was uncomfortable with (Section 2.2.4). Tests of my ethical obligations, when in socialised practices other than my own, led to seeing the socialised practices of others not as something that may amount to children being disadvantaged, but rather as an awareness that others' perceptions of 'protection from harm' were different to my own. Barbour's (2010) point is relevant, however, for my study I needed to temper reactions by juxtaposing

⁴⁹ Disclosure Scotland is an executive agency of the Scottish Government, providing criminal records disclosure services for employers and voluntary sector organisations. Checks, made on applicants, are institution specific and I completed Enhanced Disclosure, the most stringent category, for the Scottish case.

my own habits or ways versus those of others. I saw, heard, smelt, tasted and touched my way through the observed sessions while '[immersed] in others' worlds' (Emerson et al., 1995, p. 2) without forgetting to pay close attention to the participant's orientation and what appeared to be salient to them in an interaction (Burr, 2015).

5.3 Data collection

Data were collected between February 2010 and June 2011 at the Danish, Finnish and Scottish settings. I used five methods congruent with my social constructionist epistemology and multicase study approach that guided my research. Observation was my principal data collection tool and, in total, I completed 53 observation schedules as devised during scoping (see Section 4.3.4) and these are described in detail below (Section 5.3.1). Second, I used two field journals for recording additional notes outwith my observation protocol, and pertinent extracts from my journals are explained in Section 5.3.1 and incorporated throughout my explanation of data collection. Third, I also conducted 16 interviews with eight adults and 28 conversations with a selection of the 45 child participants (Section 5.3.2). Fourth, for visual data, I took photographs and recorded videos on a Flip device⁵⁰ (Section 5.3.3). Finally, other mute contributions to my data set include children's drawings on display at the case settings, scrapbooks and noticeboards (Section 5.3.4).

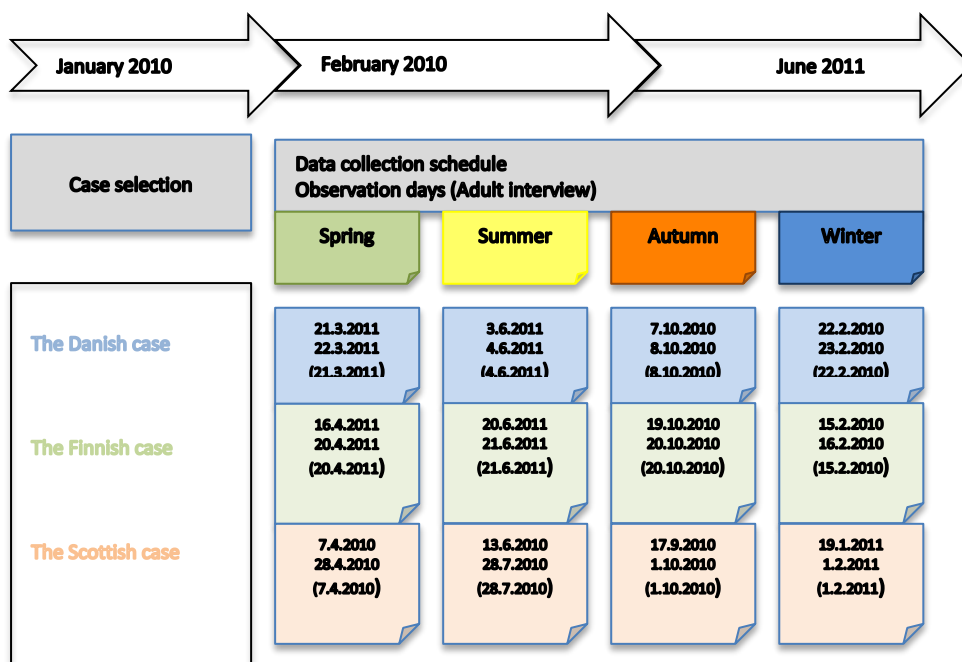
Penn's (2005) belief is that in a situation that is 'complex to understand then more time and more care are needed to investigate it thoroughly' (p. 20). For my research, the duration of the data collection phase was necessitated by the aim to record the participants across each season and while the visits to each nature kindergarten were not sequential, each setting was visited each season and, on

⁵⁰ A Flip is a compact, hand-held tapeless camcorder designed to capture digital video.

average, visits lasted for 3.5 days. Returning to the same settings in different seasons allowed the capture of these naturally occurring, dynamic environments during different climatic conditions.

A timeline (Figure 2) follows on from the timeline presented earlier that showed scoping and case selection (Figure 1, Section 4.3). Figure 2 summarises the period of data collection⁵¹ that followed case selection. An explanation of my principal data collection tool, observation, then follows.

Figure 2: Timeline diagram to show data collection



The timeline above (Figure 2) represents the time from case selection to the end of my data collection (February 2010 to June 2011). During the 16 months, I spent two days at each of the three cases on observation and interviewed the adult

⁵¹ The longest visit was to Finland in April 2010. This was an anomaly as the length of my stay was extended when affected by the Eyjafjallajökull volcano eruption in Iceland.

practitioners at the end of either my first or second day with them. From each visit, data, in what I refer to as ‘manageable chunks’, were managed and analysis started as detailed on my flowchart below (Figure 3, Section 5.5).

We know from my Methodology chapter that I chose to devise a bespoke observation protocol to record what I saw during my visits to each case, each season. In essence, my observation protocol comprised a schedule of three-minute scans of what all participants were doing, once every 30-minutes, and how this protocol was used as my principle form of data collection is described next.

5.3.1 Observation and field journals

During each seasonal visit to each of the three cases, I completed my sensory-ethnographic observation protocol, as devised and trialled during scoping (Section 4.3.4). As developing my observation protocol had been a key aim during secondary scoping (see Section 4.3.4), I was confident of its suitability for data collection. Observation lasted for a full day's session⁵² and at the Scottish case, I observed 11 days over the 16 month data-collection period; at the Danish, 17 days; and the Finnish, 25 days,⁵³ giving a total of 53 schedules. On to each schedule, during the three-minute observation ‘window’, I recorded my coded description of the physical setting, the weather and how adult and child participants were using that space at the time of each observation window. Group sizes at each case were typically small and I noted only slight variation of group sizes (12–15 child and 2, 3 or 4 adult participants) across my visits, for example, a child’s absence due to illness. I was disciplined to

⁵² Schedules varied in the number of scan windows recorded, dependent on the length of a day’s session as determined by the seasonal context. The shortest day’s session was 2.5 hours (4 scans) at the Finnish case in winter; the longest was in the Danish spring when I was outdoors with the group for 6 hours (12 scans) (MacQuarrie et al., 2015).

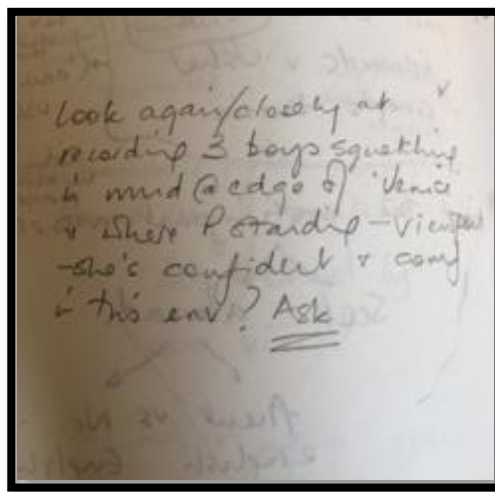
⁵³ Ash cloud extended the spring visit by 11 days, and while I spent many of these extra days at the nature kindergarten, I did not conduct observation sessions. Had I not been caught in Finland, there would have been 14 days in total spent at the Finnish case.

ensure my ‘observation shorthand’, refined during scoping (Section 4.3.4), was systematically applied and this paid dividends in consistency across the visits. The speed of using shorthand was an advantage in that each three-minute window invariably necessitated my intense mobility across often uneven or slippery terrain and recording quickly. The 27-minute intervals between scans were used to draw breath, write notes, take photographs and reset my stopwatch. Completed schedules provided accurate data on the placement of participants, their actions and non-verbal detail, but were devised to also note sensorial details including background noises or climatic features—for example, wind—thus adding to the capture.

Hammersley (2006) critiques the brevity of much contemporary fieldwork and the ethnographic tendency to treat observations during a period of study as typical of what always happens to note that ‘what goes on in any situation changes over time. Some of these changes are cyclical, in shorter- and/or longer-term patterns’ (p. 5), and I see his point. I wish to argue, however, that observing for a minimum of two full-day sessions per season gave insights into routines and behaviours that could be interpreted as typical. My data evidenced patterns of practice and behaviours that allowed my written account to be that of first-hand experience. With each return to each case, my relationship with the research process in general and my observation protocol in particular, matured. On my second, third and fourth visits to each case, I took with me raw data collected at that case on the preceding one, two then three visits. I used these data to build my complete data corpus.

Further, I maintained such continuity through using field journals. Field journals, or the field notes that they are filled with, are written representations of events, people and situations that may arise during data collection (Emerson, Fretz & Shaw, 2001). Two A5 journals were filled during my thesis, but to describe them as

aide-memoire, address books, diaries, travel guides, recipe books and doodle outlets would be most accurate. I cannot claim that my journals were a data-gathering instrument, rather they were of practical benefit as one location to keep notes (Etherington, 2004). My journals recorded developing ideas about people or routes to themes within the data, as well as other analytical insights. The following screenshot of an extract is indicative of how I used my journals:



Photograph 1: Screenshot of an extract from my field journal (16 February 2010)

[Look again/closely at recording of the 3 boys squelching in mud @ edge of 'Venice' (flooded, petrified-type of woodland) and where P standing – viewpoint – she's comfortable/confident in this learning env? Ask]

Emerson et al. (2001) accept that while the principal purpose of field notes is to describe, they have value as the first chance to interpret and analyse. The above extract shows an entry written during my first visit to Finland, towards the start of data collection when my research focus was evolving and invites contrast to my final visit to Denmark, 15 months later, by which time vague notions were thankfully forming into informal analyses:

Two men here – show qualities (Ask them about these!) and enthusiasm – but not all are explicit about ‘special nature’ – more implicit in their feelings towards these spaces. (3 June 2011)

What I wrote in my journals varied and depended upon observed events, asides, throwaway remarks, inspirations or insights not appropriate to write on the observation schedules. Entries were variously useful, practical and un-noteworthy. That said, attention was paid to discussions that occurred by chance, informally and journals were kept in my hand luggage, in my daypack, on my bedside table and, most usefully, by my side during observation sessions.

5.3.2 Interviews and conversations: ‘altogether alien and “outsider” questions’⁵⁴

My third form of data were interviews and conversations. During each visit to each case, I interviewed adult participants on a semi-structured basis, and had informal, impromptu conversations with child participants. The dates of my interviews are included on Figure 2 above. In total, 16 interviews with eight pedagogues and 28 conversations with a selection of the 45 children were collected across the settings over the 16-month period of data collection. In line with BERA and CESSDA ethical guidelines (Section 5.2), I reminded all interviewees on each visit that their participation in the research was optional and they could withdraw their consent to participate at any time. All interviews and conversations were recorded

⁵⁴ Scheper-Hughes (2003) tells of how she arrived in rural Ireland, ‘with a starting set of altogether alien and “outsider” questions’ (p.121) that later led her informants to warn offspring ‘beware books written by strangers’ (p.122). I use her words as an aide-memoire to not straightjacket informants by asking leading questions.

using either my Dictaphone or Flip device and, in total, I generated 23 hours of recordings. All interviews and the conversation data with Scottish children were transcribed verbatim into written text. My conversations with the Danish and Finnish children were recorded for later translation by the children's practitioners for reproduction in my thesis, and I discuss the worthiness of this below (see Section 5.5). All transcriptions were confirmed, either during that same visit or upon my return the following season, by all informants as accurate records of our conversations.

For the interviews and the conversations, my procedures varied and are explained in turn below, however, the rationale behind both interview and conversation techniques was mutual and twofold: first, I aimed to contextualise and hence add value to my observation data; and second, I sought the participants' own views of what I had observed and recorded by working with participants to construct rather than elicit responses (Webb, Schirato & Danaher, 2002).

Interview is a powerful research tool (Siraj-Blatchford, Muttock, Sylva, Gilden & Bell, 2002), and with each interview I garnered more detail on observed episodes, including aspects and opinions not captured in the observational data to emerge. In Finland in an episode with a tree stump (see Section 9.8), for example, the follow-up interview corrected my interpretation by adding situated aspects that may have been overlooked had observation data only been considered from my 'outsider' viewpoint. Equally, following Davies (1989), I was prepared for some of the young children's comments to not initially make sense to my adult perspective (see findings relating to 'snow pizza' in Section 6.4). Towards my first aim, interviews also proved a welcome complement to the observation data by allowing me to ask questions according to the research questions under consideration. I was keen to see what was happening day-to-day during my visits to each case study, yet felt direct

communication empowered participants by allowing them time to express and explain their worlds, on their terms (Stake, 1995). Equally, Shank (2002) urges the researcher to see the world from the participants' cultural perspective, and I would have been misguided in my social constructionist worldview to ask questions and aim to interpret practices without a contextual understanding.

Interviews with adults, more often than not, took place over a meal or coffee, indoors in the main kindergarten building after the children had left for the day. Research has shown post-observation interviews of skilled teachers more usefully enriched observation data (McAlpine, Weston, Berthiaume & Fairbank-Roch, 2006). By conducting interviews post-observation session, questions could focus on the practitioner's perspective of the observed session to limit researcher bias (Brown & MacIntyre, 1993), and by targeting the interview to what had happened on that particular day, my questions could allow participants to recall and reflect on the session. Photographs and digital footage were available to participants, and while these data were of great use, visual data were not prioritised (Mason & Davies, 2009). Reserving visual data until towards the end of each interview served to challenge the dominance of visual data (Pink, 2012a) and encourage wider discussion.

The interview structure was flexible, questions open-ended (Waterman, Blades & Spencer, 2001), with both the content and form woven from experiences shared between respondents and myself in a convivial, relaxed atmosphere, sometimes tired from our day outdoors—our roles 'revised or reversed as true rapport' was established (Wellington, 2004, p. 75). In their opening chapter on interview research, Gubrium and Holstein (2001) describe 'asymmetrical' encounters where interview 'respondents are relatively passive in their roles, which are delimited by the interviewer's coordinating activity' (p. 2). I was not there to coordinate nor

control; I was not interviewing or to borrow the title of Weiss's (1994) book on interview—*Learning from Strangers*. I considered the practitioners taking part in my study as friends, sharing their own individual subjectivity and the social contexts that brought them about. Indeed, Atkinson and Silverman (1997) suggest an 'open-ended' interview structure highlights social understanding in that the subject's internal voice only comes out when not externally screened or restricted. For my study, there was a reflexive advantage to relinquishing, to a degree, my control over the interview narrative that I preferred to the pre-interview constructed genre of questions (Davies, 1989) in that it granted interviewees a voice or, an 'exceptional opportunity ... to testify, to make themselves heard' (Bourdieu, 1999) and freely disclose feelings that perhaps may not have emerged from a more formal interrogation.

Equipped with my background experience of nature-kindergarten practices and positive relationships with interviewees, interviews were approached with confidence. Laughter (at ourselves) stemmed from talk; talk explored episodes, doubts, ideas, attitudes, understandings and assumptions around our socialised behaviours (and perceived abnormalities). Key questions and retorts teased out subtleties of practice based on situated perceptions and dispositions of using nature environments for ECE. Time spent in this way, in line with my aim for conducting interviews, validated, confirmed and enriched data by giving additional information or contextualising the practitioners' information (Davies, 1989). My observations and interpretations were, at times, challenged, to the benefit of the final viewpoint (Gubrium & Holstein, 2001), yet true rapport and mutual openness were omnipresent as adults on both sides of the interview—practitioner and researcher—returned to conversations and events of the day in convivial ways to construct understanding.

To obtain conversation data, I followed methods of ‘free narrative’ (Cameron, 2005, p. 601) to settle into a conversation and, as with my adult interviews, kept questions open-ended based on what, when, where, why openers (Waterman, Blades & Spencer, 2001). I was aiming, as stated above, to contextualise what I saw during observation as well as give child participants opportunities to express thoughts about their nature-kindergarten days.

Both with small groups and individual children conversations occurred at all three cases across my visits on impromptu bases and were all recorded. Informal, ethnographic conversations contrasted to the adult interviews in that they were neither planned nor encouraged. There were no contrived scenarios as both during and/or after events, both individual children and children in small groups (the maximum number of children at any one time was five in spring at the Danish case) volunteered contributions that they felt were pertinent.



Photograph 2: A group conversation on top of a rock

Such fluidity to conversation procedure was consistent with the physical environment where conversations took place (Punch, 2002)—outdoor, ephemeral, unpredictable, nature environments. Conversations were located, for example, around

the fire, on rocky outcrops (Photograph 2) or in a den, and on one occasion a child joined the pedagogue's interview in the dining area of the kindergarten building and contributed to discussion. Equally, Following Davies (1989), I was prepared for some of the young children's comments to not initially make sense to my adult perspective (see findings relating to 'snow pizza' in Section 6.4).

At the outset, I had not planned to separately talk to child participants, as the language barrier, in two of the three settings, was absolute (Section 4.3.4). The children, however, did not take issue with language and spoke to me in their mother tongues in conversations ranging from one to nine minutes in length. It was apparent as early as my first data collection visit abroad that children wanted to express their viewpoints.

As I note in Section 1.3, I chose to contextualise my writing using participants' own words, metaphor, poem extracts and colloquial phrases as mechanisms in the production of singular meaning. Translation, as a key methodological challenge in cross-cultural research, has been addressed (Lopez, Figueroa, Connor & Maliski, 2008) yet, and perhaps due to inherent challenges, there is a dearth of ECE research conducted in languages other than the investigator's primary tongue. While I was conducting research in a language other than my own at two of my three cases there was, by virtue of my case selection criteria, at least one practitioner at the Danish and Finnish cases who was fluent in English and was willing to translate. For example, from video data of conversations with child participants, dialogue was transcribed into the source language (Danish or Finnish) and then back-translated (Lopez et al., 2008) by these practitioners to more accurately capture the meanings ascribed to situated events and facilitate my subsequent interpretation. Transcripts with side-by-side English and Danish or English and

Finnish versions were checked by English-speaking pedagogues at the Danish and Finnish cases. At the Scottish case, I talked directly with children and understood talk between children that I overheard.

Even so, and following Twinn (1997), the reliability of some of my data, namely, words or phrases that did not have a comparable English translation (for example, *sisu* in Section 9.5 and *is I maven* in Section 2.2.4), posed an issue that could question its validity. I was reluctant to rid my written account of colloquialisms and idioms, as Brislin's (1980) convention would have had me do. I was advantaged by having been in the context with the speaker when the word or phrase was used, and believe this helped convey the participant's meaning.

Where I didn't speak the language, children found ways to be heard. Children who could not verbally communicate with me proffered artefacts, summoned an English-speaking adult to translate, took my hand and led me to see things important to them and nudged me to turn on my Flip recorder. All conversations were recorded with the child participants' consent; ranging from a nod in response to being shown the recorder to children taking hold of the Flip and recording themselves. The volume of conversations was highest at the Scottish case and lowest at the Danish case, and while I recognise this as a limitation of the language barrier, on reflection, it was through the temerity of the Danish and Finnish children in their insistence to be heard that I lessened any imbalance of these children's voices in my data set.

In conversation, verbal probes were used to promote talk and explanations, increase the number of things recalled or clarify my questions (Gubrium & Holstein, 2001); for example, I said, "Tell me a little more about what you have made here", "Could you give an example?" and "What else would you like to show me?" to children directly or using Mari and Henrik as translators. Video recordings from the

observed sessions and other visual aids were also used as a prompt for discussion; I return to the use of visual elicitation in Section 5.3.3. Verbal and non-verbal prompts and probes were a valuable part of my data collection for how they encouraged child participants to voice their experiences. I was mindful, however, from a conversational standpoint to pay regard to the effects of situational characteristics. By being open and respectful regarding the children's contributions my conversation data were more likely to be relevant to their meaningful experiences and, thus, more relevant to answering my research questions. In impromptu situations, when an English-speaking adult was not present, I showed the Dictaphone or Flip devices to the children and with their consent recorded any exchanges for later translation.

5.3.3 Visual data

My fourth data source was visual data and I generated two types. First, digital, where still photographs were taken to purposively capture key aspects and everyday events (Quinhonas & Fleer, 2010) during the 27-minute intervals and second, video data.

Photographs were taken using a Nikon 80/200 camera lens—discreet shots, subtly taken from up to 200 metres between researcher and participants so as to minimise disturbance of naturalistic interactions. For video data, I used a Flip device—a compact video recorder with a USB port to ease data management—to capture multi-sensory aspects of practice with the aim of enhancing observation data.

*'Ditch the photos'*⁵⁵

As a keen photographer, the camera was a clear choice and, in total, over the 16 months, I took 1,428 photographs. During one data collection session, however, an issue presented for which I had no contingency. I had not previously, during scoping or prior experience, had to consider the acute impact of extreme cold on my cameras. Observation methods had been trialled (Section 4.3.4) but not in extreme conditions, and I had failed to anticipate the adversity of the Finnish winter on battery-operated equipment. Outdoors, in temperatures of -25°C to -35°C batteries bled within 10 minutes, photography was interrupted as batteries were replaced, and halted altogether as replacement batteries ran out too.

My intention was for visual data to enhance the myriad perspectives offered by the unpredictability and flux of this field, yet the Finnish winter made demands that tested the adaptability of my research design. Following my shock, came the terror at an incomplete data set. I sat in the snow worrying about how to make up for missed opportunities to photograph episodes as the session ticked by. The issue remained unresolved. On returning home, I took time to read around relevant visual sociology and visual anthropology disciplines (Harper, 1987, 1998; Pink, 2012a; Rose, 2012) to seek to clarify the purpose of photographs for my study. I questioned what value photographic data would add to an understanding of nature kindergartens and whether any use of photographs would be ambiguous and my camera little more than an ethnographic accessory or 'identity badge' (Ruby, 1976, p. 7). It has been said that Bourdieu's (1990a) essay on photography can be read as a record of his 'attentiveness as a researcher, his curiosity and ultimately his sociological

⁵⁵ One of my supervisors, Dr. Simon Beames, dropped this bombshell during data analysis. He was doing his job; that is, saving me from the cliché of 'drowning in data' under the unwieldy weight of the photographic data that had been collected. In turn, this made me question the purpose of my photographs.

imagination' (Back, 2009, p. 471). However, Ingold (2000) says that the hegemony of the visual is often at the expense of taste, touch, sound and smell in many existing inquiries. The implication for my study was a need to frame the understanding of visual data by their interrelationship with the entire sensory domain (Valtonen, Markuksela & Moisander, 2010) and manage this dominance within a sensory ethnographic approach. Mason and Davies (2009) warn that 'photographs only capture an instantaneous and flat visual image, without all the other sensory stimuli' (p. 593), and thus photographs might not add to my main description by inadequately accounting for practice at nature kindergartens.

Ultimately, my supervisor's advice solved the dilemma. It was a tough critique to take, but he was right; and the decision helped me to see that photographic data were perhaps one 'manageable chunk' (see Section 5.5) of data that had grown unmanageable! There were too many photographs, the data set was incomplete and the Finnish experience had demoralised my intention for this visual data and, on reflection, the quality of the other data served the study well. The images, however, had influenced me and I resolved to use what I had to enhance recall of observed events (Chawla, 1994; Løkken, 2011) both during interviews and conversations with participants, as described above (Section 5.3.2) and during data analysis (Section 5.5). To this end, while selected photographs are included in this thesis, they have not been analysed and are illustrative support only. I ask that the reader hesitate in constructing meaning from the visual information and see images as contextualising material rather than primary data.

My video data recorded multi-sensory episodes, including impromptu conversations, to provide verbal, non-verbal, atmospheric and background sounds as well as sensorial details for interpretation. Such aspects revealed rich representations

of complex situations to help contextualise that which was observed (Denzin & Lincoln, 2000). Smoke from the fire, for example, making eyes smart was a detail that may have been overlooked in a photograph or audio recording. Video also had a contribution to make by virtue of this medium allowing repeated viewings of the data, and thus facilitated interpretations and analysis in an iterative way (Fleer, 2008). During interviews and conversations (Section 5.3.2), recorded clips were shared, and the value in such correspondence was that video allowed participants to purposefully explore with the researcher specific meanings placed by them on events in their worlds (Rose, 2012; Sherman-Heyl, 2001). I used visual elicitation (Gubrium & Holstein, 2001) such as non-verbal prompts, including video, digital photographs or artefacts, as with some of the young children verbal questioning was inadequate (Johnson et al., 1997). I fully exploited the utility of my sensory ethnographic methods by using food, texturally-rich artefacts and recordings from the forest to help the child respondents to express emotions and memories about the taste, feel and sounds from these visual prompts.

5.3.4 Other mute and peripheral contributions that told the story

Finally, other informal data were collected—'mute' contributions (Hodder, 2000, p. 703) and peripheral data—that served two aims: to enrich my data set, by giving further clarity to my interpretations through allowing more voices to join the story (Mason & Dale, 2011); and to provide a form of data triangulation by using multiple methods (Denzin & Lincoln, 2000), which is in line with the 'qualitative researcher-as-*bricoleur*' (Becker 1989). As a social constructionist researcher, it was apt to be open to the viewpoints of others, and admission that my philosophical worldview informs my method recognised the worth to my thesis of peripheral data.

Being open to all information influenced my data collection by helping me make sense of complex situations in contexts where nature-kindergarten participants constructed their worlds in resonant and dissonant ways.

Mute contributions drew my attention to various aspects that held importance to a case setting. At each case, celebrations of practice evidenced locally, or seasonally specific, practices and comprised children's drawings, scrapbooks, portfolios, wall displays, noticeboards, advertisements and messages for and from homes. While these data provided valuable insights into the attitudes, behaviours and dispositions of the groups under study, I was mindful of how attempting to be holistic risks having a negative impact on data quality (Thomas, 2011). Epistemologically, it was unjustifiable to cast aside others' viewpoints as they had relevance to my research.

Other peripheral insights into local, social and contextual relationships were garnered for my multicase study from articles in professional magazines as well as curriculum and policy documents. In Denmark, for instance, it was insightful to attend a seminar at University College Lillebælt and in Finland meet with the Education Minister at the municipal council to hear her opinions of nature-based learning vis-a-vis other mainstream provision. At home, sitting as Chairperson on the Board of the Scottish Pre-school Play Association charity, and also being a member of the Scottish Government's Play Risk Forum, helped to keep my perspectives open to Scottish issues. Each peripheral source of data, whether individuals eager to share their stories or community enactments of customary ways, helped my research, in the field of nature kindergartens, to generate knowledge where little exists.

Before moving on to my data management, a summary of my data collection is provided. Data were collected over a 16-month period, completed with a final visit to Finland, just ahead of their midsummer celebrations. Predominantly, I collected

observation data with interviews and conversations as welcome complements that gave me insights, extra details and greater accuracy to observed episodes. Photographs and video data were useful but not used, as originally planned. Mute and other contributions—small, but significant gems of data—were important in helping build my understanding of both my own position and the position of others within a nature-based ECE community. There were challenges over the 16-month data collection period. An Icelandic volcano erupted and caused me to struggle to get home. I stayed where I was for longer than scheduled and better relationships with informants were built, to the benefit of my study. Naïvely, I failed to anticipate the Finnish winter and was unable to resolve dead batteries. Resorting to pencil and paper was cumbersome with, but impossible and inadvisable without, very thick gloves. In Scotland, the inconvenience to my summer observation was the midge—a further rationale for the three-minute scan, given that on one mild, calm day sitting still for three-minutes to complete my schedule was the limit! Challenges were faced and embraced, which meant I had a data set to manage, analyse and verify.

Observation was my main data source and pertinent, therefore, to note the limitations involved with its dominance. As stated above, I understood that my observations—conducted by myself, a biased data collection instrument—may impact the method, data analysis and interpretation (Schensul, Schensul & LeCompte, 1999). Such awareness served to facilitate a better understanding of the practices and behaviours observed, as through my close involvement, alongside those whom I was observing, the likelihood that I could see what was happening and interpret why, was increased. Such awareness, such closeness also stood my dominant data source in good stead. I defend the dominance of my observation data as I was better able during

analysis to recollect observed episodes—often through my heightened sensitivity to the sensorality of experience (Pink, 2009).

5.4 Data management

My study's design is complicated—three nature kindergartens in three different countries. My multiple visits on multiple occasions achieved a season-round data corpus. In addition, there were large amounts of raw data: observations recorded, interviews and conversations conducted, photographs and video recordings, two field journals bursting with notes and other peripheral data. There was a risk that my data would 'get chaotic in a hurry if not well planned' (Miles Huberman & Saldaña, 2014, p. 51). There was, therefore, a need to ask two questions: What are my data management needs regarding managing and retaining my data? And how thorough do I need to be? (Miles, Huberman & Saldaña, 2014).

My data management needed to be systematic at coping with each manageable chunk of data that came in. I indexed a clear plan and chronological log of what data I collected on what data visit and securely stored all raw data and field journals. Transcriptions were stored in hard copy in both season and case folders (see below) and backed up electronically. All visual data were transferred to my laptop following each visit and electronic back ups completed on my return home. Thumbnails of still photographs were printed and stored in hard copy. My coding scheme took several iterations. Each version was stored in a folder on my laptop and on a USB stick.

In answering Miles, Huberman and Saldaña's (2014) second question, my degree of thoroughness was determined by the implications I felt the procedure would have for data analysis. I wanted to be in a position to analyse data systematically, from two directions: country by country and seasonally. Excepting my field journals,

I duplicated all data and chose to compile two folders: one titled by season and one by case. My ‘Summer’ folder, for example, stored copies of data collected during my summer visits to each of the three cases. In my ‘Scottish’ folder was stored the second copies of data collected each season at the Scottish case. Creating two master folders with identical contents, differently ordered, was a preliminary way for me to begin interpretation, keeping mindful not to draw premature conclusions (Braun & Clarke, 2006). In-depth analyses were not carried out on my photographs, as justified above (Section 5.3.3), nor my two field journals, as I chose to use these data as background, supporting information. All my data management was in accordance with the University of Stirling review board requirements for secure storage.

I have accounted, in Sections 5.3 to 5.4, for the data collection and data management phases of my study. Data were incoming from a variety of methods, at different times, as my study design was such to be able to cover the rich seasonal dynamic inherent to nature-kindergarten practice. My rich and complex data set needed an analytical approach viewed through my social constructionist lens as this would allow me to unpack human–nature complexities, apparent on the surface layer and less apparent hidden layers, to go beyond mere description of nature-kindergarten practices.

5.5 Data analysis

At the risk of repetition, I restate that my study’s design is complicated! Three nature kindergarten in three different countries each visited once in a seasonal cycle using five methods of data collection with eight practitioners and 45 children. Faced with such complexity, it was not easy to see a way through data management to data analysis processes involving data reduction, data display, conclusion drawing and

verification (Miles & Huberman, 1994). It was easier to grasp what to do next when, 20 years on, Miles, Huberman and Saldaña (2014) describe data analysis in more informal tones explaining how ‘When you’ve been doing qualitative research as long as we have, the genres start to blur’ (p. 9). Reassuringly, they nowadays speak of a versatile process using appended adjectives such as ‘shamelessly eclectic’ and ‘borrowed’ to describe an analytical approach that not only could I comprehend, but I could also adopt as an approach applicable to my epistemology. My approach was on that, rather than being ‘improvisationally foolhardy’. I could maintain my constructionist viewpoint by moving from one inductive inference to another by selectively collecting data, comparing and contrasting this material in the quest for patterns and regularities, seeking out more data to support or qualify these emerging clusters, and then gradually drawing inferences from the links between other new data segments and the cumulative set of conceptualisations (Miles, Huberman & Saldaña, 2014, p. 10).

Germane, helpful and another safety line for this drowning analyst, I found the way Miles, Huberman and Saldaña (2014) spell out the data analysis process highly suited to the present study. As an alternative to deductive reasoning, thinking inductively comprised a more exploratory character, suited to my study’s descriptive goals. While it has been suggested that the role of induction has been overstated (Charmaz, 2007), a central tenet of grounded theory is that simultaneous data collection and analysis inform each other through abductive reasoning (Charmaz, 2008b) and this was a useful concept for my analysis. I could pursue new, unanticipated directions (Charmaz, 2008b) with each visit. While there were no previous studies of nature kindergartens to deduce from, OL and ECE literature and my experiences of these sectors was closely tied to this specific form of pedagogical

environment. It was necessary to be mindful, however, that through my prior knowledge, codes and themes were not being imposed on the data due to familiarity (Corbin & Strauss, 2015). A study that returned back and forth to seek out more across the seasons, across the settings. To start to make sense of what my collected data may show, I turned again to Miles, Huberman and Saldaña (2014) who describe a process progressing from

the empirical trenches to a more conceptual overview of the landscape [to] no longer dealing with just observables but also the unobservables ... connecting the two with successive layers of inferential glue. (p. 292)

My study gradually collected ‘manageable chunks’ (Section 5.5) of data with each ‘new segment’ fuelling my initial interpretations, as data collection progressed. Interestingly, this ongoing, cumulative logic helped to overcome issues such as ‘going native’ and ‘superficial random data collection’ (Charmaz & Mitchell, 2001) and gave clarity to what I saw. Indeed, here also was licence to follow Patton’s (2002) assertion that the chosen analytical approach be as unique as the study itself. I took the utmost advantage of such licence. Here was a highly rigorous culture of analysis that provided a useful ethos to hold on to and, while for me, data analysis was the most difficult part of this thesis journey, the steps had to be taken. Essentially, what I wanted to do was to find robust means to read, and then describe to others, the experiences that these participants were telling of by their everyday practices.

I grappled with whether or not to use a computer package for analysis, and eventually opted for the latter. The strengths of software for organising and storing data from which to build the analysis were apparent (Richards, 2009), and wide

acceptance by qualitative researchers ought to have been a sufficient push. Time was spent exploring CADQAS packages, especially NVivo version 8, in an effort to find the satisfaction experienced by proponents and conform. Not only, however, was my technological ability found wanting, I felt software failed to do justice to this data set. Lu and Shulman (2008) describe ‘usability frustration, even despair and hopelessness’ (p. 108) towards software packages—a fair dose of which was brought on by my own computer literacy inadequacies, but also, as posited by others, computer software tools guide me in unwanted directions (Barry, 1998; Lewins & Silver 2007). I felt distanced from my data in a way that wrestled with its first-hand, embodied, sensorially-rich mode of collection and struggled with software’s impersonal dimensions. While I admit a desire to be freed from manually sifting my data (see Silvermann, 2005), and while it may well have saved time (Miles, Huberman & Saldaña, 2014), I had 16 months to gradually manage, ponder, sift and audit the data as they were collected. Buoyed by Lu and Shulman’s (2008) honesty, I agreed with the critics of the use of computer software to justify that working with the data manually would be preferable (Mason, 1996). Arguably an interesting choice for a complex study, however, as the sensitive human instrument (Dey, 1993), I relied on my own intelligence, integrity and reflexive awareness to analyse the data and my approach is explained next.

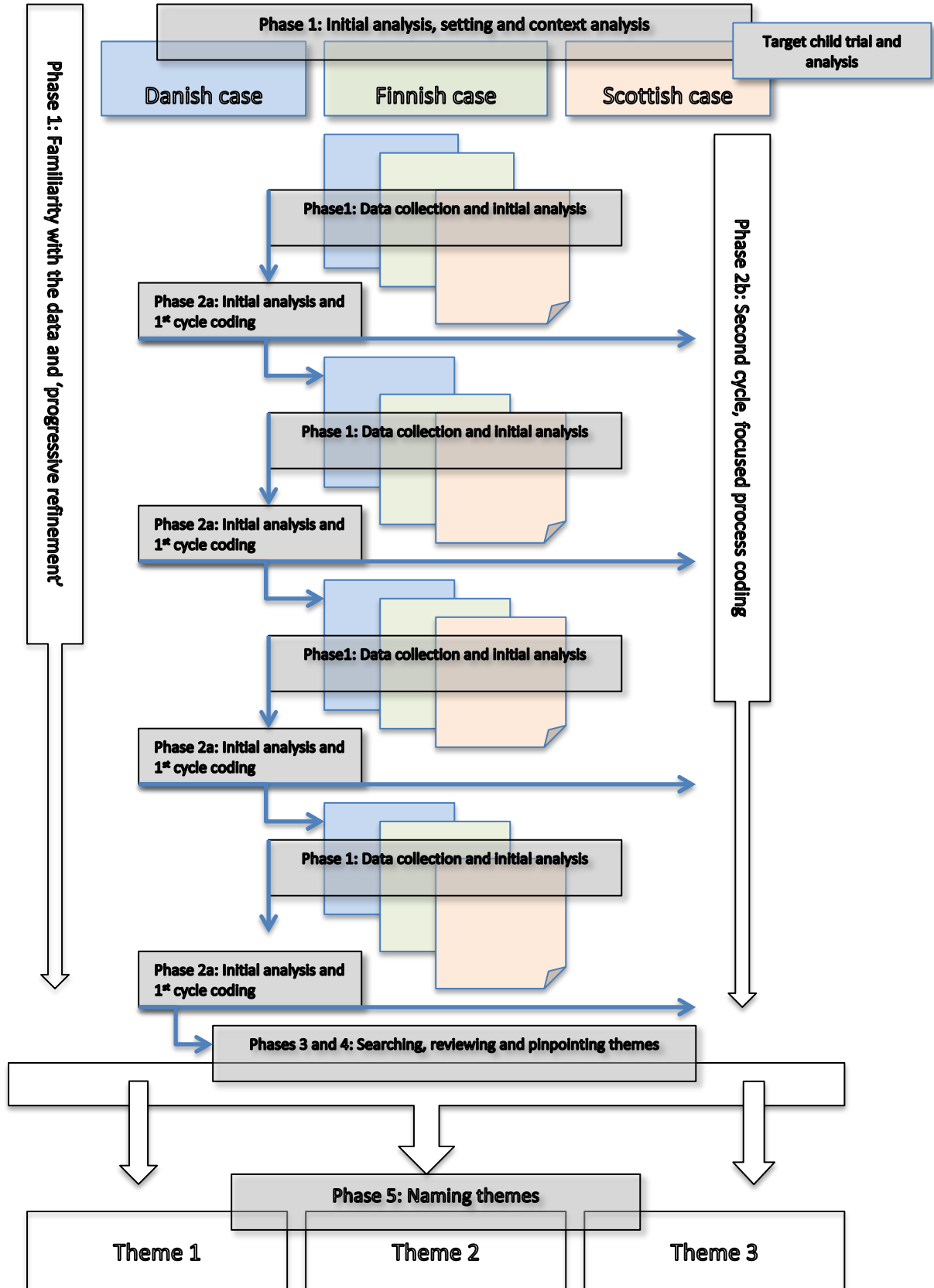
My route to data interpretation

For my inquiry, I chose Boyatzis’ (1998) data-driven, inductive approach called thematic analysis in the search for key themes that emerge as being crucial to the description of a phenomenon. To arrive at an integrated set of findings, I applied three coding techniques to the data set recommended by Saldaña (2013): setting or

context coding (Bogden & Biklen, 2007); process coding (Corbin & Strauss, 2015); and focused coding (Charmaz, 2006). I saw the ‘setting and context’ coding as an initial analysis and ‘focused coding’ as a secondary phase as approaching the data in these stages helped to reduce and organise data as they came in. As compilation of my data set progressed, my research questions could be addressed and sense made in relation to my methodological principles and existing ECE and OL literature.

Boyatzis (1998) specified thematic analysis as the development of ‘codes’, words or phrases to label data in an approach that has since ‘moved away from the embrace of grounded theory’ (Braun & Clarke, 2014, p. 1). It was in the six phases set out by these two psychologists that I found thematic analysis well-suited to my orientation and this study (Braun & Clarke, 2006). In emphasising the theoretical flexibility of thematic analysis, these authors see it as a basic analytic approach suited to a range of disciplines as its techniques and theoretical orientation lie separately (Braun & Clarke, 2014). Braun and Clarke’s (2006) six phases (outlined below) guided me in formalising the identification of themes, yet emphasised the process as a recursive rather than linear one. By ‘recursive’ I mean to express how my scoping, data collection and data analysis involved going back repeatedly on case visits; going back over my data as they came in. I used the six phases as a structure for thematic analysis of the data set and a flowchart (Figure 3) summarises my analytical process. Their process, as applied to my study in the flowchart and a more detailed explanation of each of the six phases to the flowchart, present how I reduced my data to the three central themes. Using thematic analysis in my research involved phases of initial coding, combined with themes emergent from the literature to lead to three central themes that provide the structure of my analysis and support my conclusions.

Figure 3: Flowchart to illustrate the six phases of data analysis [en route] to defining the three central themes



Phase 1: Initial analysis: familiarity with the data

My study's design helped facilitate Phase 1—seasonal visits to gather data, in what I saw as 'manageable chunks' (Section 5.5)—eased my immersion in the data as initial analysis took place in stages in the time between visits. I gradually got the feel for my data as they amassed. Emerging thoughts could be addressed and readdressed in a process of 'progressive refinement' (Saldaña, 2014, p. 58) on visits and subsequent visits to a case, or its counterparts, as an ongoing process ensued of observing, questioning, reflecting, collecting more, questioning again, going back to see more. An example of Phase 1, focused on familiarity with my data, stemmed from earlier concerns (Section 4.3.4) over whether or not to follow a target child. In essence, familiarisation comprised repeated reading of the data and searching for patterns within.

Also during Phase 1, portions of data were coded for attributes of the setting or context (Bogden & Biklen, 2007) to build the rich description of the case settings. I assigned 11 codes to categorise the three cases by, 'summative, salient, essence-capturing, and/or evocative attribute(s)' (Saldaña, 2009, p. 3). My coding was applied to the basic, descriptive information in the data at the end of the scoping exercise when the three nature kindergartens had been selected (Section 4.2) ahead of data collection, and, from this initial analysis, a context analysis or clear description of each of the case settings could be presented (Appendix A).

Over the 16-month data collection, as data came in, my cycle of initial analysis continued as Phase 2. I have divided explanation of Phase 2 into two parts (2a and 2b) as, while distinct, I want to stress Phase 2 as progressive processes running concurrently and recursively through my data collection period. Data is

incoming throughout Phase 2 (as explained in Section 5.5) and is initially analysed in chunks, ahead of second cycle analysis on my complete data set, in Phase 3.

Phase 2a: Initial analysis: generation of first cycle process codes

During Phase 2a, I generated process coding (Corbin & Strauss, 2015) from my data—a method chosen for its ability to indicate action in the data from a constructivist perspective (Charmaz, 2006). Coding processes or ‘ongoing action/interaction’ (Corbin & Strauss, 2015, p. 96) was particularly suited to my study’s search for cyclical repetition and the passing on of ways. Process coding applies gerunds or ‘-ing’ words to verbs in the raw data (observation schedules) to connote simple, observable acts (climbing, picking, shivering) as well as more conceptual activity (feeling, day-dreaming). A gerund makes verbs function as nouns and, in doing so, helps focus analysis on the action and processes (Charmaz, 2006), rather than emphasise a static state, to help develop a more dynamic account of what I had observed (Dey, 1993). I reiterate here, the work of Ingold (2011) as referred to in my literature review. Ingold’s (2011) use of gerunds in his notion of ‘dwelling’, ‘working with’ and ‘weaving’ admitted processes in active ways. I found the emphasis that these words placed on continuity encouraged consideration of the origins of practices as well as the ways actions evolved. For example, during my summer visit, three Scottish boys were observed behaving in a way that led to generation of the code ‘frivolling’. The boys with their small collection of sticks and stones were sitting on the ground, in the sunshine, without words, without clear purpose. ‘Frivolling’ encompassed what they were doing more purposefully than ‘wasting time’ or ‘idling’ or as Wilson (2012) described ‘messaging around’ (p. 2).

Data collected over time needs a method that assertively flags change (Dey, 1993). Given my seasonal visits, my use of process coding analysed data, for example long-lasting dens and melting *quinzee*, in a way that attended to continuity between visits not as ‘linear “snapshots” of events rather [through] kinesis – the simultaneity of immersion’ (Brady, 2008, p. 529).

Dilemmas encountered in developing the coding helped me to see initial analysis as a recurring phase, applied to my ‘manageable chunks’ of data after visits, with codes merging and splitting with each new data discovery. At the outset, that codes overlapped and meshed troubled me, yet I endeavoured to embrace this facet in my data in that it helped me to recognise the intertwined social and cultural worlds as manifest with nature environments at the three cases. It was a turning point to begin to take the data apart and look through an analytical lens, although interacting with the data in this way was not as enjoyable as interacting with the research participants out in their forests! Over my first three data collections, I reduced 44 process codes to 41 and this then increased to 45 before the data set was complete. Corbin and Strauss (2015) note how different aspects of the same episode or occurrence are uncovered by mining the data and while overlaps annoyed, fine distinctions were accepted as part and parcel of the complex scene. Remaining mindful of Stake’s (2006) assertion that multicase study is not truly comparative, I was comfortable with having patterns continually reference across the matrix, as my research product emerged as analytic grasp of the data progressed (Charmaz, 2008a). There was a suspicion that nature-kindergarten participants and their practices consisted of much more than the surface layer, and it was important to recognise that coding, while laid out on paper in neat columns, was not so easily deciphered when unpacking observed practices. I approached coding daunted yet determined that noting patterns and constructing

linkages across and within my 'manageable chunks' would synthesise my data in a way that allowed description to emerge.

Phase 2b: Second cycle, focused process coding

During Phase 2b my coding became more focused and I felt I had taken ownership of the data and it was coming alive (Pink, 2009). In reaching this point, several codes were amalgamated or discarded as driven by the data, and my immersion in them trained my attention to duplication and overlap of codes. The nature of the data was such that codes were sometimes used more than once, even in short units of data. This was a helpful part of analysis in that readings of the data expressed interconnected parts of complex social scenes as some participants, for example, returned to activities after a distraction or lunch, while others joined and dispersed at will or a chance downpour shifted the focus of events. Following my final data collection visit, I decided on how to 'categorize and crystallize the analytical work' (Saldaña, 2009, p. 206) for a final time by accepting that my coding of data, in all its complexity, would never be a precise science and 33 process codes were fixed upon and their overlaps embraced (see Figure 4).

Phase 3: Search for and pinpoint themes

Phase 3 occurred at the end of all the data collection, after all twelve visits were complete. From my Phase 2 coding, three broader 'outcomes of coding' or patterns were recognised within the data to be organised and labelled as my themes: pursuing the benefits of nature; understanding in locally and culturally situated ways; and practice as the tip of the iceberg. Boyatzis (1998) recognises such outcomes as fallout from the interpretive analysis of data as they present in relation to emerging

arguments and differentiate themes on a spectrum where a pattern in the data ‘at minimum describes and organises the possible observations and at maximum interprets aspects of the phenomenon’ (p. 161). It was important to distinguish themes as outcomes of coding or ‘central organising concepts’ (Braun & Clarke, 2013, p. 226) and assured myself that they were not codes or sub-themes by asking, ‘Does this theme tell me something meaningful about a pattern in the data, in relation to my research question?’ (Braun & Clarke, 2013, p. 226).

Phase 4: Review themes

By Phase 4, having repeatedly engaged with and sifted my data set for patterns as well as anomalies, I was well attuned to my data. Each visit to each site expanded my experiences, interpretations and data, yet analysis—chunk by chunk and phase by phase—was driving an emergent reading of the data set that may have formed very differently had the seasonal lens not been used. My field journals (Section 5.2) became indispensable documents—emergent, analytical asides and insights comprehensively contained in two documents. With hindsight, and what I had not appreciated until I realised the need for reflexivity (Section 1.3), was that these journals were an exercise in self-awareness. From my journals over the six different phases, there surfaced biases and assumptions that had emerged and progressed at various points over the 16 months of data collection. Interestingly, the data set, when read alongside my field notes, roused evocative memories bound up in my journals to enliven my data analysis process (see Emerson, Fretz & Shaw, 1995). I found that repeated visits had had a further advantage; there were subtleties in practices that became easier to decipher over time.

While Braun and Clarke (2006) describe two separate phases, for my analysis, Phases 4 and 5 worked in unison. My study's design encouraged a return to data gathered during previous visits through talking with participants, usually the adults, as a valuable means of verification and critique. Indeed elements of my data were enriched when seen over time with each season's visit, and feedback was extremely useful in reaching my wording of the three final themes.

Phase 5: Define and name themes

The phases that contributed to my finding and naming central themes was an analytic strategy that took numerous forms before reaching a final structure. My final three central themes were used to structure, but not stranglehold, the findings chapters and naming them with sufficient 'give' helped the intertwined nature of my topic. It was a deliberate choice not to use the three central themes as titles for my Findings chapters as doing so risked overlooking the opportunity of writing an account in a way that better attracts 'reader attention' (Thody, 2006 p. 133). Rather, my three central themes weave across my four findings chapters, the titles of which and my reasoning for them is described in Section 5.9.

My three central themes are: 'Pursuing the benefits of nature', 'Understanding in situated and culturally constituted ways', and 'Practice as the tip of the iceberg'. Each theme name captures something or someone important in the data in relation to my research questions, in order to label a patterned response from time spent at the three nature kindergarten. For example, theme 3—'Practice as the tip of the iceberg'—returns to the metaphor used in my literature review (Section 2.3.1) in recognition that my 53 days in the field only allowed me to see a relatively small part of everyday ways. As this title alludes to, practices seen and analysed were part of a

wider picture and timeframe, the total extent of which would not be open for interpretation.

In places in my Findings chapters, I have chosen to use my focused process codes as section headings (for example, Section 8.5.1, ‘Nurturing relations with nature’, and Section 9.2, ‘Choosing to have own experience’) to help maintain strong links between the data, its analytical journey and the stories told by these aspects of my research process. Figure 4 shows the 33 focused process codes and three themes.

Figure 4: Process codes and themes identified

<p>Process codes applied to data</p>	<p>Seeking and using what nature affords</p> <p>Knowing where to look/find</p> <p>Knowing what to do</p> <p>Nurturing relations with nature</p> <p>Recalling as a route to learn</p> <p>Listening</p> <p>Watching</p> <p>Talking</p> <p>Smelling</p> <p>Touching</p> <p>Tasting</p> <p>Discovering immediately</p> <p>Impressing of special qualities</p>	<p>Passing on</p> <p>Embedding socialised behaviours</p> <p>Recalling of local aspects</p> <p>Transmitting how things are done</p> <p>Interacting in habitual ways</p> <p>Frivolling</p> <p>Supporting environmental stewardship</p>	<p>Morning routine</p> <p>Preparing for the day ahead/activity</p> <p>Preparing to eat/drink</p> <p>Preparing to light a fire</p> <p>Preparing to leave</p> <p>Accepting without question</p> <p>Pervading affordances influences practice</p> <p>Choosing to have own experience</p> <p>Steering/mediating purposefully</p> <p>Doubting in confidence</p> <p>Recognising and accepting risk-taking/struggle</p> <p>Recognising and accepting experiences of others</p> <p>Meaning making through play/fantasy</p>
<p>Outcomes of coding</p>	<p>Theme 1:</p> <p>Pursuing the benefits of nature</p>	<p>Theme 2:</p> <p>Understanding in situated and culturally constituted ways</p>	<p>Theme 3:</p> <p>Practice as the tip of the iceberg</p>

Three tables now follow, ahead of explaining Phase 6: one extract from an observation schedule at the Finnish case in autumn (Figure 5); one extract from a conversation with a Danish pedagogue recorded while walking between the kindergarten building and the forest (Figure 6); and one extract from a conversation with two children out in the autumnal Scottish woodland (Figure 7). Each of these extracts show how coding was applied to the data and also how the coding crosses theme boundaries.

Figure 5: Extract from observation schedule with process codes (F – autumn)

Key:

D – spr = Case and season identifier – Denmark, spring visit
 F – aut = Finland, autumn visit
 S – aut = Scotland, autumn

A1 = Henrik
 A2 = Morten
 A3 = Anne-Lise

A4 = Mari
 A5 = Joonas
 A6 = Steve

A7 = Dan
 B = Boy child participant
 G = Girl child participant

R = researcher
 C = children

Extract from data	Line No	Process code		
		Theme 1	Theme 2	Theme 3
09.00				
Whole group (2A+7B+7G) indoors @ main kindergarten bldg.	1			Morning routine
3G+1B on sofa with guitar	2			
4B+2G+A5 in changing area – toilet, all-in-one suits, boots on, looking for lost glove.	3			Preparing for the day ahead
2B+2G+A1 in porch area loading trolley – blue twine, 2xflasks, water containers	4			
	5			Preparing for the day ahead
	6			
	7			
09.30				
6°C, damp, o/cast, rain o/night	8			
A4 @ hut lighting fire + 3B/1G (with matches)	9		Transmitting how things are done	Morning routine
2B + 2G helping fetch logs from store to hut	10			Recognising and accepting risk taking
2G drag across site of clear fell birch saplings, one in each hand to shelter	11	Seeking and using what nature affords		Preparing to light fire
A5 + rem. group @ new shelter starting build	12			
A5 knots twine to join branches 2B+1G watch	13			
	14			
10.00				
Whole group at shelter build	15			
2B ‘managing’ build – gestures and talk to other C	16	Watching		Steering or mediating purposefully
2B knotting as branches delivered by others	17			Recalling as route to learning
A5+1G+1B seated beside build – whittling sticks and sniffing the green stick/bark	18	Nurturing relations with nature	Passing on	
	19	Smelling		
1G climbing and hanging upside down from completed section of frame	20	Discovering facets immediately		
	21			
2G seated underneath – separate play/not building	22			Meaning making through play
A4 just returned to hut – checking fire and snack prep				Preparing to eat/drink

Figure 6: Extract from impromptu conversation with coding applied (D – spring)

Scene setting and conversation extract from Dictaphone	Attribute code	Process code		Theme 2	Theme 3
		Theme 1	Theme 2		
09.30 5.5°C, cold wind but dry and bright, weak sun Walking on pavement along road to forest from main kindergarten with whole group (A1+A2+6B+6G) R at rear of group with A1+A2, children in pairs/solo ahead of us. 2G + 2B at end of line carrying large pot, hot choc powder, cups, milk cartons. No other equipment/resources					
A1: [pointing at large pot] It is colder today and we will make fire and hot chocolate early. We take this to forest, they know because do before. Fire is place for everyone and this is community woodland we see share the nature so everyone is enjoying it when they want to be here. A2: You see at forest <i>vis hensyn bade overfor natur og den næste gæst</i> ('look after the natural place for the next guest' Morten's translation). Here is for everyone yes and winter is coming now and everyone is understanding that next person as cold as them. A2: So, no plan [...] we go find is the plan. There is not many choices sticks, mud these things and that is good. Few choices few confusion to children's brains saying 'I don't know what to do, there is too much I'm stressing out'. You know this? R: Yes, I understand A2: Nature is more simple primitive [...] freedom from need to be doing fixed plan. Not everyone is the same and the child will just do the things they find. Our pedagogy of this is important for the adults must know when to go and be with the child and when to be experiencing by themselves. This is our way of sharing and know when to do this or not. A1: We must not be ringing big bell 'you stop learning now [...] leave that discovery because this is a good time for me to ring the bell and the watch is saying we go now stop being in the nature'. Our pedagogy is seeing children here and trusting they will move when ready for next thing, come when hungry or eat later when busy.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	Knowing what to do Recalling as route to learning Seeking and using what nature affords Impressing of special qualities	Transmitting how things are done Supporting environmental stewardship Passing on	Preparing to drink Pervading affordances influence practice Pervading affordances influence practice Choosing to have own experience Steering purposefully/mediating by adult Recognising and accepting experiences of others	

Figure 7: Group conversation with coding applied (S – autumn)

Scene setting and extract from data (Dictaphone)	Attribute code	Process code		
		Theme 1	Theme 2	Theme 3
<p>8°C, damp and overcast, rain overnight</p> <p>Group (A7+R+1B+1G) in forest about 150m btwn roundhouse and stream</p>	11.30			
<p>G to R: Come and see. I know where the rabbit goes [G leads R to rabbit hole near base of tree. B follows]</p> <p>R: What would you like to show me?</p> <p>G: It is the rabbit's home [G lies flat on her tummy and reaches hand inside].</p> <p>[B has joined us]</p> <p>G: What's the difference between a den and a shelter?</p> <p>B: We always hide in our dens [...erm...] and it's normally in the woods and camouflaged with the thing here like wood and bark and somethings like that. That is our den over there [pointing].</p> <p>[B runs across to den and leaves conversation]</p> <p>G: You shelter from the rain or live there. I made a shelter for the fairies. I can show you that too.</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p>	<p>Knowing where to find</p> <p>Nurturing connections with nature</p> <p>Discovering facets immediately</p> <p>Touching</p> <p>Using what nature affords</p>	<p>Recalling of local aspects</p> <p>Transmitting how things are done</p>	<p>Pervading affordances influence practice</p> <p>Doubting in confidence</p> <p>Pervading affordances influence practice</p> <p>Choosing to have own experience</p> <p>Meaning making through fantasy</p>

*Phase 6: Write the report: 'chase the beams gently, introspectively'*⁵⁶

During writing up, I found a poem about analytical methods. Anthropologist, Ivan Brady, sees the 'powers of poetic interpretation and representation' (2003, p. 504) to support Denzin (1997), who says, 'good ethnography always uses language poetically, and good poetry always brings a situation alive in the mind of the reader' (p. 26). Nature environments, the settings for my thesis, offer emotional inspiration and rich pickings for poets and creative writers and, for me, the nature environments in which participants and I spent time data collecting afforded me time for gentle, thoughtful and subjective introspection. The risk with 'cases' of nature kindergartens was that the 'multiples of individuals [were] typically aggregated within their settings' (Denzin & Lincoln, 2000, p. 193), and it was important to see each actor as an individual while, at the same time, analyse their practices in multiple configurations. Through reflexive awareness, I kept my own subjective dispositions attuned to respecting participants and their individual ways.

I use my Phase 6 analysis of interview transcripts as an example. Paying heed to Silverman (2006), analysis of transcripts was determined by my preferred analytical approach, in unison with my methodological approach. In a postscript, however, Bourdieu (1999) recognises how transcription, by omitting to account for body language and situation, risks editing much of the sense of the interview (Webb et al., 2002). To this end, my writing aimed to affirm participants' accounts of 'their days' at 'their nature kindergartens' (see Webb et al., 2002, p. 55), and my use of a Flip device facilitated my inclusion of participant narratives in the form of direct quotations—their words—in analysis and in resultant Findings chapters. Additionally,

⁵⁶ Taken from Brady (2003) and reproduced in Denzin and Lincoln (2008, p. 503).

regarding writing, thematic analysis allowed a focus on the details of *what participants said* rather than any focus on the ways they said it (Braun & Clarke, 2006) and, in this way, the transcripts could be used alongside the observation data, ‘attuned to specific ... moments of practice’ (Webb et al., 2002, p. 57). Themes were analysed, not just described, and were coherent and consistent, yet distinctive throughout. Indeed, for my research, it was easier to find congruence between extracts and analytic claims when the subject was so ripe for interpretation.

5.6 Data verification

I verified my data using member checks (Burr, 2003) and triangulation by method (Denzin, 2001). I also took time, between each data collection visit and at the end of data collection to reflexively consider my latest ‘manageable chunk’ and how it affected the data set.

With characteristic clarity, Stake (2005) cautions that the researcher must not be ‘caught without confirmation’ (p. 453), yet what constitutes rigorous research is unclear (Guba & Lincoln, 2008). I followed Guba’s (1981) model for trustworthiness comprising four aspects: credibility, transferability, dependability and confirmability, as these criteria, suited to the present inquiry as validity, as routinely understood, are inappropriate for legitimating social constructionist research (Burr, 2003). I verified knowledge, therefore, by means appropriate to my multicase research; to situate it in my social constructionist assumptions and ideologies, as one in a position to judge its quality (Humberstone, 1997). I took steps, therefore, during scoping, data collection, analysis and writing to alert me to how to legitimate my work for the reader. I used member checking (Burr, 2003) by asking the participants themselves to further corroborate the data, its analysis and interpretations, giving both the adults and

children the opportunity to comment on my representation of their experiences. This took two forms. First, during data collection, usually towards the end of each seasonal visit, observation data were shared with the whole group or a sample of participants. Also, after all transcription and translation, participants fluent in English were invited to read interview transcripts and confirm an accurate capture. The second step to legitimate my analyses through member checking involved several pedagogues who were taking part in my study choosing to visit their counterpart cases. The visits took place both during and after the 16-month data collection period. For example, a Finnish pedagogue visited the Scottish case in summer 2011, two Danish pedagogues visited in autumn that same year, and one Scottish pedagogue visited the Danish case in winter 2011. Visits by adult participants to other cases provoked debate about practices typical or atypical to different countries in ways that gave feedback on trustworthiness of my work.

I like how Guba and Lincoln (2008) see interpretation, as well as method choice, as crucial to rigour. In training as a surveyor, I was taught that triangulation was the byword for accuracy, yet Massey (1999) argues that triangulation as a surveying method and triangulation as a measure of confidence in social sciences do not share comparable foundations. In relation to qualitative research, Patton (1999) argues that the logical basis of triangulation is ‘the premise that no single method ever adequately solves the problem of rival explanations’ (p. 1192). As such, this may lead, according to Massey (1999), to misleading claims as researchers place trust in the notion that a result must be ‘right’—akin to surveyor accuracy—if different methods produce the same result. When triangulation is seen from a practical perspective rather than simply ‘more grist for the research mill’ (Patton, 1999,

p. 1192) and its use is approached with care and understanding (Humberstone 1997), then it can enhance the comprehensiveness of the data. Triangulation by method (Denzin, 2001) is achieved through gathering multiple data sources—my observations, field journals, interviews and conversations supported with visual and other data. As I have described in this chapter, I used different methods in concert and in combination to investigate, to confirm or triangulate by method (Denzin, 2001) by compensating for the individual limitations of my methods and exploiting their respective benefits (Shenton, 2004). Triangulation stood as another way to locate the unknown and, as such, has worth. It was prudent, however, to be mindful of significant contrasts amongst my data set. For example, as noted later (Section 7.2), the Finn's fished, whereas the Danes and Scots did not and, while such contrast provided rich evidence for my research, it had to be seen for what such practice said about factors that influence observed practices. The underlying assumption of triangulation is that if data obtained by different methods correspond then credibility of the findings has been established (Yin, 2009). Denzin and Lincoln (2000) recognise the 'danger that multiple cases will be analysed at high levels of inference, aggregating out the local webs of causality and ending with a smoothed set of generalisations' (p. 194). Rigour in my analytical phases was ensured through careful attention to data from observation schedules through coding, from transcription to checking of themes and through writing up analytical arguments. My fishing data did not correspond across the three cases, but rather located me—the British researcher—in the unknown. Geertz (1973a, 1973b) coined the use of the word 'thick' to qualify the description of a phenomenon that produces patterns through which to understand it, and these patterns signify layers of meaning embedded within a network of cultural behaviours. While thick description has attracted criticism (Abbott, 2004; Mitchell,

1990), Geertz (1973b) stresses the importance of the researcher to observe, recognise and report facts with interpretive commentary while overcoming any handicap from being an outsider. Where my inquiry can benefit is from Delamont's (1992) sentiment that thick description, 'aims to make the familiar strange and the exotic familiar' (p. 150). My research did so by recording the unknown and reading in any contrast the deeper layers and influences that can be used to describe contexts, emotions, belief systems, relations and sensory experiences that join a community together (see Denzin, 1989) in a credible account.

In my writing, with credibility as one goal, it was important to give a voice to the participants alongside my own opinions. I ensured frequent opportunity for feedback with participants, both face-to-face and by email. Video clips were reviewed and interview extracts were discussed, and doing so helped me to recognise my own emergent biases to contribute to an informed, reflexive discussion. Reflexive thinking added credibility through ongoing commentary on my own, personal understandings and, while such understanding would inevitably be reflected in my findings and discussion chapters, scrutiny was called for ahead of this point. I was mindful to reduce the impact of bias that my own taken-for-granted ways and personal biography may cause by reflecting upon my position in the research process. Indeed, there was a risk that I might see only those parts of social reality that make sense in terms of my earlier experiences (Eriksen, 2008). Interestingly, for my study informed by Bourdieu's concept of habitus, Patton (1999) states:

When looking at the same scene, ... different people will see different things. What people "see" is highly dependent on their ... backgrounds. Our culture tells us what to see; our early childhood socialization instructs us in how to

look at the world; and our value systems tell us how to interpret what passes before our eyes. (p. 1199).

An understanding of the multiple layers of interpretation from my study according to Geertz's thick description, and the production of an ethnographic truth (Hoffman, 2009), will be accepted as partial and dependant on circumstance.

Merriam (1998) asks that we question whether our dataset and its findings are a true reflection of that observed. To the question, 'How congruent are the findings with reality?' (Merriam, 2008), Stake's (1995) retort would be that 'there are multiple perspectives or views ... that need to be represented, but there is no way to establish, beyond contention the best view' (Stake, 1995, p. 108). My considered, social constructionist retort is that it was not my goal to capture 'reality', to describe the 'real world' nor 'find the truth'. My role was to ensure data captured were in as much credible detail as possible and, accompanied by appropriate analytical tools, to present an 'interpretively rigorous' (Guba and Lincoln, 2008, p. 272) version of the socio-cultural situations that I had been party to in writing my final account.

Shenton (2004) recommends that one way to address dependability is by reporting the study design to a level of detail that would allow a future researcher to repeat the work. While novel, my observation protocol has since been applied in studies of botanical gardens (Nugent, 2015a), and in a bolt-on piece of work for which the protocol was explained via email and successfully applied by a researcher in Australia (Nugent et al., 2015).

Generalisation

It is beyond my intention and ability to generalise my findings from within the limits of my multicase study. My research describes and interprets what happened during one seasonal cycle, in three particular contexts. For my conclusions to be more widely applicable, consideration would need to be given as to how this evidence could be replicated over a larger selection of cases over an extended timescale. Indeed, to generalise would surely render my case descriptions as ‘static and frozen in the “ethnographic present”’ (Florio-Ruane, 1991, p. 241), when my hopes are for a more dynamic outcome.

Of particular importance to my study is the issue ‘of reconciling the particular and the universal’ (Denzin & Lincoln, 2000, p. 194). While I prefer to discuss the singular and the universal for reasons that are discussed later (Section 10.3), what is key during analysis was my aim to describe practices—some generic, some not—without making superficial claims and without obscuring individual experience under a blanket of generalisations. To this end, generalisations of practice should be made with caution. What can be taken forward is the potential in the beliefs that comprise the reasons for promoting human–nature relations during early childhood. It is not my intention to generalise; rather, scrutiny of nature-kindergarten practice can promote nature-based childhoods for what they can offer within the myriad different contexts of our own everyday routines.

5.7 Reflections on methodology and methods: limitations and advantages

Sensory-ethnographic methods corresponded well with the present discourse—ECE institutions deeply situated in socially, historically and culturally constituted

contexts. My dominant data source—observation data—required researcher and participants to be bodily and sensorially emplaced (Pink, 2009) in three different forests across four different seasons.

Denzin (1997) endorses ethnographic methods for the writing of stories that are more than records of human experience as ethnographic methods not only bring awareness of difference, but empower readers to make discoveries about themselves (Schwandt, 2007) through the research of others. Methods, however, for collecting and analysing sensory ethnographic data are, as yet, under-represented in existing education literature. Indeed, only a small handful of education studies use multi-sensory methodologies in their work; for example, with older age groups (Bingley and Milligan, 2007). Law and Urry (2005) call for social science ‘to develop its own suite of methods for understanding’ (p. 403) by dealing with ‘the *multiple* – that which takes different shapes in different places ... the *sensory* ... the *emotional* ... and the *kinaesthetic*’ (p. 403, original emphasis).

My way forward was to engage with traditional ethnographic methods but to rethink my methods in ways attentive to senses (Pink, 2009; Howe, 2013), and this involved looking outside of both the ECE and OL fields. Recent work on the notion of media-saturated households (Pink & Leder Mackley, 2013) was usefully applied to the present context in thinking about how relations with natural environments form part of people’s ‘experiential, habitual, and unspoken dimensions of everyday routines’ (p. 677). Making the choice, therefore, to adopt sensory ethnographic methods meant that, to the best of my ability, I was able to bring my data alive to enact rather than simply describe (Law & Urry, 2005) nature-kindergarten practices. My study was an opportunity to record the constructed and reconstructed processes of human–nature relations in these spaces but also to try and experience in ways that the

participants have to build a multi-layered picture to describe the vitality and verve in each case's use of their nature environments by recording these spaces 'as part of the sensory embodied and affective routines of everyday life' (Pink & Leder Mackley, 2013, p. 679). My social constructionist stance embraced first-hand encounters and responded to emergent demands and unpredictable events, as and wherever they occurred. My observation protocol—as devised and trialled (see Section 4.3)—and sensory ethnographic methods were adaptive to changes of pace, circumstance and weather as demanded by nature-kindergarten settings.

While Spradley's (1980) remit encourages the observer's role to 'evolve' (p. 58) during data collection, scoping had confirmed my observation protocol as both sensitive to, and apt for, the physical and social environments under observation (Punch, 2002). In essence, scoping gave me confidence in using the observation protocol and, as advised by Barker and Weller (2003), time to critically reflect on the way I used it. While novel, my bespoke protocol was flexible, systematic and physically achievable for a lone researcher as well as sensitive to the complexities of the nature-kindergarten environments.

Atkinson and Delamont (2006) implore researchers to avoid 'smash and grab' (p. 749) data collection. Mindful of such temptation, I strove for a contextually appropriate or 'study specific' time span. By setting out how my protocol and timeframe was operationalised (Section 5.3), I show how my data collection spanned a full seasonal cycle and this was important for two reasons. First, to satisfy the 'wholeness perspective' (Bang, 2008, p. 199) and garner a comprehensive description of the same participants in the same natural place under different seasonal conditions; and second, to observe how seasonal change influenced practices. Thody (2006) attests:

Observation is fun. . . . an actor with a walk-on silent part . . . You become party to intimate thoughts and actions. After the fun comes the nemesis. How do you convey your perspective, that of the observed and that of others in the scene? (p. 133)

For my study, observation amounted to gaining access to social worlds other than my own, recording those worlds and then reporting them here. I agree with Thody—observation was fun, likewise my interviews, conversations and photography. There was no strain, stress or worry regarding fieldwork as reported by some others (Whyte, 1993). Scoping through data collection was the best part of my PhD journey. From first introductions, to squatting against a tree in the rain, to watching participants play with ice blocks or whittle whistles, my time with participants was relaxed and enjoyable, welcoming and enlightening. Scheduled visits ran to plan and only once were travel plans delayed by adverse weather (and once by a volcanic eruption!) Practitioners made time in their work schedules to be with and help me, give interviews and feed me. There was practice (and conviviality) to be shared and I determined that my thesis would get written and its story would be of value for enhancing nature-based childhoods within the contexts of our own everyday routines.

I am well aware that my findings chapters that follow and my interpretations that they contain may be those of an outsider and an insider. The chapters that follow present my views on three nature kindergartens and contrast practices, where distinctions are constructive.

5.8 Summary: a methodological abstract

My conceptual framework (Chapter 3) and methodology (Chapter 4) that have guided my methods (Chapter 5) will now move on to informing my findings (Chapters 6–9). Ahead of presenting my findings, I recount these three chapters in the form of a ‘methodological abstract’ to show the interconnectivity of my methodological approach and conceptual framework to collecting, managing, analysing and verifying my data—all elements of my thesis journey that, as stated in this chapter’s introduction, I may ‘begin to comprehend the impact’ (Grix, 2004, p. 68) of my study.

In Chapter 3, I explained the social constructionist paradigm and theoretical framework of Bourdieu’s habitus and Heft’s affordance theory that underlie my study. Chapters 4 and 5 have focused on the methodology, including a scoping phase, and five methods I used to gather, manage, analyse and verify my data. I have shown in Chapters 4 and 5 that the sensory ethnographic methods chosen to answer my research questions accord with my philosophical paradigm and theoretical framework.

The five methods I have used are observation, field journals, interviews and conversations with participants, visual and other peripheral data. From these data sources, my research will describe, with sensitivity, what nature-kindergarten participants do day-to-day, season-to-season, country-to-country. My multicase approach to studying these participants is deeply grounded in an awareness and empathic understanding of different contexts (Huberman & Miles, 2005; Polkinghorne, 2005) as only by doing so might my choice of three nature kindergartens enable better understanding of the commonalities and distinctions between everyday practices and the influences that mediate them.

Mason (2002) states that qualitative inquiry has ‘an unrivalled capacity to

constitute compelling arguments about *how things work in particular contexts*' (original emphasis, p. 1). Nature kindergartens, as research subject, necessitated the selection of a methodology and methods that not only accommodated, but celebrated their contexts and multi-dimensionality—qualitative, sensory ethnographic inquiry had such qualities, and was as such, an epistemologically consistent means of inquiry for this study. My methods were flexible in order to capture unpredictable events, as they occurred, where they occurred, to whom they occurred as well as be adaptive, say, to a change of pace of events. Equally, my methods did not rely on one source at one point in time rather, by returning across the seasons to collect data I could corroborate my analytical arguments. In instances where there was a mismatch or anomaly in my data set, I could discard the argument through insufficient evidence to support it or look for meanings in the mismatch. To this end, my data analysis using thematic analysis was a process of finding out 'What is a nature kindergarten?' I took apart the component characteristics and influences my data presented to identify the facets of everyday practices. To verify the data, I used member checks and triangulation. The knowledge acquired from such scrutiny was then used to interpret practices at each nature kindergarten for what it said about a nature kindergarten quintain.

5.9 Seeking a structure for the findings chapters

Above (Section 5.4), I quote Miles, Huberman and Saldaña's (2014) 'inferential glue' (p. 292). For me, a defining blob of 'inferential glue' was to derive a structure for the findings chapters and explain this structure here. Finding a findings structure was important because, as Thody (2006) attests, 'observation data ... are unrivalled for attracting reader attention. Observation immediately establishes

verisimilitude and atmosphere with its rich data' (p. 133). My observation data were rich, and I had other primary data to support what I had seen, hence my desire to write up my interpretation in a way that did it justice was paramount. I wanted a structure that would foreground our human dependency upon nature to recognise our elemental parts in unison with the socio-cultural worlds we inhabit. I set upon four findings chapters—Air, Water, Food and Shelter—within which my three central themes 'Pursuing the benefits of nature', 'Understanding in situated and culturally constituted ways' and 'Practice as the tip of the iceberg' are addressed.

My four findings chapters are each presented in an order as determined by their hierarchy for human survival and each chapter is used as a means through which to order, describe and reflect upon different ways of noticing. My four findings chapters come together to represent, across the seasons, a picture of nature kindergarten-practice and participants—a story to evidence the use of nature environments by different participants. My three themes link and thread through each chapter—overlapping and spanning the findings chapters in a way that epitomises the complexity of these practices in these environments. Food, for example, is discussed in various ways. For example, it is addressed in terms of seasonal change and the availability of 'wild' foods as determined by nature and through discussions of hot chocolate in relation to fire and its use to keep children comforted and warm. Episodes involving ice and snow fall variously under the chapters Air and Shelter. Similarly, breeze-born scents of wild garlic sit as appropriately in Food as they do in Air—such is the matrix of threads that form like a 'recursively patterned loomwork' (McFarlane, 2015) into four findings chapters.

The early childhood literature is lightly peppered with authors who have chosen an elemental description (Ambrose & Armstrong, 2009; Knight, 2011; Williams-

Siegfredsen, 2012), perhaps in response to Froebel's gifts (see Archibald Smith, 2013). What I take from Higgins's (1996) description of outdoor education and his use of Maddern (1990;1991) and Hodgkin (1981) is the idea that elements are things we can't live without, which hints at an emphasis on human–nature relations. While the elements suggested an interesting grouping for my findings, or, if you like, one possible way to 'cut the cake',⁵⁷ an elemental ordering advanced a structure that somehow marginalised the human by omitting to make a sufficient connection between the human (habitual ways) and the learning environment (affordances). Adopting instead a structure based upon 'needs' that are fundamental to human survival helped me to order my findings in a way that foregrounded human–nature relations, providing a vivid way of ordering analysed events while reminding the reader of the multi-layered, intertwined dynamic that underpins outdoor learning and human existence as such 'needs' are an adaptable requisite to be modified according to contextual circumstances. While there may be other essentials for humans to grow, adapt and thrive, ordering based on human needs emphasises the immediacy with and our dependency upon our elemental parts in unison with the socio-cultural worlds we inhabit. Whoever we are and wherever we live, human needs cross boundaries and contexts—the 'universal activities of savage man' (Curtis, 1916). It is how we attend to these needs, for example, through our clothing and nutritional choices, that is of interest to this field as differences and similarities in our attention to our natural environments sheds light on how nature's draw upon human actions and relationships may manifest.

⁵⁷ This analogy stems from a supervision meeting with Professor Higgins and Dr. Beames when, over cake, there were ponderings as to the most appropriate way to present the findings as chapters. Ponderings and cake cutting proceeded after this meeting, perhaps to excess, before I fixed upon my final structure for the findings chapters.

I attempted to reach a diagram to represent an explanation of my findings and planned the title ‘Unpicking the threads’ as an attempt to help the reader navigate through the ‘tanglewood’ (Maitland, 2012, p. 5). A neat table was not to be, despite several attempts. I present the reader instead with evidence compartmentalised, as clearly as possible, into the four chapters that follow to describe my 53 days at three nature kindergartens in three different countries.

Chapter 6

Air

6.1 A place, 'That's noted for fresh air and fun'⁵⁸

Air is the most basic human need. Without air, specifically the oxygen in it, there would be no human life on earth. Simply put, we need air to respire and the carbon dioxide we exhale is essential to plants for photosynthesis—a process which in turn releases oxygen as a by-product. The basis of Chapter 6, and the three findings chapters that follow, is my data from across the Danish, Finnish and Scottish cases during the 16-month data collection period. Chapter 6, the first of my four findings chapters, presents findings that emerged from the data analysis that I have chosen to order around the human need for air.

The six sections that comprise Chapter 6 relate to the three themes of 'Pursuing the benefits of nature', 'Understanding in situated and culturally constituted ways' and 'Practice as tip of the iceberg'. The chapter opens with a focus on the perceived benefits of 'fresh' outdoor air to human health, including how woodlands are noted to be 'good for us' and how we might come to feel that way about the outdoors (Sections 6.1 and 6.2). In Section 6.3, I cover fire, its associated uses and risks, as what we call fire is the energy released during the chemical reaction of burning material and oxygen. Fire needs air too. Also presented (Section 6.4) will be aspects of context, notably air temperature and seasonal change as well as other weather and climatic impacts, including the impact of high wind upon practice (Section 6.5) and silence at nature kindergartens are presented (Section 6.6).

⁵⁸ Taken from the monologue *The Lion and Albert* by Marriott Edgar written in 1932. The Ramsbottom's family outing to Blackpool ends in tragedy, when their young son is swallowed by a lion at the zoo.

While technically not matter that adhere to a findings chapter and my point could be made without reference to the Ramsbottom family, writing of ‘fresh air and fun’ would not be complete without mention of Blackpool. Indulge me, please. The Ramsbottoms go to the seaside and the opening stanza’s message refers to the tradition of doing so being ‘good’ for one’s constitution. While Blackpool’s ‘fresh air’, like many seaside attributes, is a version of Victorian nostalgia, the same benefit is promoted in other contemporary spaces. In the UK, for example, the Countryside Alliance website attends to the ‘fresh air and exercise associated with outdoor learning’⁵⁹ and even in a virtual learning environment, Fresh Air Educators⁶⁰ offer the contradiction of online, hands-on outdoor education courses. In outdoor learning, as omnipresent as our respiratory need for air, is the distinctive desire for ‘fresh’ air, and its benefit to humans’ health goes beyond physical fitness to evidence spiritual, psychological and cultural benefits as well (Tabbush & O’Brien, 2003). Nan Shepherd’s mountain ‘has its own air; and it is to the quality of its air that is due the endless diversity of its colourings’ (Shepherd, 2011, p. 41). A nature writer, for whom the outdoors and the Cairngorms in particular were special and evocative, Shepherd (2011) is classifying mountainous air as different—‘sharp and intense’ (p. 41). My findings aim to empirically evidence my introductory points about air (and not Blackpool!), starting with links between fresh air, human health and well-being.

⁵⁹ See www.countryside-alliance.org

⁶⁰ See www.freshaireducators.com

6.2 'Drink the wild air'⁶¹

Mari, the female pedagogue, refers to the air outdoors right from the outset in Finland:

Okay. Let's get to the forest to breathe in the goodness and see what the fuss is all about in the nature. Come now, it's better out there. (Mari, Finnish case; extract from field journal, 19 October 2010)

We are indoors at the main kindergarten building, readying the group to leave for the forest, when Mari makes the above comment. Mari understands her version of 'the nature' to be good for us, and her comment allows my findings to pursue the recognition that the air outdoors is different and 'better'. In our follow-up interview, when drawn on her use of the word 'better', Mari expresses the ability to 'breathe easy' in the 'calmer classroom' outdoors. Similarly, both the Scottish and Danish practitioners made reference to 'clean air' and 'good autumnal air':

There is nothing to compare to the forest air ... we like it here and the children are relaxed in it and discovering smells on the air and this would not happen at the kindergarten. (Morten, Danish case)

For me, here is 'a breath of fresh air', literally [*laughs*]. When you hear what some kids do all day at nursery, you realise that this is such a good place to be. You know what I mean, of course you do, you see the difference. (Dan, Scottish case)

⁶¹ Taken from Ralph Waldo Emerson's (1860) poem 'Merlin's Song' and included in his later revised book *The Conduct of Life* (Waldo Emerson, 1876).

The Dane and the Scot made their comments when we were in the woods, while the children ran, dug, climbed, watched or we talked as we walked on our way to the woods. The practitioners commented in ways that confirm distinctness in outdoor, natural classrooms and their comments were closely aligned both to Mari's and my own (see Chapter 1.2.6). There was also reference to the difference in air by a Scottish parent:

[The children] are always tired after their days out here. They sleep well, that's for sure. I like that when they're at nature kindergarten, there's few indoor distractions, and they just stay out and get the best of it. (Parent, Scottish case)

This mother's reference to air quality is surprising as this family lived locally to the nature kindergarten in a small, rural village, yet she was expressing nature kindergarten as her children's route to the benefits of time outdoors. The difference she saw in her children's sleep pattern when they spent their days in the woods reminded me of the long-refuted surplus energy theory (Curtis, 1916). From a position of 'better' air and 'relaxed' atmosphere it was easy for parents and practitioners to impress on me their beliefs in the special qualities of nature-based ECE. Predominantly, adults felt they advantaged children through facilitating a year-round relationship with nature.

I use Bourdieu's habitus (1977) to look at my data in 'ways in which not only is the body in the social world, but also the ways in which the social world is in the body' (Reay, 2004, p. 432). While each group under study sought 'fresh air and fun', the 'immanent structures' (Bourdieu, 1998, p. 81) of the social world at each case

shaped their perception by subjecting potential affordances, and thus observed actions, to wider influences. During analysis, keeping to mind the notion of the habitus as ‘a socialised body’ (Bourdieu, 1998, p. 81) helped me to understand how episodes in the Danish, Finnish or Scottish forests are differently or similarly negotiated. Morten, the Danish practitioner, together with Dan and the parent from Scotland speak of outdoors as better to indoors and better for the children and in doing so, focus on the idea that nature-kindergarten childhoods may be contributing to ‘constructing a national childhood’ (Nilsen, 2008, p. 54).

During my research, I spent a considerable time in airports and, waiting for a return flight from Helsinki, there was a booth in the departure lounge that for Kahn et al. (2009) would be a prime example of technological nature. Stepping inside and sitting a while was intended to remind visitors of their time in Finland. Press a button and a motorised fan emitted wafts of ‘air’ through vents and accompanying sounds: smoke-scented air and a crackling fire; warmer air and birdsong. I paid particular attention to the button labelled ‘pine forest with wood smoke’ because it had meaning to me and to my time in the woods the day before. That all button options were ‘nature related’ said something to me about the Finns’ perception of their country and the genre of memories they wished visitors to take home. Sitting there, pressing buttons and being wafted were effective in stirring memories of the forest. The smell of that ‘technological’ air stirred my emotions of my experience and my knowing of the Finnish forest I had left behind. From their self-reported, questionnaire data, Moser and Martinsen (2010) note the tendency for practitioners to overestimate the time spent outdoors each day and how that time is used. My methods, in particular the sensory-ethnographic observation protocol and post-observation interview, avoided such inaccuracy to offer knowledge about what participants actually do at nature

kindergartens ‘as part of the sensory embodied and affective routines of everyday life’ (Pink & Leder Mackley, 2013, p. 679). When I came to analyse these data, I concerned myself with interpreting participant experiences yet ‘my capacity to imagine myself into the corporeality represented by [the data] was more specifically connected to my own research experiences’ (Pink, 2009, p. 123). When I came to theorise my analysis, Merleau-Ponty’s (1945) phenomenological ideas of, in this particular scenario smell, could help in understanding the centrality of my own body and the bodies of others (Coffey, 1999) in our relations with the natural environment.

Similarly, on other visits to my case settings, the aroma of the environment stimulated feelings of familiarity. For example, a Scottish child looking out at a spring shower from the kitchen doorway:

It’s raining; it’ll smell different out there now. (Girl A, Scottish case)

The remark from the Scottish girl above is on the same topic as, almost a year later, a Danish child:

This is my favourite smell. It’s rained just enough to make everything smell right, like really sweet and the soil and the leaves too. (Girl B, Danish case)

These extracts convey meaning, as Giono would have wished (see Section 2.2.3), through children’s experiences of a ‘gentle breeze laden with scents’ (Giono, 1957/1985, p. 12). In my field journal, there is a note to find out what makes the world smell like this some days. On following up, I learnt a new word. What these

girls and I are sensing is the ‘petrichor’⁶²—the characteristic odour produced by rainfall on to dusty, dry earth that releases oils from the earth to scent the air (Bear & Thomas, 1964). For both these girls, their playscapes were giving them olfactory messages via their immediate sensuous experience of the world. Gibson’s (1979) ecological psychology recognises an interrelation between the senses, the cognitive properties of the brain and perceptual systems, including muscles and movement, yet the physical context of such perception is key. In these sensory episodes, these girls and I with our sense of smell—our nasal cells mediated by our biology—may well have perceived petrichor, but there is something more in what Gibson (1979) says, namely, that physical context counts; context determining and as determined by the researcher’s understanding (Flyvberg, 2005). While the airport booth was fun and its wafts sufficiently realistic to stir my recent memories, I wasn’t outdoors, rather, I was standing in a big, plastic box pushing buttons.

In the Scottish spring, we foraged for the prodigious wild garlic to make pesto to serve with pasta at lunchtime. The anticipation of lunch that the group detected began with the smell of the forest floor before we reached the plants:

Child A: I know it’s coming.

Steve: How do you know?

Child A: I can smell it.

Child B: And, yes but it’s always here. This is where it grows.

As an aside, a practitioner was quick to point out:

⁶² This word’s origins derive from the Greek ‘petra’ meaning stone and ‘ichor’, the ethereal blood of the Gods in Greek mythology. Originally known as the Nature of Argillaceous Odour, the smell was renamed in 1964 by two Australian scientists, Joy Bear and Richard Thomas, following their work on the physical mechanism of this phenomenon.

They love doing this ... and as soon as there's flowers and the smell, they're off. It's as if they've been presented a clue, and if they don't know the smell the rest of the group are so vocal about it, we all know soon enough! (Dan, Scottish case)

Going back to the point that my present section is making, namely, that 'freshair' and 'better' or scent-laden air is distinctive to an indoor classroom, Dan's comment above is useful. In saying the air 'presented a clue', Dan confirms one contribution of nature to the children's experience in the context of a nature kindergarten. Dan's insight is representative of the pervasive belief amongst each of the adult practitioners in my study, and in line with the literature (Gurholt, 2014; Kahn et al., 2012), that nature is a pedagogical tool. Practitioners made frequent reference to the ways that nature's cues—Dan's 'clue'—afforded flexibility in their pedagogical practice to feature within children's experience at nature kindergarten. There is a further point to make from my opening findings on adult participants at the three cases. We know that nature kindergartens share facets with other nature-based ECE concepts including Forest School, and in the absence of literature specific to nature kindergartens, I have drawn on what we know about Forest School throughout my thesis. In parallel with Leather's (2016) recent insightful analysis of Forest School as a social construction, I suggest through the three nature kindergartens in my study, that nature kindergartens are too. In contrast, however, to Leather (2016) and similar critique that the import of the Forest and Nature School programmes in Canada lack cultural relevancy (Power, Cree & Knight, 2015), my research is based on empirical data. My observations and interviews with the nature kindergarten practitioners under

study has shown that these individuals not only understand the concept of this form of nature-based ECE, but also that they value what they do and why, in the locally specific ways they do it.

Adult and child participants, each using different pedagogical environments and picking up information from—as evidenced, for example, in this section—airborne scents allows for consideration of how nature is used over time, given that the Danes, Finns and Scots visit their forests and watercourses on multiple occasions across different seasons. I return in due course to further accounts of participants’ sensory experience and discuss how such findings deepen our understanding of affordances in relation to nature kindergartens.

6.2.1 Recalling as a route to learning

Inside the ‘scent booth’, amidst the airport’s bustle, I had sensory cues but also relaxation—‘a little time to sit and think’ (Boy, Scottish case) of the forest and its atmosphere and the time I had recently spent there with participants (Photograph 3). It had been a long few days of data collection; however, a calm sense of ease was at the forefront of my mind ahead of any strenuous, muscular, post-outdoors fatigue. Muñoz (2009) and Gleave and Cole-Hamilton (2012) attend in their literature reviews to the relation between outdoors, higher levels of physical activity and well-being, and my study supports nature’s effect on well-being alongside physical benefits to the human body. The booth’s smells took me back to the forest mentally, if not physically.



Photograph 3: 'A little time to sit and think' (Boy, Scottish case)

Talk with adults during interviews at each setting had frequently come round to a group's feelings of well-being and, specifically, adult perceptions of the children's happiness that will help my study to justify links between attendance of nature kindergarten and well-being. In the deep snow of the Danish winter, Henrik, far from dejected at the conditions, saw the benefit in this affordance for these young children, adding:

We think of body and movement theme in context of little legs in deep snow. This hill sloping and deep snow is something the nature affords for our bodies ... we are more fit. (Henrik, Danish case)

In this data, the Dane is acting in line with expectations from the literature of Nordic peoples positive sentiments towards the outdoors (Moser & Martinsen, 2010) and Nilsen's (2008) robust child there. As our conversation continued, however, I recorded sensitivity in how this practitioner wished the children would remember 'how it felt to be tired and happy after being with the nature' but also remember their

year at nature kindergarten with fondness. One Finnish boy came to see me.⁶³ I had met this boy during scoping, but by the time of my data collection he had finished his preschool year and moved to school. Mari was close to the boy's parents and word had got to him that 'the woman from Scotland' was back. Mari said of this nature kindergarten 'graduate':

He asks to come back and see us again and again, he loves to be in the nature and he wants to give interview again now his English is better. (Mari, Finnish case)

With an appreciation of nature doubtless inherited from his geologist father, this boy was an expressive participant. He asked to be 'interviewed properly' and we sat in the hut with Flip recorder, pen and paper. Points he made suggested his relationship with the nature-kindergarten environment to be well established (see Section 9.7). For example, leaving the hut, he showed me his 'special hollow' nearby. We had been here before, although previously he felt that he could not explain it as well as he had wanted as 'I had not the words'. The significance here is twofold. He wanted not only to get his point across, but also come back to his former nature kindergarten as it was a place that he held special because 'school is different, we're inside a lot and I like it out in fresher air'. This young boy, in expressing his preferences, evidenced sentiments that emerged across all three settings: to go out and take the air in the woods felt good and, while tiring, was worthwhile taking.

Lloyd and Gray (2014) recognise a connection between place-based understandings, such as evidenced above, but Malone (2016) also recognises

⁶³ I refer to the same Finnish boy again in Section 9.7

contemporary challenges, including our environmental crisis, that surround such practice. In my example of the garlic-hunting Scots, a connection with nature was being instigated during nature kindergarten. Whether, however, such opportunities would be facilitated for the children at school the following year or at home, would require further investigation. Across my ‘fresh’ and ‘better’ air section, there is an overriding positivity towards the use of outdoor, nature environments. Even when air temperatures changed (see Section 6.4) and the weather turned inclement, few negative remarks or actions were recorded. In due course, my findings will reason why there may be bias amongst nature-kindergarten parental and practitioner attitudes towards this form of ECE that may challenge how representative my account is. At this point, I feel there are socially and culturally specific reasons behind observed relationships and, by digging deeper, these may become explicit.

6.3 Fire

Oxygen sustains us, gives us our breath and at the same time, it is a vital ingredient for fire. My field notes say, ‘I noticed it yesterday for the first time—dusk’ (extract from field journal, 1 October 2010). I noticed and noted dusk to have settled before the end of my observation session as the clocks had gone back an hour since my last visit to the Scottish case. The fire had been lit inside the roundhouse that afternoon, popcorn had been cooked for snack and by the time we left the firelight’s glow at session’s end, the light played tricks as our eyes adjusted to the late autumn light. As the children ran ahead of the adults along the path through the woods to the kindergarten building, their voices were clear although they could not be clearly seen—it was 3.10 p.m. One Scottish practitioner stated:

There's such a change in the air and the length of our days now. We'll get the fire on more for them. (Steve, Scottish case)

For this practitioner, fire served the purpose of warmth and comfort but also served as a necessity and met his expectation that for these young children there was a need to protect them as the weather turned cooler. Fire needs oxygen to burn and with its distinctive qualities, has become synonymous with nature-based practice and, if my findings are indicative, fire is more commonplace in the outdoors than in any other contemporary classroom. Each of the three cases included the use of fire in their provision. In both Finland and Scotland, there were permanent fire pits in permanent buildings. The Finns lit a fire daily whereas the Scots were more selective. So pervasive and habitual is their need for fire, the Finns also lit one when away from their permanent pit, and one example is their trip to a frozen lake (see Section 7.3). In Denmark, there was no permanent buildings or fire site in the woodland, but, in autumn and winter, the Danes lit temporary fires at their daily 'camps'. All fires, at all cases, were open and wood burning.

In 1973, Bourdieu's early work included the study of a Berber home. His description, thick with 'Geertzian abilities' (Lizardo, 2003, p. 3), records sensuous insight and cultural aspects along with more technical detail. Inspirational to the surveyor in me (see Section 2.4.3) is how Bourdieu draws upon architectural facets—the 'magic' of design elements—that have implications upon a space. I introduce my readers to the different buildings at the three settings (see Appendix A) and make further mention in Chapter 9.



Photographs 4 and 5: The Finnish laavu: with and without its 'uniform of snow'

(see Section 6.4)

While direct comparisons cannot be made, for example, between the Finnish *laavu* (hut) (Photographs 4 and 5) and the roundhouse out in the Scottish wood, I want to attend to the use of these inside spaces at each case as relating to my findings around fire. Both buildings were gathering spaces of approximately the same size, with a fire pit as focal point. Both were purpose built and used for community, for resting and for didactic dialogue. Notably, both these buildings significantly changed in atmosphere when the fires were lit. The *laavu* was cosy when doors and windows were closed against the chill, yet fresh when thrown open in spring and summer. The hut's space was rich with tactile and olfactory cues including animal furs and woollen mats on its seats with chopped logs piled underneath. In design, and in contrast, the roundhouse was partially open on all sides without windows or doors giving no option of being sealed away from the weather. The atmosphere that that space imparted was very much that one was still part of the forest. An (intentionally designed) hole in the roundhouse roof let the sky in and the smoke out—but neither smoke, cooking smells, nor sadly the fire's warmth lingered to have a limiting effect on the roundhouse's—to borrow from Howes and Classon (2014)—sense-scape.

Three examples follow, one at each case, to express the dimension of contrast that surrounds nature kindergartens' use of fire. At the Danish case we were preparing to leave the main kindergarten building. There was an assembling group of children, myself and one other adult at the garden gate that divides kindergarten garden from the car park and the road to the autumnal forest beyond. My journal entry says it was 9.30 a.m. and I noted that the majority of participants had been at kindergarten for two hours. Wilson (2012) describes how children learn while 'messing around' (p. 2). I opted to code such endeavours as 'frivolling'. Several children came directly to the gate on release from the building and were coded during my analysis as 'frivolling'—that is, they were purposeful, independent and 'doing their own thing' until the time came to set off for the forest. Several other children were scattered across the garden area, squeezing time to roll down the hill, digging in the sandpit or swinging on the garden trapeze, before leaving for the forest. I recall that Morten, standing at the gate, showed no concern at the dispersed group. Presently, Henrik, with one child helper, emerged from the main building carrying a large cooking pot, containers of milk, plastic cups, a packet of hot chocolate powder and various utensils for stirring and serving. The group gathered, ready to walk to the forest—a fire would be set, hot chocolate made, but the fire's location would not be decided upon until the group settle into their morning and made a base for their day. Five months later, I returned to the forest with this Danish group during my spring visit (20.3.2011); hot chocolate was on the menu again and I got the impression this practice was a familiar discourse.

At the Finnish case, fire was a pervading feature and was evident within the data all year round. Their continental weather systems typically produce very harsh, very cold winters, and marked temperature drops and short days for up to seven months each year resulted in a fire being lit for warmth, but also for cooking food as

well as for the socialising and radiant comfort that gathering around fire provides. At the hut, a fire was lit each day. When outside temperatures rose, the fire was used for smoking fish, warming wet feet or making charcoal for drawing. When away from the hut, fires were also frequently lit by Mari and Joonas and used for cooking as well as being a pastime in itself (Photograph 6). Children would gather kindling and branches for their own use or to leave at a fire site for the next user:

Someone chopped this so we chop for the next person and so we all have wood ready for fire. (Joonas, Finnish case)

There was a strong emphasis in Joonas's (rare, but always astute) comments on the communal, shared aspect of nature environments. Later that day, sausages—fatty, salty, hot from the open fire and prevalent—were a welcome return for our wood gathering efforts, and even shared with passers-by, including a couple of cross country skiers. The sharing of logs chopped by others, the fire's warmth and hot sausages could be interpreted as a community of nature users as:

We're here together in the nature, this is what we all do. (Joonas, Finnish case).



Photograph 6: Fire by the lake in Finland

At the Scottish setting, it is October and a damp, overcast chill rests over the setting—it is 8°C outside and talking with parents delays me in walking up through the woods. My observation schedule notes that by the time of my arrival at the roundhouse for the first scan, two girls and one practitioner were already there—the children seated on benches made from logs about one metre from the fire pit and the adult setting the fire. The rest of the group arrive after me having been ‘the long way round’ via ‘playing on the Dragon Tree’. The whole group and I settled, watching Dan ready kindling for a fire. It was difficult to understand why the fire pit is ever present yet routinely remains unlit, except for the colder months, and even then perhaps for just part of a session. I asked both the practitioners for an explanation and in their responses I recognise their constitutive, rather than solely causal, roles in human–nature relations:

It doesn't always work out for us, if we're late getting up here or there's other things going on. (Dan, Scottish case)

If we plan to do marshmallows or get bread going, then we'll bring up what we need, otherwise it's not always cold enough to get a fire started and then we have to keep one of us next to the fire for safety reasons and that can be limiting on what else gets done. (Steve, Scottish case)

Evident in these two comments is the adult's power to enact a practice but also how other factors might guide what is observed. The literature has shown that adult members share responsibility within a community's context and practices are embedded in everyday ways (Fleer, 2003). Drawing on Bourdieu's habitus to think through my data, the adults' conversations illuminate their own understanding and approaches to afforded opportunities. For example, data around the use of fire at each of the three settings ground the notion of 'conduit adults' (Nugent & Beames, 2015, p. 82) so that consideration can be given to the adult's mediating role at nature kindergartens, the adult's own subjectivity and the specificity of the social and physical contexts in such a construction.

Oxygen is an essential ingredient for fire and fire is a characteristic of nature kindergarten, yet all three cases take a different approach to fire. For the Finns, fire is routine; for the Danes and Scots less so, and I return to this point in Section 6.3.1. A key point applicable to my findings about fire, as well as my findings on other practices discussed in due course, is in relation to methodological implications for researching nature kindergartens—my multicase design using sensory-ethnographic methods allowed me to gain insights into how observed behaviours are shaped by hidden influences. My descriptions of a fire site, the frequency of fires and uses of fire are misleading without understanding of social and cultural facets influencing the different approaches between cases.

Before summarising the use of fire at my examples of nature kindergartens (Section 6.3.1), I suggest two of my three guiding themes coalesce as the adult's belief in the 'the benefits of nature' is inextricably linked to 'situated and culturally constituted ways' for it could be said that the 'pursuit' is habitual only because of what is afforded each setting in their 'quotidian everydayness' (van Manen, 2013, p. 139).

6.3.1 Embers: summarising thoughts regards fire

To one looking in from the 'outside', the Finns' use of fire prompted me to consider whether human–nature relations cement simply by going outdoors. By their actions, the adults showed a commitment to facilitating the experience. For example, when fallen deadwood was collected, chopped and stored the talk was of renewable fuel and a stewardship role towards 'our forest'. When the fire burned, the talk was of different tree species and respective burn times. I saw such practice as a passive form of cultural transmission from one generation to the next that appeared to be very deliberate in purpose, but subtle in method. Fire was a ritual for the Finns—almost as if it *had* to be there. I felt the Finnish fires epitomised a relationship with nature that they felt was not only an essential characteristic of practice and central to surviving the elements, but also a pastime or inherent to their feeling of well-being. For them, not only was lighting a fire 'second nature', but there was also a sense of incompleteness when the fire was not lit. At my Nordic comparator, the Danes were more ambivalent about the use of fire and equally at the Scottish case: 'It's a more "take-it-or-leave it" exercise' (Dan). One Dane, Henrik, did not want to be pinned down on the possible reasons for this difference, even under questioning, saying: 'It is no big deal.' I look to Bourdieu to help my understanding of the ways resources,

including fire, might be conceptualised in different ways by different groups where habitus (Bourdieu, 1977) is the generative principle of different practices and ways of living. For example, by analysing the different constructions in the Finn's use of fire to the Danes and Scots' relationship with it through the role of the conduit adult, might lead one to ask, therefore, about the use of fire as essentially habitual.

Combining this insight with knowledge based on data from all three cases, across the seasons supports that observed practices may only be the 'tip of the iceberg'.

In many ways, fire and smoke heightened our senses. One comment made by a Finnish pedagogue on our return to the main kindergarten building was of how

[i]t's not the same now that we are back inside here, but there's the strong smell of smoke to my hair. We change our clothes and tomorrow when I put on the coat, ah, the smell again and I think of yesterday and think of the day coming. (Mari, Finnish case)

Mari's comment suggests that sensory cues arising from the outdoor, physical environment and its resources go beyond say, a simple photograph of the event and may better stick in the memory. Participants were always keen to recount sensory associations to events, including how their bodies felt and how it was to be there in terms of smells, tastes and sounds. Late one afternoon, a small Scottish boy came and quietly sat by me on a bench at the fireside as I was wrote up field notes and asked:

Are you listening to the fire? (Boy, Scottish case)

Listening to the fire? I had grown up staring into the open fires in my childhood home, had adored gazing at garden bonfires and the colours and patterns in

the flames—I had watched fires, not listened to them. I paused, flicked on the Flip recorder and asked him: ‘Do you listen to the fire? Can you tell me what you mean, what are you listening to?’ He replied:

Oh, they’re good if you put leaves on. Then that’s a really flat sound, except some leaves are more fizzy sounding and really big fires have lots of different sounds going on all at the same time ... fizzing and things all mixed up. Then if the stuff that gets put on is wet and the flames go all smoky there isn’t much to ... listen to and it goes really quiet for a bit. (Boy, Scottish case)

Across each case, the overwhelming ease of discussing sensory cues was evidence of the centrality of such cues to our relationships with nature. After every autumn and winter sessions, ahead of interviews, both researcher and adult participants changed out of our outdoor, outer clothes once back at the main kindergarten buildings. There was always coffee, cake and conversation and as children were collected for home in Denmark and Finland, under-floor heating rather than open fires always warmed our slippers feet and, on one occasion, was a starting point for discussing the weather.

6.4 ‘Whether the weather be fine, or whether the weather be not’: air temperature and seasonal change

Climate and weather contributed to practice and I refer to this facet throughout my findings chapters. In this chapter on air, I refer to falling air temperatures when water becomes sleet, snow and ice. My winter visits evidenced such afforded features as a rich conduit, across all three settings, for sensory experience and creativity. Snow

in Scotland was not a given and, therefore, snow-related activities were more of a frivolous novelty evidenced by snowmen and snowball fights. The Danes were more familiar with snow and icy conditions, however, not to the extent of their Nordic counterparts, the Finns across the Baltic Sea who fished (Section 7.3) and built ice shelters (Section 9.2) in the most extreme conditions. On one wall of the Finnish hut had been hung a snowflake identification chart (Photograph 7), the like of which I had not seen before. This chart was frequently referred to and it was photocopied for me in order that I too could better understand snow, the Finn's emblematic resource. To me, snow was 'slushy', perhaps 'dry', perhaps good for making snowballs or skiing. I had not previously thought of snowflakes in the way that the Finn's chart presented. The chart showed different forms of snowflake with the qualities and climatic conditions associated with each form.



Photograph 7: Snowflakes—celebrated in a wall display

I recorded the transmission of environmental messages (see also Section 7.4 that describes ice-fishing) and the impact of direct experience outdoors aligns with the literature (Duerden & Witt, 2010; Palmberg & Kuru, 2000; Peacock, 2007). During

my winter visit to the Finnish case, I observed participants refilling empty, one-litre milk cartons with water dyed using natural food colours. The cartons of coloured water were left in the hut overnight, the water froze, and the children played with the frozen bricks the following morning (Photograph 8). Mari explained that this was exciting and memorable for children but had wider value as environmental concerns were gently introduced.



Photograph 8: 'Veistokseni' ['My sculpture'] (Boy, Finnish case)

In this example, recycling was fun, offered in an appropriate seasonal context and on a scale appropriate for the age group:

The children learn to recycle as extra to playing with frozen water. We do not try to do “Today at kindergarten we will save the planet” this is not our day...good habits [saving] the packages and so in summer the ice is not forming in the forest but always saving the cartons is now what we do.

(Mari, Finnish case)

Similarly, at the Scottish case, I observed how practitioners related the situated understandings of their child participants to prior experience. A rainwater storage system attached to the roof of a shelter (see Section 9.6) evidenced environmental stewardship being introduced slowly and appropriately for young children. In contrast, examples of catastrophic environmental concerns may overwhelm young children, risk premature abstraction (Coffey, 2001) and serve to nurture pessimistic outlooks or anxieties rooted in ecophobia (Sobel, 2014; Strife, 2012). While the literature recognises challenges (Boileau, 2013), it was commonplace to record nature-kindergarten practices where the significance of environmental education was more directly apparent for young children. These nature kindergartens, by virtue of a basis in learning *with*, rather than *about* nature (MacQuarrie et al., 2015), adopted an approach suited to their location and rooted environmental education in straightforward, daily experience.

It was often with ease one could exploit potential of an interview as a ‘social, sensorial and emotive encounter’ (Pink, 2009, p. 83) evidenced here by Joonas:

All the people are excited when spring is coming ... the first snow is important but spring is very welcome to us. We keep a chart for [the] first signs of spring and the children are excited to find and put ticks for bird song, fresh-air smell, melting ice and light sun and longer daylight, so more time here in the forest. (Joonas, Finnish case)

Spring signals warmer weather and longer daylight hours and, for the Finns in particular, seasonal contrast was sharp. The excerpt above expresses how such notable change, including the onset of spring, can contribute to practice and in this instance,

more time outside.⁶⁴ Waiting for rising temperatures to melt back their winter snows was characteristic of a Finnish certainty in seasonal change, akin to their anticipation over the first snow the previous October. Across the Baltic Sea and 5° latitude further south, seasonal difference may not have been as pronounced or as predictable for the Danes, however, the end of winter and seasonal change was attended to. Late on in the Danish February and in cold, but beautifully crisp, conditions I am in conversation with Henrik and Morten. I open with: ‘Tell me a little about your kindergarten at this time of year?’ He replied:

We have had snow, sleet, the cold times now for four months ... this is tough. It is inside the bones. Maybe it is the end of winter, we hope, but still much snow this year. (Henrik, Danish case)

We talk on while the children are changing and preparing to go out. Morten notes the importance of mentioning the children’s clothing, as differentiated by the season. Henrik nods his agreement and helps translate:

All the layers of warm wool and the boots ... good socks are important to us. Ready for day now. Our parents are good parents and they know and this helps our job. Spare clothes too and we have the boot drier ... big investment for all the kindergartens in Denmark. Cold and wet children are unhappy children. Cold and wet pedagogues, unhappy pedagogues [*laughs*]. (Morten, Danish case)

⁶⁴ The shortest observation span was recorded during the Finnish winter (2.5 hours outdoor; four scans) compared to the Danish springtime (6 hours; 12 scans), which was the longest day outdoors.

As both men headed away to get changed, I made a note in my field journal to compare this scenario to the morning routine at the other cases. There was more, I felt, in his remarks that called for consideration of an adult's 'knowing': parents sending in spare clothing in case their children got wet and pedagogues assisting in getting children ready and mediating what was worn for protection—be that layers of merino wool, fleece or sunscreen. It was through the older generations' own experience and own understanding of how it feels to be cold or sunburnt that was informing their pedagogical actions and advice.

There is an adage likely known to the reader, its originator less so, and its ending is open to debate:⁶⁵ 'There's no such thing as bad weather ...'. Now used, in my opinion, to excess, this statement deserves to be challenged. The meaning behind this saying is, I feel, one that comes from knowing from experience, and this is why I chose to challenge it after being alerted to clothing by the Danish practitioners. Origin and punchline aside, the saying gets regular use in reference to children going outdoors. Its reference, however, to human relationships with the weather and clothing choice must be questioned. There is such a thing as 'bad' weather. 'Bad' weather is a subjective, contextually bound judgment—'bad' weather may result in a poor crop of berries or a storm that fells a mature stand of trees. The 'wrong' clothing for outdoor conditions, whether merino wool, Gore-Tex or wicking cotton, merely attends to the human–nature aesthetic, where the consequence of getting the choice 'wrong' may be discomfort, but inappropriate clothes still exist (and are worn by

⁶⁵ The origins of this saying are unclear. Various muted as Swedish and Norwegian—as a rhyme the saying works in both languages for weather and clothes (in Swedish *väder* and *kläder*; in Norwegian *vær* and *klær*) yet, both Roald Amundsen and Sir Ranulph Fiennes are attributed to saying '... only inappropriate clothing', whereas Alfred Wainwright's clothing was 'unsuitable'. Perhaps my favourite ending 'just soft people' (Anonymous) could be adjusted in light of this research to 'just people who haven't lived in this climate'.

many!). Higgins (1996) noted that ‘Severe weather, directly experienced can generate a true sense of awe and wonder’ (p. 35). Awe and wonder, however, are difficult emotions to sustain. There can be, however, lasting impact upon human behaviours from emotional highs and lows as well as from experiencing first-hand the effects that are highlighted by my findings. As a conduit to imparting relatedness and lasting relationships, experiencing emotional highs and lows, or experiencing hot and cold weather, have a role in memories and the learning that memories bring. Before experience taught me otherwise, for example, gloves were worn to keep hands warm in winter. There was no hesitation in packing gloves in readiness for data collecting in the Finnish winter—my ski gloves would do just fine. I was naïve and unprepared for this Finnish extreme and was berated by Mari on leaving for the forest, the thermometer reading -31°C:

Those ‘September’ gloves [*laughs*], your fingers will fall off. (Mari, Finnish case)

She had learned young the benefit of wearing higher-quality layers and different weight ‘tog’ or animal furs dependent on the season. She was attuned to checking her charges—children and ‘outsiders’ alike—before heading outdoors for extended periods in winter. Extremes impacts of weather—frostbite, lightning strikes and heatstroke—are potentially lethal to humans. We live in a world where protecting our bodies against these extremes is a serious consideration. The ultimate way to learn the sensation of being cold or sunburnt is to know it personally (see Higgins, 1996), and before real and immediate experience taught me otherwise, one pair of gloves

sufficed for winter. My habitual understanding of ‘appropriate’ had to be adjusted to the context.

6.4.1 Snow pizza and ‘Isaacles’

Runco (2003) writes of educating children to reach their creative potential and Craft (2001) writes about creative responses to natural resources. In Denmark, Finland and Scotland, snow and ice encouraged such creativity and fantasy. I saw an opportunity in the literature to go beyond mere description of nature-kindergarten practices. From my evidence of snow and ice afforded at each case, I recognised how fantasy and creativity could contribute to authenticity and, as Beames and Brown (2016) recommend, capture the minds of these youngest members of each society.

One of my favourite examples to illustrate rich, sensory experience entwined with fantasy and creativity was at the Danish case—an episode coded as ‘Tasting snow pizza’. The observation schedule showed for this episode that the outside temperature was -1°C and the group had arrived at a large, wide-open, snow-covered field that bordered the forest. By 10.30 a.m., the surface of the snow remained thinly crusted, not yet melted by the weak sun. Two girls had settled on the ground about 250 metres away from where I was talking to the pedagogues, and I recorded their actions. Seated and kneeling, using their thumbs, the girls were ‘cutting’ circles of frozen snow and lifting to taste them. They—sucking, biting, discarding different circles, gloves on, gloves off—cut another disc and the sequence was sustained across three, consecutive observation scans. Enthralled, but not wholly understanding the episodes, I simply watched, recorded and photographed (Photograph 9).



Photograph 9: 'Snow pizza'

Later, back at the kindergarten, Henrik and I talked about the girls. My initial interpretation was, 'the girls like to taste the cold', but this gave way to a deeper analysis as Henrik disagreed with my idea saying, 'it's not all about sensation'. By all accounts, both girls frequently performed 'tea parties' and 'picnics' with and without snow and, of course, presented with an adaptable resource a slice of snow can be a slice of pizza, a sandwich or a piece of cake. The girls' actions and Henrik's insight drew my attention to the notion that while there is reciprocity between playing humans and a natural resource, such relations may be misread when there is a dose of childhood imagination in the mix. Davies (1989) found that children's interpretations, in differing from adult interpretations, may not initially make sense to an adult researcher. In interpreting the contradictions in viewpoints of the 'snow pizza' episode, it is useful to turn to Stake (2006) who reminds us that 'to the extent that what is not agreed upon is unimportant, what is agreed upon is confirmed' (p. 37). When Morten and Dorethe joined the discussion of 'snow pizza', we agreed upon one thing—snow afforded these children the chance to taste it, throw it or be a snow angel 'in' it. Snow afforded sensory and creative opportunities to be whatever each child wanted it to be on that snow-covered day, and the benefits to the child of such scope was more important than adult interpretation.

Central to my theme of ‘Practice as tip of the iceberg’ is the need to critically consider the layers beneath observed episodes which operate in socially, historically and culturally specific ways (Burr, 2003). By analysing such episodes with codes including, ‘Choosing to have own experience’ and ‘Recognising and accepting the experiences of others’, my data were challenging any notion of constructs as readily visible to others (Schweisfurth, 2010) hence, the significance of subjectivity and Bourdieu’s (1993, p. 271) ‘specificity’ would not be underplayed in discussions.

By interpreting ‘snow pizza’, and other episodes, through sensory ethnographic means, different perspectives were revealed. Children saw colours in the Danish, Finnish and Scottish ice:

It sometimes goes really blue. That’s real ice. (Girl, Danish case)

Snow is pink like diamonds. (Boy, Finnish case)

The snow was more white yesterday. (Girl, Scottish case)

There is such a thing as ‘bad’ weather. My winter data collection visits took place during ‘bad’ winters in northern Europe. By chance, the Danish and Scottish visits recorded temperatures and snow falls characteristic of a Danish winter and the Scottish setting had not experienced such high levels of snowfall since it opened in 2007. The Scots spent much of the winter of 2010–11 in an Arctic airstream and climatic conditions similar to that of the Danes. It was mid-January and after a month of record low temperatures and record high snowfalls, I drove to the Scottish case along treacherous icy roads under heavy grey skies. From a roof’s overhang and

drainpipe, icicles had formed overnight and the children excitedly raised their voices to get their points across:

Boy A: I like eating icicles.

Boy B: I like snow better, it's not as sore on your teeth.

Boy A: Icicles are my favourite because they are really crunchy.

Girl A: Well, they're both my favourite because first, they taste good, but then melted they are both water and the taste goes the same.

Boy A: Well, icicles are crunchier.

Boy B: Snow is a different crunch.

On went their debate until a third boy joined the group, Isaac, who switched the exchange to whether the object of interest was actually icicles or, as he had always known them, 'Isaacles'. From the outset the boys were confident in their knowledge of icicles and attracted to this affordance, and their interaction attracted others to share the sensory experience. It was through their shared sensorial encounters, likely previously experienced, that Merleau-Pontian theory would see these nature-kindergarten participants respond to icicles in a way, 'attuned to surrounding regularities' (Twigg et al., 2011, p. 181). Aside from comedy, this part of the exchange was revealing regarding the immediate sensorial interactions with others in nature-based experiences and the boys' ownership of the experience.

There was, across the cases, clear evidence that child participants were also well aware of the weather and its effects. At the Scottish case, for example, shivering on a particularly dreich day, one boy stared at the horizon, saying:

You can't see where the land stops and the sky starts. All the colours are the same. (Boy, Scottish case)

His remark related his experience of the natural environment in a highly observant way. Equally, elsewhere, the children were heard to notice even subtle effects of different weathers, including one example of dappled sunlight through the trees on the forest floor:

It looks like broken glass or a sort of street map. (Girl, Danish case)

Late autumn, and while the first snow is yet to arrive in southern Finland temperatures are falling, and a recorded and translated exchange with a small group of children suggests how seasons held importance for them:

Boy A: This is the same place in the winter, but it is different.

Boy B: Yes, yes. In the snow we walk higher. I slip around, but don't trip up at that step [points to the threshold of the hut, which is a step of about 15 cm].

Boy A: I mean ... different on your skin.

Boy B: The hut looks different. It is a uniform of snow.

Girl A: In here with the fire always is better in the cold. The hut needs it. Does the hut stay warmer?

Taken from a short recording of a conversation later translated by Mari, this exchange draws me back to the *laavu* and its fire—I am there, warming through, writing in my field journal as the three children in the exchange above came in with

Joonas. My social constructionist approach to Heft's (1988) affordances, such as cold weather and firewood for warmth, allows my study to address my second research question of why one nature kindergarten's practices may vary in the way they look to another nature kindergarten's practice by, as Charmaz (2008a) explains, retaining the complexity of social and cultural influences. The link made between cold weather and the Finns' need to keep 'cosy' shows the importance of fire to them, yet understanding these participants and interpreting their behaviours required an empathy with them and sensitivity to their situation. I could interpret participants' social constructions at each of the three cases, across each of my four seasonal visits because my epistemological stance is one that sees multiple realities as dependent upon situation.

6.5 The wind in the trees: seeing risks

In Chapter 2 (Section 2.2.4), I outlined elements of the relevant literature on risk, risky play and risk-taking behaviours to identify these not only as distinct characteristics of outdoor practice but as a social and cultural construction (Brown & Fraser, 2009). Also recognised, and closely linked, was the issue that adults' attitudes to young children taking risks are different in different countries and open to cultural interpretation (Oltedal et al., 2004). My findings around fire as well as high winds in woodland areas form a principal narrative regarding the concept of risk across my visits. I found attitudes towards fire varied between my case settings; attitudes towards high winds, however, did not. What makes these conversations noteworthy is twofold: the content or actions of both child and adult practitioners, and also—as Cheng & Monroe (2010) report—the underlying perceptions that occur in decision making as adults and children respond to each other in these similar environments.

Children and adults at each case showed interest in taking risks. Through relating observation and interview data to existing literature, in particular Sandseter's work (2007; 2009; 2010), a description was sought of risk-taking as well as an acknowledgement of contrast between the three cases. Attitudes and perceptions of risk varied between adult and child as well as between Danes, Finns and Scots as subjective differences and commonalities were recorded.

Practitioners, and myself as researcher, hold a standpoint when it comes to how we each view risk-taking behaviours. Returning to the icicle in the vignette above, the Flip recording captures a practitioner's voice cautioning the children to 'be careful my friend not to burn your lips'. From interventions like this, one gets a strong sense that concealed in the adult's thinking are external agendas including curriculum demands. For example, at the Scottish case in situations of foraging (Section 8.2), and next, as Henrik, Joonas and Steve explained, regarding high winds. At all three cases, high winds and woodland were a feared partnership:

So here ... each institution writes own plan. Under Danish curriculum for the child we have the six areas and projects for the preschool year. We talk always about the primary goal and how we are here to feel the nature, respect for the nature, and self discovery is easy when you get like today's big wind and the nature is deciding what we do, what we don't do today. Wind is natural phenomenon so the time today the focus will stem from what the nature gives us on that day. We can talk about it, but if we go out into it then this is better. The children will be kept safe from old trees but they feel the wind, struggle to be standing tall, hit by leaves and this will remind them with the nature.

(Henrik, Danish case)

There is a power we feel when the storms come. We feel it in wind more than in other weathers. (Henrik, Danish case)

When the wind is strong we check the forest before the day start. We respect the danger. (Joonas, Finnish case)

It's just one of those days. I saw the forecast last night and thought today was going to be dodgy so we will have a wee think and plan our day to suit the weather. It can't be helped, and we have the garden or away at that side of the gates there are no mature trees. We've got to do what is safest. (Steve, Scottish case)

Apart from in high wind, narratives emitting from the Finnish data show a different, somewhat less constrained, opinion of risk-taking. In the hut, as I observe two girls and a boy grilling sausages over the open fire there came an example indicative of what I interpreted from looking between cases. Joonas was inside the hut too, but away from the children, busying himself repairing a knife sheath. The episode evidences qualities of patience in Joonas, who gave the children scope and time to learn about fire without overt mediation. Even in pressured situations—in this example, one sausage rolled from the grill and a child made to retrieve it—Joonas sat and watched quietly as the child ducks under the hearth. At first reaching out, the child decided against this risky action and opted for a nearby stick to retrieve the lost sausage. There was trust in Joonas's actions—a belief that children will learn, perhaps not first time, perhaps not without discomfort, perhaps not without risk of burning themselves, but learning by experience is an important part of the process. The

sausage was retrieved, returned to the grill and in due course, eaten.

I winced watching this episode—my personal habitus obstructing the view and seeing the potential for harm heightened by my non-Nordic eyes. Mari loved to talk, and afterwards I was interested in what she had to say about what I had seen and how I had felt. There was an interconnection of our corporeal experiences with the analytic process (Hahn, 2007) as we talked about emotion and beliefs and, in particular, about the parental view had actions gone awry. We teased out that rather than them being fearless children, it was that they were allowed to test themselves until the point they felt unsafe, or got burnt. Mari felt little or no concern about parental resistance to her exposing the children in this way as the parents were supportive of such endeavours, and I want to surmise that these nature-kindergarten parents would likely behave the same in similar circumstances. She concluded that families had fires and white-hot coals in saunas in their own homes and, after all, ‘in my country, children are sometimes born in the sauna’.⁶⁶

Parental validation of provision was evident across all three cases as well as their trust in what adult practitioners did with their children. Parents made a clear commitment to the ethos of nature kindergartens and their direct involvement was evidenced in two further ways: by selecting such provision for their child; and through their own additional involvement as parents volunteered, visited or worked part-time in each of my case settings. In the Scottish case, for example, two parents were employed there part-time and helped with outdoor cookery or art, while in Finland a father came to speak about diamond mining. At the Danish case, its management committee was comprised of parents who had been actively involved in founding the kindergarten; they agreed curriculum and organised staffing and other

⁶⁶ I return to further discussion of saunas in Chapter 7.

day-to-day matters.

I was able to observe and record everyday, multi-layered practices. Digging deeper, however, exposed hidden layers to better understand what I was seeing. Comments relating to concerns over risky practices were routinely explicit and voiced at the Scottish setting, whereas both the Nordic settings made little reference, at least in my company, to such concerns. These matters may have been present in the minds of Nordic practitioners, but perhaps were easier to negotiate given a lesser need to struggle against hostile pressures of social and cultural expectations. At the start of the scoping exercise, my initial impressions and prejudices about the Nordic participants pictured them as ‘valorous Vikings’, and my early field notes are illustrative of this interpretation. Over the course of study, meeting adult participants from different countries both confirmed and challenged my opinions. When I asked one of the Scottish practitioners what qualities were required of a nature-kindergarten professional, he replied:

You need a belief that what you’re doing out here with these kids is right, worthwhile. It’s nerve-racking at times, but it’s all part of the package and that is what makes it feel good and right. (Dan, Scottish case)

In Denmark, it was Dorethe, the trainee pedagogue, who explained a little more about her choice to train in this specialism. Similar to Dan, she felt her suitability for the profession was determined by:

My love for the nature. I can do it everyday for the children like someone did it for me when I was child. (Dorethe, Danish case)

Shifts between embodiment and practice are revealed within these remarks and, as these findings have noted more than once already, such interchange suggests that there can be more to practice than meets the eye.

As introduced above, regarding high winds, adult practitioners took no risks. Each of the three nature kindergartens used mature woodland settings and each recognised that these sites were not safe to use during high winds. At the Scottish site, practitioners carried out daily risk assessments, as required by their regulatory authority the Care Commission and supported by in-house policies. For example, practitioners took care to identify hanging dead wood in the canopy. Such practice was in line with Forest School guidance in the UK (Knight, 2011) who have their own extreme-weather policies. No mention is made in the literature on Danish practice (Ejbye-Ernst & Stockholm, 2014; Williams-Sieghedsen, 2012), yet at both Danish and Finnish sites, I saw good sense prevailed; groups did not go to their forests in high winds. While driven by adults' safety agendas, children showed an understanding of the directive, as evidenced by this conversation between two boys recorded in Scotland:

Girl A: There was a bang and we didn't know where it was, but it was in the woods.

Boy A: Yeh, I know and then it was like a really bad Star Wars graphic ... the bang wasn't at the same time as the branch crashing off.

Girl A: Or, yeh, it was so lucky we weren't close ... I'm not going when it's windy.

What this vignette also shows is children's ability to appreciate risk in their kindergarten surroundings. I can understand how wind sounding like gunshot through giant, gnarled trees can fill these children with fear; I too have heard the whole woodland resonate. Indeed, through such shared events and recollections of events, the understanding I developed of the participants' experience helped my interpretation of events. My findings comprise different layers of interpretation: my own interpretation of what I observed and participant accounts. My habitus and personal biography would impact on my own interpretation just as it would impact the interpretations offered by the adult participants, but my awareness of this rescued my interpretation from being 'thoroughly oblivious to the social genesis of historically varying forms of interest' (Bourdieu & Wacquant, 1992, p. 125).

My data can support two studies in Scotland led by Mannion et al. (2006, 2011) to help to further develop a more contextualised understanding of nature-based provision through interrogation of an adult's biography and background and the habitual ways that guides us. Not surprisingly, professionals at each of the three kindergartens had different, situated thresholds for what they considered 'extreme weather' and 'risk'. My findings of each group's relationship with nature environments illustrate these Danes's, Finns's and Scots's social constructions of nature that reflected, as Greider and Garkovich (1994) would see it, their situated definitions of themselves. There was evidence of how an adult's reliance on health and safety agendas may inform their actions. The loch at the Scottish case, for example, enters later discussion (Section 7.2 and 7.4). Roam was key feature of preschool days at kindergartens as children move relatively freely around the woodland sites during the sessions. Such freedom, however, fell within limits. There was a Nordic 'management' of this type of activity, perhaps subtle, perhaps 'behind

the scenes' rather than overt control, but evidenced all the same. In Scotland, there were more explicit controls in the form of registers, care inspections, policies and qualifications for employees, mobile or emergency phone contact and first-aid boxes taken in to the woods that served to allay concerns.

At dinner one evening, Troels's Greenlandic wife spoke of children in her home town's port jumping off high harbour walls on to chunks of iceberg in the sea below as cargo ships docked upon spring melt. I knew Troels well by now, having watched him with Danish children and training Danish teachers. I knew that he was comfortable with tree-climbing, whittling knives, roaming and the like; yet behaviours of which his wife spoke, behaviours perhaps commonplace in Greenland, presented scenarios for him to ponder. Shock at this tale induced reflexivity for both the Dane and I—it not being a part of either of our professional and personal biographies—and something to quietly contemplate.

6.6 Silence and emperor penguins⁶⁷

Participant relations and experiences did not always manifest in talk. Pink (2009) explains how qualities of soundscapes can contribute to ethnographic description something that writing cannot. A discussion of silence or rather the absence of talk (Lees, 2012) as a form of communication between participants is appropriate within findings on snow as it was walking along the main road in Hämeenlinna near the Finnish case that I realised the traffic noise was muffled and on mute. I had walked this same road the previous autumn before air temperature plummeted. The winter snow had arrived and had been mechanically pushed aside to create, over the intervening four months, 1.5–2 metre banks of frozen snow along the

⁶⁷ Thanks are due for the title to this section to Gavin Francis (Francis, 2012), a doctor, who spent fourteen months experiencing 'unparalleled silence and solitude' in Antarctica as a member of the British Antarctic Survey.

length of where the kerbstones and gutters lay beneath. These walls of snow effectively softened the noise of the traffic and made for a somewhat surreal walk. Snow, ice and the features they create (or are formed into by human actions) were an everyday part of winter in Finland and, as such, other pedestrians may not have noticed, but I struggled to correlate being on a city street, with traffic, and it being so quiet. Initially, it was less clear how this feeling and the vignettes that follow could be seen as a comparable, contrasting point of discussion. To me, aspects of the Finnish landscape were outside of my own previous experiences. I walked (and slid) on, silently contemplating.

With time, I realised my study could reflect on recorded soundscapes; in particular, silence as a positively perceived feature of nature-kindergarten practice, as it is in these environments that ‘time without talk’ (Mari) is readily afforded. One Finnish boy was shy and reserved. His mum worked in the kindergarten kitchen at the Finnish case and I went to her to tell a story of the ‘Day of the Third *Quinzee*’⁶⁸ (Joonas, see Section 9.2). I talked to her about finding her son lying alone and quiet inside the *quinzee*, and she was eager to know that he had been left undisturbed to dwell. She explained how he liked to think alone, in a ‘nature space’, and how she often found him outside, sitting quietly in their wooded yard back home. His relationship with nature was the reason that she had decided a nature kindergarten was right for him. In her explanation, this Finnish parent evidences her supportive attitude of nature-based childhood (MacQuarrie et al., 2015) with a societal collective (Hedegaard & Fler, 2008).

Of note here regarding recorded soundscapes are findings taken from during the rebuilding of a vandalised den in Finland (Section 9.4). There, the atmosphere was

⁶⁸ A *quinzee* is a temporary shelter built from snow. A fuller description is given in Section 9.2.

difficult to articulate until I realised, upon data analysis, how quiet the participants were. A 7.5-minute Flip recording of the activity gave me this interesting insight. The recording captured the noise of the wind in the trees, birdsong and the clamber of tools, yet the children's voices were barely evident. Reflecting on the method I got a better grasp of the sensuous level on my data (Feld & Brennaiss, 2004). I played the Flip recording to Mari and Joonas during interview with the goal that they too would benefit from sharing this, to use Pink (2009), auditory way of knowing. While my observation schedules from these two days focus on the story of the build, the interview in which I played this recording moved to a different narrative. Through watching the build again, I learnt that the pedagogical approach relied upon the group's unquestioning acceptance and quiet concentration to complete the task.

Both for the boy lying inside the *quinzee* and in the vandalised den endeavour (Section 9.4), I see how actions could be interpreted as learning with nature in ways that manifest the other than vocal when in the company of others (Lees, 2012). In engaging with my data through these and other Flip and Dictaphone recordings, I recognise, however, challenges to underlying, perhaps culturally biased, pre-conceptions of silence. To assert such an alternative perspective on how experiences may be configured and interpreted as learning, is needing further work.

6.7 Chapter summary

Davis and Elliott (2009) state that 'There is no recognition ... that daily experience with the air we breathe and the water we drink might underpin later learning of abstract environmental concepts' (p. 11). Such a pronouncement led me to consider if nature-based ECE prioritises conceptual knowledge. Perhaps it was the days I spent leaning against trees observing, perhaps I was not the only one to delight

in fire after feeling cold outdoors, perhaps it was my ‘wrong gloves’ or the times when ice and snow were as omnipresent as air? In my view, conceptual knowledge about our ‘great outdoors’ and environment is a process of linking relationships in which our sensory experiences can play a role. I leave further discussion of our brain’s concepts to others (see Gallese & Lakoff, 2005), but whatever the experience, I held the experiences with me and they constituted my own socio-cultural identity.

It was difficult to choose which chapter under which to include some findings—deep snow changed sounds including muffling and dampening voices; air temperatures rose and fell, turning water to ice crystals and snow to slush—as snow and ice findings settle equally well in the water as in air findings chapters. Such is the meshed overlap of my subject. In this chapter, my opening scene of findings, there are traces of Bourdieu’s ‘practices in context’ (1977), and whether such contexts call for animal furs, sunscreen or staying away from woodland during high winds, my ‘air’ findings begin to emphasise the need to appreciate the essential, contextualised qualities of nature. Such an appreciation gives agency to the elements, but also recognises the power of nature to highlight the human impact upon it if a lack of informed respect pervades.

Chapter 7

Water

7.1 Preparing to drink: ‘Thousands have lived without love, not one without water’⁶⁹

Our need for water links all of us. In 2010, the United Nations declared access to clean drinking water a human right.⁷⁰ Chapter 7, the second of my four findings chapters, presents the findings from events that relate to our relationships with water,⁷¹ as enacted at the three cases. After air, water is the second most essential human need and is vital to a description of the use of nature both for nature-kindergarten practice and for practicalities. Chapter 7 comprises six sections including a summary (Section 7.6). Regarding practicalities, my findings cover access to drinking water, toileting in woodland spaces and hand hygiene (Section 7.2). Regarding practice, Chapter 7 covers the uses of water as afforded by the three case environments (Section 7.3) and is heavily focused on fishing at the Finnish case, including the practice of ice fishing (Section 7.4). As such, I acknowledge over-representation of the Finnish case in the present chapter but will recognise (see Chapter 10) that my findings, from data gathered over a 16-month period, represent naturally occurring events and socio-cultural differences between the three countries under study. Fishing is one example of practice that overlaps my findings chapters, as explained in Section 5.9, and could have been included in ‘Water’ as well as ‘Food’ as indicative of a complex interplay of the facets of nature-kindergarten practices.

⁶⁹ Taken from W.H.Auden *First Things First*

⁷⁰ I accept that this edict has met with challenge, for example, from those who consider water as a commodity that should be limited by access to pay.

One final section (Section 7.5) presents findings of particular relevance to my theme, ‘Understanding in situated and culturally constituted ways’ to look at the use of water in terms of patterned behaviours and normalised ways behaviours.

7.2 *Vær beredt! Ole valmis!* Be prepared! Aspects of practicalities

I use this section to look at the use of water for practicalities, namely, toileting and handwashing as well as drinking. Irrefutably, there are human practices and behaviours that are common to all of us from our evolutionary past, such as going to the toilet and drinking water. Despite this history, almost no attention has been paid to how we ‘go’ in the woods in empirical texts.

7.2.1 Toileting in the woods

Toileting outdoors was inescapable and was dealt with without any fuss at all three cases. The Danish and Scottish sites had no formal toilet facilities in the woods. Children and adults alike would use an allotted tree (Photograph 10) and showed an understanding of contamination of their forest and watercourses. ‘Toilet trees’ were selected away from streams and lochs. In Denmark, the tree changed depending on where in the forest the group were, whereas the Scottish case used one tree throughout the data collection, and a small portable ‘potty’ was latterly arranged and removed by a practitioner at the end of each day. At the Finnish site, there was a composting toilet housed in a permanent shed (Photograph 11), yet children also reverted to trees if activities took them a distance away from this building or when preferred. In a giggly conversation with three Finnish girls that involved holding their noses, I was told that they preferred to ‘go’ outside and never used the composting toilet because of its bad

smell. Interestingly, children only made reference to the smell or sight of urine or human faeces in the context of a building.



Photographs 10 and 11: The composting toilet (Finnish case) and children next to the Toilet Tree (Scottish case)

The sensory ethnographic methods applied to my research, once again, recorded cues beyond the visual. While our olfactory environment played an important part into interpreting practices and it drew me into new relationships with my research participants (Pink, 2009), I struggled to account for this, other than in written words. With further questioning, child participants expressed ‘freshness’ and that ‘it smells better’ as a key advantage of toileting outdoors over toileting in an odour-ridden composting toilet. In contrast, again in conversation, two Danish girls explained that it was better to be prepared and go to the bathroom before going out as having to go in the woods was, as Henrik translated, ‘cold ... so cold’. To interpret meaning from the girls and Henrik, their statements need to be put in context—the girls were wearing the ubiquitous all-in-one snowsuit and their skin was exposed to freezing temperatures when unpeeling clothing to toilet. Since I was out in the woods all day too, with the same needs as the children, I was better able to identify with the children’s explanations of smells, toileting needs and cold temperatures against my skin through, as Hahn (2007) states, our interconnectedness of corporeal experiences. We all preferred to go to the bathroom at the kindergarten before dressing in outer

layers to go out. There was talk of how to defecate outdoors and in deep snow. Over coffee, Mari talked openly:

You know this? It can be difficult. Layers of clothes, big clothes and gloves. What comes out freezes quick enough, but leave it for us to smell and find at snow-melt [*laughs*]? No, we don't want that. Here there is the composing toilet in the hut, but most children choose not to use this hut. There is a smell, Joonas and I know this smell and now you too! This business is same for all of us and we want it nice as possible but, hey! No! What's this? You only need to see what somebody has left in the nature in spring to know this is not good and you go before or after, not in the nature. (Mari, Finnish case)

Irrespective of having direct experience in that Finnish forest, it is not difficult to appreciate the challenge. Hahn (2007) having been a dancer could relate with the Japanese dancers in her research; having worked and walked outdoors, I could relate to being away from a toilet.

What was also clear was that participants strove to minimise environmental impact from human waste. As hinted by the title of my section, preparation was key, but also precautions to protect participants from harm. Practitioners in each of the three settings were mindful of the health and well-being of the children in their care, especially in regard to hygiene issues that surround going to the toilet and handwashing.

We know habitus conceptualises the internalisation of social structures. This theoretical tool, therefore, offers a way for my description of nature-kindergarten

practice to be explained from a socio-cultural aspect—an aspect that has been underrepresented in nature-based ECE research.

7.2.2 Discovering immediately: handwashing and experiences with nature

There was ‘contained water’ at each site for cleanliness and for consumption, and in these respects the influence of statutory boundaries was evident at each setting. The decisions that practitioners took were guided by policy as well as know-how. At our second interview, both Scottish practitioners identified not only ‘in-house’ policies specific to that institution but also Care Commission posters that alerted adults and children alike to the necessity of clean hands. Hand hygiene was not ad hoc and the risk of cross-contamination was not left to chance. Children were regularly reminded and young hands were routinely checked. Indeed, in confirmation of this practice, one comment made at interview was of particular benefit to my understanding of my dual practitioner role as caregiver and conduit:

Dirt’s dirt! But we can’t have them getting sick or going home like this.

Filthy waterproofs is one thing, filthy hands at lunch or a cut that hasn’t been dressed gives out a different message. (Dan, Scottish case)

The example above demonstrates that handwashing was routine and while may not be done immediately after contact with mud, a mouldy branch or worm, it was always ensured by the adults immediately prior to the children eating a snack or lunch. All three settings transported water for drinking and handwashing out into their woods in large, 15- and 25-litre plastic containers (Photographs 12a and 12b). Each

morning, these were filled at the main kindergarten buildings in preparation for going out. At the Finnish and Scottish cases, the containers had taps to release the water flow, while at the Danish setting the containers had a screw lid. Liquid hand-wash and paper towels were always made available too. Discarded paper towels and hand-wash equipment were taken back to the kindergarten buildings at the end of each day or burned on the fire.



Photographs 12a and 12b: The ubiquitous water container: left, in Scotland and right, in Finland, with hand-wash positioned on the benches ahead of lunch being served.

Hand hygiene was common ground across the three settings as not only were practitioners *in loco parentis*, they truly cared and did not wish to see the children dissuaded from being outdoors because of any unpleasantness. This narrative concerns the dual role of practitioners encouraging ‘hands-on’ and sensorial relationships for children with nature set against the well-being of the children. As Steve said, ‘we want them to love being here’ (Extract from Field Journal, 13 June 2010, Scottish case). My bout of giardia was far from pleasant. Forever the optimist,

though, it added a dimension to the intention behind my words and rather than allow such an experience to overshadow my love of the woods and waterways, the parasite heightened my own appreciation of the embodiment of nature-based practice. Other, more subjective facets, however, steered the ways in which these professionals worked: professionals each with their own dispositions and beliefs. In 2011, at the conclusion of my data collection timeframe, an outburst from a male pedagogue visiting from another kindergarten struck a chord:

It's lovely to come home from work with mud in my ears, paint on my shirt, blood on my pants and jam in my beard. (Adult visitor, Finnish case)

What I take from this statement is how it shows something about what happens every day at nature kindergartens. To employ a Deweyan lens, I recognise the 'full', interactive experiences of education as experiences grow and lead to further experiences. This adult revels in dirt and disarray. He wants children to learn from experience too that prompts consideration of why nature-based practitioners act in the way they do. The nature-kindergarten employees in my study frequently made use of local knowledge and expressed how career choice was based on their personal dispositions and orientations towards nature. All seven practitioners in my study acknowledged that a job at nature kindergarten was, for example, 'hard work' (Hanne-Lise, Danish case) and:

It can be tough, like the trolley gets stuck in the mud, getting kit dry, it's just extra stuff to get done at the end of a tiring day, but it's all part and parcel of

doing something worthwhile but having fun at the same time. (Dan, Scottish case).

With extracts such as these my findings digress. I interpret, however, the point that Dan is making as revealing a layer of understanding beneath my descriptive account of events. Being confronted with the cold, damp, heat, scratches, chopping logs or insect bites, I could appreciate meaning beneath the words that Dan and other adults used to describe their outdoor days. Practitioners were content sharing strenuous activities with children in places and ways that they were passionate about and thereby their skills and sentiments contributed to the children's experiences. We know from ECE and OL literature that practitioners motivated towards working outdoors note their passion (Moyles, 2001; Wistoft, 2013) and strength of personal values (Bogeholz, 2006; Wells & Lekies, 2006). The Danes and the Finns expressed their preference for combining work and leisure interests by using words like 'fun', 'true love' and 'hobby' to express how their pursuit of outdoor lives married well with their career. While Joonas in Finland explained that nature was near his heart as it was his hobby and that he 'wouldn't be interested in returning to indoors work', in Denmark, Hanne-Lise commented that, for her

being in the nature is true love. For me, this is perfect to share nature, show the children and be paid too. (Hanne-Lise, Danish case)

Equally, nature-kindergarten participants strove to build human–nature relations by taking advantage of what their nature-kindergarten environment afforded daily, each season. It was evident that practitioners, and children, coped well with

contingencies presented by characteristic features of their workplace or kindergarten environments that were ‘hard’ and ‘tough’ precisely because of the context. Mud, paint, blood, blisters, splinters and jam evidenced first-hand, immediate experiences of nature but also fulfilment developed in response to the inherent features of the nature-kindergarten contexts.

Findings from my section on toileting and handwashing outdoors open the way for an embodied, sensory description of nature-kindergarten practice. I was there in the forest with the same need as the participants and this was significant. I drew continually on my epistemological and ontological perspectives to develop an ongoing sensory-ethnographic inquiry based on what I saw, smelt and felt during each seasonal visit. As my visits to each case over 16 months continued to advance, I lived through visits in situated, embodied ways in an analytical scheme helped by van Manen’s (1990) view of hermeneutic phenomenological reflection. Making meaning of a lived experience, both the participants’ and my own, was:

A process of insightful invention, discovery or disclosure—grasping and formulating a thematic understanding is not a rule-bound process but a free act of “seeing” meaning. (van Manen, 1990, p. 79)

Rather than capturing any ‘conceptual abstraction’ (van Manen, 1990, p. 79) I sought to describe and understand everyday, lived experience and, to do so, involved bringing my ‘embodied and emplaced proximity’ (Johansson & Løkken, 2014, p. 10) to the experience. My research unfolded, as shaped by unpredictable and ephemeral events, and required an awareness of my research assumptions and how they were developing. I was part of the intertwined, bodily encounters of participants and

physical environments through our senses. Van Manen (1990) uses Merleau-Ponty's philosophy to argue for a hermeneutic or unfolding awareness for the researcher. Løkken (2011) concludes that one's sensory research encounters 'remain in interaction with theoretical perspectives and systematic analysis' (p. 164), while my researching, or 'being emplaced in' (Johansson & Løkken, 2014 p. 11), three different nature-kindergarten environments highlighted 'the impact of sensory knowing preceding academic knowledge' (ibid. p. 11). My findings imply that my sensory-ethnographic approach relied to an extent on my reflexivity and self-awareness as a researcher. Critically, for me this raised awareness as my thesis progressed from scoping through data collection and data analysis that in our lives in complex, interrelated systems and societies, we each experience multiple subjectivities. My own identity, as social constructionist researcher, provides a positioning and hence, subjectivity in relation to practices. During analysis, I turned a Bourdieusian perspective towards myself and my own socio-cultural position. My worldview not only provided choices in interpreting everyday ways but opened my eyes to implicit normativity—in some things for some, and some things for others; that which may be extraordinary for one, may be ordinary for someone else—in nature-kindergarten practices.

7.3 Water for practice: 'Experience a piece of nature, peace of mind'⁷²

The value of looking between examples of practice is truly foregrounded in my discussion of the use of watercourses for practice as each of the case settings afforded a watercourse (stream, lake, loch), yet there were no commonalities in the

⁷² When Mari was asked to describe what fishing meant to her in terms of her relationship with nature's serenity, she explained it as a 'traditional hobby, for example, I have sat on a hole or took up winter nets since I was 5 years old'. She saw fishing as part of Everyman's Right (see Section 2.2.2) and that led to its popularity, 'because people won't forget' and also because the climate nurtures this tradition, 'remember that our thousand lakes have always been frozen for four months'.

ways that participants chose to use them. In this respect, my data showed these are not ‘dedicated physical spaces, playthings’ (Baldock, Fitzgerald & Kay, 2009) but rather generic, natural resources and, as such, their use for early childhood is readily shaped in culturally and locally specific ways. For example, while the Danish stream and Scottish loch were fishable, participants at the Finnish case were the only ones who fished in their lake. The Dane’s showed little interest in fishing and used the stream’s embankment more often than the stream itself. The Scot’s made use of the stream at their setting on my summer visit, however, observed episodes are reported under Chapter 9, as bridge building over water took precedence over fishing from it. The Scottish loch had been fenced on the instruction of the Care Commission and no data were recorded at the Scottish lake, and I return to this ‘barrier’ shortly (Section 7.4). The Finns were also the only group who used their lake for canoeing. Data were collected at the Finnish lake and at their local swimming pool (Photograph 13).



Photograph 13: ‘Yes, I can swim. Take me out on the lake.’ (Boy, Finnish case)

Again, preparation rather than overt prescription was key. Mari explained the vital importance of knowing the swimming ability of the children in her care ahead of taking out their canoes:

I need to know that they can swim and be confident when we are at the lake and going fishing. I need to know that they know what cold against the skin feels like too. (Mari, Finnish case)

A photograph (see Photograph 14) on the wall of the *laavu* evidenced a previous fishing trip by boat that groups had been on. I refer to this peripheral data from that trip as, while not included as data as the trip did not happen during my data collection period, it adds to the understanding of the importance of making the effort to fish and fishing as customary practice.



Photograph 14: A previous fishing trip by boat

At the Finnish case, practices I observed affirmed the literature on the utility of natural resources (Anderson, 2013; Kahn & Kellert, 2002). It was commonplace to fish inland waters and fishing was the norm. Fishing, while not seen at the Danish or Scottish cases, is a useful means to discuss the participants' relationship with nature in a way that highlights what Stake (2006) calls 'situated uniqueness' (p. 6), as fishing was not routine practice at the Danish and Scottish cases. Finnish children were observed fishing from the riverbank, be that alongside or a fair distance away (300 m) from adult practitioners. On the occasion in Photographs 15, 16 and 17 the group had walked about 1½ kilometres from the forest towards the mouth of the river.



Photographs 15, 16 and 17: Fishing for the Finnish case was a season-round practice

The Finnish children showed knowledge of the species of fish that they were hoping to catch. Salmon⁷³ and pike were the biggest prizes, ‘to have at dinner with my dad!’ or ‘throw it back and go again’. Doubtless, Joonas’s love of salmon fishing influenced the way he worked to instil a respect for fishing and its implications for the children. That said, both Joonas and Mari spoke about fishing above all other activities that they used their lake for. During interview in spring, as Mari translated, Joonas said:

We use the area around us in new ways. The ski and snow sculpture melted and gone so we fish and can go on the boat, no need to drill the hole [*laughs*]. It is the same goal, you know. We try to catch the fish, but the way to do it is change. (Joonas, Finnish case)

The two pedagogues looked satisfied by this statement. What they seemed particularly interested in was the continuity and maintenance of fishing practices across the seasons, as made in Joonas’s reference to drilling (see Section 7.3). In this

⁷³ See Chapter 8 for Joonas’s preparation and cooking of smoked salmon.

way, these adults are confirming their belief in the value of childhood relationships with nature by returning to the same lake at different times of year, embed experiences and, while deepening their understanding of nature as a food source, fishing was seen as more than just that. For this Finnish group, fishing could be viewed as situated, normative practice. Bourdieu and Passeron (1977) would recognise such pedagogic endeavour as, ‘a function of the distance between the habitus it tends to inculcate ... and the habitus inculcated by all previous forms of pedagogic work and, ultimately, by the family’ (p. 72). Practice went beyond catching the fish to gutting, smoking, cooking and eating the catch. The Finnish participants walked to the riverbank, or cycled five kilometres (during both the spring and autumn visits), and in the winter took a bus in order to fish the same lake—‘our lake’. Of particular note relating to the ice-fishing trip in February was not only the time invested ahead of the practice but also how these data evidence the interplay of humans and context when deeply held dispositions, orientations and patterned behaviours ‘serve to organize our thought and action’ (Allin & West, 2013, p. 121). The day had arrived—we were going ice-fishing.

7.4 Ice-fishing: sitting, waiting on a hole

There is an image of much significance to my data—a teenage boy stood drilling a hole through metre thick ice out on a frozen Finnish lake (Photograph 19). The boy accompanied the Finnish group on their ice-fishing trip. It was February and this day was the culmination of preparation, both through the months of my study as well as through generations of practice. Observed roles evidenced individually relevant histories that are imbued with relationships with nature (Kaufman, Ewing,

Hyle, Montgomery & Self, 2001; Wattchow, 2008) I theorise the practice of ice-fishing below (see Section 7.5).

Child-size snowshoes had been bought by Mari using funds donated by the municipality—she emailed me between my visits to celebrate their delivery and tell of how the community had responded positively to requests for financial support and recognised the importance of ‘taking the children into the nature’. The children practised walking across neighbouring farmland in snowshoes (Photograph 18) and took instruction in the assembly of their fishing rods.



Photograph 18: Practising with new snowshoes

That autumn, berries had been harvested and a puree blended and frozen was made into cordial for the children’s flasks, ready to drink hot on the ice-fishing trip. From flashcards the children had learnt about different types of fish in order that, ‘we can be ready for the trip’ (Boy, Finnish case).

We took the bus and, on arrival at the lake, walked in snowshoes out across the frozen lake. For that morning, the observation schedule says the temperature was -19°C and walking a distance of almost $\frac{3}{4}$ km in snowshoes, with cold air burning at your lungs, was exhausting. I was sweating under several layers of clothing and the

dry powder snow made for heavy legs. We made slow progress out on to the ice. The older boy, who had joined us for this trip, was closely watched by the children as he settled to drill the first hole (Photograph 19). He modelled practice to the children and at one of the final drill holes was the group's youngest boy, who waited patiently for his hole to be drilled through the ice, and this is the image that truly sticks in my mind—the teenager showing the boy how to drill, before his young apprentice settles, alone at the drilled hole, expectant with his fishing rod. The young boy then sat (Photograph 20) for a cold, patient wait hoping for a catch like his friend (Photograph 21). I took this last image moments before my camera was put back in its bag; its battery bled. The group had been out on the lake for 45 minutes by now. It was cold—bitterly cold.



Photographs 19, 20 and 21: Drill, then sit and maybe catch

The drilling and settling to the task of ice-fishing was repeated across an area of around one square kilometre. At a total of nine drill holes there were lone, paired and grouped children on collapsible stools, sitting 'on holes'. Mari, Joonas and I walked hole to hole pouring hot berry juice from flasks, checking rods, quietly nodding. The caregiving role of the adult was evidenced as Mari explained:

They will suffer without notice as fish is the focus. They are thinking only about the hole and the fish and not realise that body is cold, very cold and this is dangerous. They are young to be here and realise that they could get cold in short time. (Mari, Finnish case)

By establishing in younger generations these 'norms' or quotidian, intergenerational practices these Finns were experiencing time 'by the lakes or by the hole' (Joonas). These data were an opportunity for my study to extend our knowledge of nature-kindergarten practices by convincingly grounding description of practice in empirical evidence. In summer and winter, in the observed fishing episodes, could be recognised how the use of nature environments for learning could be differentiated or aligned to wider cultural and societal aspects of context. For the Finn's, fishing through the ice symbolised a repeat of customary practice as Mari expressed in the following exchange which started from my questions while out on the frozen water, waiting, watching for a fish to bite that line:

We always do the ice fishing ... we try for two and three ice-fishing trips in the winters and Joonas gets the fishing rods ready. There is juice, sausages. There is

a lot for the pedagogue to do but also for the children, and they have seen this in books and stories at home and going with parents to the lake so ... they know ice-fishing and why we do it. This fishing is new to you, but here we know this.

(Mari, Finnish case)

Nature-kindergarten practice at a frozen Finnish lake looked like this, but as I was questioning the influences beneath the visible layer and looking to find meaning in what this extract confirmed about the marginality of practices, I saw that Mari was right—ice-fishing was a first for me and understandably unfamiliar. From her remark, however, I would argue for another concession. The Finnish case recorded extremes of temperature unknown at my Danish and Scottish cases. Climate factored in a situated facet that determined routine practices, as reported through ice-fishing and throughout my findings chapters.

The Finn's snowflake identification chart (Section 6.4) and the knowledge it shared about resources afforded by different climates raised questions for me about whether (even if policy or skills were in place) some practices would go ahead in places where—for example, with ice fishing—such thickness of ice would not form and hence, 'nature' would limit practice. Surpassing everything else on that visit to Finland was this trip to 'the big lake' to fish through the ice. This fishing trip promised a lot—a lot more than just catching fish. A catch was the 'tip of the iceberg'. Indeed for the Finns, findings suggest that fishing was not wholly guided by the need to catch per se. As Mari remarked:

If no fish, we eat sausages. [Maybe] not lucky with the nature today. (Mari, Finnish case)

Her view indicates respect for and recognition of nature's unpredictability. From the nine drill holes that day, we caught one fish. We ate sausages for lunch. My data describe fishing and ice-fishing practices at one example of nature kindergarten to build one picture of *what* nature kindergarten participants might do. However, that only the Finns fished is indicative of practice contextualised by culturally constituted behaviours and place. Fishing was not a frivolity or a contrived character-building exercise, but a practice rooted in fostering an understanding of how human beings depend on the earth for sustenance and nourishment as well as how uncertain and changeable that relationship could be. It was not that the foraged foods were unavailable in the shops, rather 'food for free' practice was a means of connecting with nature in this particular situation. Following Bourdieu (1977), the adults were endorsing such activities as worthwhile and necessary. Children were quick to mimic fishing practices as taken-for-granted elements of 'what we do'. Behaviours I was observing were a manifestation of an engrained, resilient mentality to withstand the long, harsh winters. The Finns' fishing, even in times of extreme weather, and when other food sources were readily available, reified this ideal.

I see a further outcome in fishing practices and to explain I use a short aside. Joonas felt the need to defend the outcome of the ice-fishing trip—a day when there were insufficient fish for lunch made him feel foolhardy eating sausage. Not wanting to judge, but keen to ask more, I talked to Joonas with Mari translating. I asked about the well-being of the children and the question was met with a smirk. Joonas's answer implied nature was the educator (see MacQuarrie et al., 2015), but also that the children need to appreciate that 'maybe fewer fish when the climate is changing' carried another environmental message (see also Section 6.4) to evidence one subtle distinction of what makes nature-kindergarten practice what it is, in different

situations. The intuitive way that Joonas expresses catching (or not catching!) fish has won him Mari's admiration and as she attests, 'every kindergarten needs a Joonas'. Mari's comment illustrates my theme 'Practice as the tip of the iceberg' in that it centres on her recognition of Joonas's relationship with nature that influences him to subtly transmit his love of nature to the children in his care.

One point raised by fishing was the stark contrast between the Finnish case and the other two cases through the depth of human–nature relationships involved in the practice of catching one's food. Each case, perceiving their waterways as the 'source of raw materials and sensations for diverse projects of cultural construction' (Ingold, 2011, p.178). My findings around fishing practices point in the direction of inquiry to come. The construction of societies is closely aligned with the use of nature's resources. When practices, such as fishing, are socially transmitted and shared adult to child, then exploring the spread of socialised behaviours and the ways that they are socially transmitted is warranted. Further inquiry is needed into ECE practices that, in my opinion, are a raw interplay between the participants and nature—the 'hide and seek' (Matthias, Allen, Ahrens, Beard Jr. & Kerns, 2014, p. 261). Fishing has those 'qualities of contingency and immediacy' (Brookes, 2002, p. 74) that I sought as characteristic of nature-kindergarten practices, collective with the uncertainty and ephemerality of the waterways where fishing is practised. During my research, however, I found that fishing was one practice that evidenced not only the inherent uncertainty of the outdoor classroom, but also the immediacy of connection with a sustainable resource. We know (section 3.2.3) Bourdieu (1992) cautions the researcher to have 'epistemological vigilance' (p. 92). I am not an angler and had never fished for fun nor food until data collection for this thesis, however, in order to avoid bias latent in my incorporated knowledge and social background, it was fruitful

to think reflexively about practice I was seeing. For me, fishing was not habitual yet fishing in Finland contributed to modifying my own habitus.

7.5 Ritualise to Actualise:⁷⁴ sauna and dipping in the lake

Saunas exist in numerous cultures, but nowhere more than Finland has sauna become so entwined in that nation's socio-cultural ways so as to signify ritualistic behaviour. Of relevance to this study, sauna is one distinction between the two Nordic cases to challenge a 'Nordic norm' (Section 1.2.4): the Danes did not sauna; the Finns did. On my first visit to Finland, it was barely 20 minutes through arrivals at Helsinki Vaanta airport before my hostess, whom I had not met before, invited me to sauna that evening. The Finnish nature kindergarten had a sauna, as do most Finnish homes. The customary process is unhurriedly repeated again and again: heating/cooling, throwing water on hot stones to increase the humidity, cleanse/refresh in summer and wintertime in the lake (Photographs 22 and 23). This ritual was relaxing at a gentle pace and shared by adults and children alike. The dry heat warmed the body in a way no amount of hot drinks, layered clothing or roaring fires could and, set against the severe winter weather, was welcome at the end of a day outdoors (as was a shower, rather than a jump in a lake). That 'we sauna like brushing teeth' (Joonas, Finnish case) is a perspective that sees sauna, as taught through home and ECE practice, both explicitly and invisibly.

⁷⁴ This phrase 'Ritualise to Actualise' is taken from *Legacy: Lessons in Leadership* by James Kerr about the All Blacks rugby squads and this lesson forms Chapter 13 in that book. My son did a school project on the team which, when closely followed by his headmaster's assembly and mention of this book, had a timely relevance to my thesis. The author uses the notion that values-based culture is a driver to achieving goals.



Photographs 22 and 23: The Finnish lake: post-sauna dip in both summer and winter

As Bourdieu (1993) advises, I grasped the profound logic of the social world by getting immersed in the empirical specificity of it. Fresh off the plane, luggage in hand, the thought of sauna was somewhat overwhelming and I could not begin to appreciate the subtle meanings attached to it. It was through listening, observing and sharing sauna that I could get a measure of the custom. In analysing the discourse, however, in relation to the use of the lake in Finland I found how customary the practice was and interpreted that the Finns ritualise to ‘habitualise’. I tried several times to seek the roots of what sauna meant to the Finns I met. It was futile to seek further explanation. I sat in the sauna and enjoyed it for what it was. For me, the outsider, this represented a need to accept that others’ ways may ‘obey a fuzzy logic’ (Bourdieu, 1992, p. 178) and leave any deeper understanding in the fuzz. Indeed, for me sauna was an example—to borrow Reay’s (2004) reference to ‘most deeply buried structures’ (p. 431)—of socio-cultural facets hidden beneath the practices observed at the different nature kindergartens, that comprise our dynamic nature-based community.

I return now to the loch in Scotland, where not only was there ‘the Care Commission’s fence’ (see Section 7.2) but also seasonal and climatic facets that

impacted on opportunities. The channel to the available fish was controlled by an authority and regulations beyond the adult gatekeepers, but, despite this, their watercourse would never freeze to the extent that they could drill the ice and fish (Sections 7.3). I have added to Heft's (1988) version of affordances, Bourdieu's concept of habitus to theorise situations like this in order to understand an affordance as subject to other influences, for example, in this situation, conduit adults. Sandseter (2009) found, in her work on risky play, that what was tolerated by the staff was an important factor. More broadly, my findings around sauna and the use of lakes document the notion of learned tendencies and the behaviours that an adult gravitates towards and feels comfortable to embrace. Factors that have been highlighted by Bourdieu's (1977) concept of habitus are evident in my chapter on water, in particular, for the Finns who evidenced inveterate dispositions to lifelong habits and rituals such as ice-fishing and sauna. My data on how practices in Scotland and Denmark are distinct to the Finns offer my thesis evidence of ECE practices which are products of different ways of life and which constitute their socio-cultural environment.

We know that younger members of society being apprenticed through routine ways are at the cornerstone of Bourdieu's (1977) concept of habitus. Hodgkin (1981) wrote that while apprenticeship is the essential relationship that defines education, 'the teacher who can only spout from a dais is a very poor fish' (Hodgkin, 1981, p. 201) and his quote supports my strong belief that there are fundamental links between socialised ways of behaving—transmitted by knowledgeable others—and our use of natural environments. In Finland, the teenage fisherman and the adult practitioners are modeling behaviours appropriate to context, yet apprenticeship is no less habitual

than washing Scottish mud from our hands or getting ready for a day in the Danish and Finnish forests by going to the bathroom.

7.6 Chapter summary: 'Round and round the seasons go'⁷⁵

To summarise Chapter 7, I want to return to two photographs (Photographs 20 and 22)—two photographs of the same Finnish lake, one taken in winter, one in summer. I return to these two photographs as they evidence the contribution climate can make to observed practices (see Section 6.4), in particular, in terms of season-round continuity of experience. The small fisherman seated with his rod in Photograph 20 has been explained above (Section 7.3). He was approximately 350 metres out from the diving pontoon on the same lake (Photograph 22) where three of the adult 'swimmers' using the lake in June post sauna, after their working day, had accompanied the ice-fishing trip (Photograph 22).



Photographs 22 and 20: The Finnish lake: a dip and a catch perhaps?

I recall both the fisherman in February and the swimmers in June—in ways that were not evidenced at either the Danish or Scottish cases to identify—through a Bourdieusian lens, children being apprenticed through habitual, routine ways in their own emergent worldview. Relations with water at nature kindergartens correspond to

⁷⁵ Taken from a song by Robbie Burns (1794) *Inconstancy in Love*

my social constructionist viewpoint that all are situated and unique. The use of the Finnish lake, as well as the ‘non-use’ of the Danish stream and the Scottish loch, is an important reminder of the diverse utility of nature’s resources, as *affordable*. While participants, be they in Denmark, Finland or Scotland, are each constructing knowledge through social, cultural and historical processes, I argue that local climate affords the conditions necessary for such patterned behaviours to develop.

This chapter, indeed my study, would have struggled to get to the sensorial without seasonal revisiting of natural resources. The use of the Finnish lake, Scottish loch and Danish stream evidenced the possibilities for continuity in knowing the same place in different times. Critically, and perhaps one reason for bias towards Finnish data in this chapter, climatic certainty played a part in the use of waterways for practice. Some practices are dictated by what nature afforded the humans that used it, and that includes the weather. Watercourses or water containers, like other resources in the study, were a means to help this inquiry to go beyond a description of affordances to document how and why adults and children actually engaged with nature and acted with each other in particular ways in different localised contexts. These episodes help to emphasise that there is an attachment or relatedness to place in nature-kindergarten provision. There is a season-round approach, and participants respect their ephemeral classroom and what that offers in terms of educational opportunities as they engage with it, as a learning environment, across time.

Chapter 8

Food

8.1 Remember the food: food for energy, food for health, food for free

Food sustains us and Chapter 8 looks at findings that contribute to my study's themes as they relate to food—finding it, cooking it and eating it.⁷⁶ Eric Earle Shipton CBE, the twentieth-century mountaineer said, 'The most important thing about expedition food is that there is some'. Securing food is a basic human need and to survive and thrive, and it was interesting that a top priority across my 53 days at these nature kindergartens was satiating the appetites of young, active children and their adult carers.

Food deserves recognition within my study as associations were evident between gathering and/or cooking outdoors with connections, between food and our memories. I present five sections in Chapter 8 to describe food-related findings from the three nature kindergartens. The nature-kindergarten participants under study ate food for snacks and lunch and, in presenting my study's findings, their sustenance can be considered in two ways: first, foraged foods, namely berries, funghi and tree sap (Section 8.2); and second, processed or raw ingredients brought on site for cooking and consumption (Section 8.4). Also presented (Section 8.3) are findings on hunting and fishing under my two themes that encompass naturally occurring events that support situated and culturally constituted reading. In the final section of this 'Food' chapter (Section 8.5), I reflect upon the role of food in providing opportunities for participants to experience directly their nature-kindergarten environments.

⁷⁶ Regarding foraging, some passages and vignettes form the basis of Nugent and Beames (2015). While this is not the first time that parts of this work have been presented, elements are expanded upon here.

8.2 Foraging: accustomed practice, frivolity or necessity?

I open this section by looking at how all three settings afforded 'wild' food to the participants to forage and consume, or not. Both the availability and utility of foraged foods varied between the cases and, as I consider these findings to offer my study the 'richest pickings' in terms of data analysis, I consider foraging first. Each case used woodland or forest with a watercourse, yet, overall, there was significant variation in the approach, content and employment of foraging and fishing in everyday activities across the settings. At the Danish case, fungi were the only foodstuff that I observed being gathered and these were not eaten by participants. The Finnish participants took five edible resources from their local environment: wild berries, *mahla* (birch sap), perennial herbs, mushrooms and fish. In Scotland, participants foraged wild berries and wild garlic.

Contrast has been noted (Nilsen, 2008) in Nordic lifestyles and the influence of Danish *friluftsliv* and the Finns' 'Everyman's Right' to say, Scottish ways to suggest these ways of living have bred perceptions amongst some outsiders of a 'Nordic norm' in nature-based practice. My findings, however, show an overriding contrast between the Finnish and Danish cases that may challenge expectations of a 'Nordic norm'. Difference becomes clearer when looking at the importance of 'wild', edible resources to the Finns as differing markedly from their Nordic counterparts by virtue of the status they gave to foraged treasures. For the Finns in my research, I did find a deep and unquestioned cultural value accorded to foraging these spaces. Of all three cases, it was the Finnish participants who foraged irrespective of whether other sources of food were readily available to them or not, and they saw value in marginal food sources; a story below, for example, tells of drinking birch sap. Both the Danes

and the Scots showed interest in engaging in foraging. Questions, however, regarding local climate and the plant species it afforded were raised by my findings.

Bourdieu's (1977) habitus can shed light on actions, such as foraging, by demonstrating how practices are influenced by behaviours embedded in different cultural identities of which agents have no knowing access. In *Distinction*, published in 1979 and translated in 1984, Bourdieu uses socio-culturally constructed notions of (good) 'taste' to examine the interests of different classes within society in order to view the ways in which such tastes are perpetually reinforced via one's socially determined status. He forwards a description of a social logic; a logic which guides those of a particular orientation to do what is befitting of their class. I want to draw on this notion of taste, but in a way that helps me analyse the foraging for 'wild' foods, and my evidence of this, at nature kindergartens. Tastes, laden with social and cultural dynamics, can be stripped to their sensorial core and thus socio-culturally constructed tastes can shape subjective desires towards an enactment of foraging.

8.2.1 'The honey-feast of the berries has stunned them; they believe in heaven'⁷⁷

Certain facets of certain foods, in particular sweetness, render those foods a potent medium in a discussion of young children. Chipenuik (1998) recognised people's preference for sweet fruits (Photograph 24), and participants in the present study were similarly inclined. Confirming Chipenuik's (1998) empiricism, Plath poetically expresses how participants in my study were similarly inclined, yet only at the Finnish and Scottish cases where berries were sought, picked and eaten.

⁷⁷ Taken from Sylvia Plath's 'Blackberrying'.



Photograph 24: 'That best one' (Section 2.2.4)

At the Scottish case, *Rubus fruticosus*, the ubiquitous bramble, was widely and voraciously harvested. In Scotland, a girl and a boy, for example, talk together:

Child A: I love brambles.

Child B: I love brambles too.

Child A: Look, there's more.

While brambles were sought with confidence, the Scottish children usually only ate them after a discussion of potential risks including poisonous species. The above conversation continues as practitioner, Dan, joins the children to caution concerning pesticides:

Child A: Look, there's more.

Dan: That's right, but what do we have to be careful about?

Child B: We don't know what they are.

Child A: They could have been sprayed ... and poisonous.

Dan: So what shall we do? What do you think?

Child B: Take it and wash it and look in the book.

While this exchange shows that foraging for berries occurred, it hints at Dan's reliance on health and safety agendas in order to inform his actions. The literature notes how such reservations may be characteristic of novice outdoor educators (see Mannion et al., 2011), yet the present evidence shows the rationale may be more specific than that. Dan was trained in outdoor education and far from 'novice', if 'novice' is being defined in terms of qualifications and professional experience, rather, his reservation suggested his ingrained disposition was at the root of his caution and I return to this point in due course. In Finland, blueberry picking is an equivalent narrative and adults were vocal regarding their lifelong experience of that facet embedded in their ways of living. While there is only sparse mention of berry picking in the literature (Pouta et al., 2007; Vaara et al., 2013), these Finnish children were familiar with berry picking and seldom sought approval to pick or eat. Looking between these data from Scotland and Finland is revealing as nested within them are not only preferences born of a situation but also what Bourdieu (1977) might term an emerging habitus that led children to look for reassurance, or not. My findings are important, therefore, for seeing opportunities in relation to the context in which practice is occurring. Specific variation, as evident through foraging, lay in participant confidence and competence to pick and eat wild foods. Again, in the Scottish summer on discovering mushrooms:

Child B: Don't touch it.

Steve: Yes, and if we're not sure we'll leave it.

The participants combined decision not to pick can be seen as a manifestation of attitudes and beliefs that were inculcated in early life via previous generations (Bourdieu & Passeron, 1977; Oliver & Kettley, 2010). The two Scots, therefore, could

be thought of not as novice outdoor educators due to their uncertainties in gathering fungi, but rather, this practice was not, to them, second nature and this affected their confidence to go ahead. Their own habituated ways restricted their experience because of this tangible difference. There was neither rulebook nor policy document to guide the decision, rather, as Jenkins (1992) supports:

For Bourdieu, the body is a mnemonic device upon and in which the very basics of culture, the practical taxonomies of the habitus, are imprinted and encoded in a socializing or learning process which commences in early childhood. (p. 72)

I talked to Dan and Steve about foraging in these terms and they found an explanation in policy. They felt that practice prescribed by their employer and regulatory bodies went beyond parental or adult anxiety. Several of my findings report ‘low-level’ risks, including sore muscles (Section 9.4, 9.8) and other minor injuries. Tasting harmful berries and fungi, however, present a heightened risk. The Scot practitioners made reference, however, to the literature and how one’s fear of litigation, in their *in loco parentis* roles, was lessened by supportive, like-minded parents (MacQuarrie et al., 2015) who likely ‘rave about’ it (de Quetteville, 2008, para 3).

Following Bourdieu’s (1977) argument that tastes are socially conditioned, foraged foods as an object of choice reflect a social order that distinguishes foragers, in this instance nature-kindergarten participants, from other sections of society. The participants are social agents, ‘in their ordinary practice, the subjects of acts of construction of the social world’ who ‘make possible the production of a common,

meaningful world, a common-sense world' (Creswell, 1996). What Bourdieu's concept of habitus lacks—in contrast to Dewey's concept of habits as seen as 'cultural resources' (Garrison, Neubert & Reich, 2012)—is, to me, a vision of practices as defined or even complicated by context.

In the Finnish summer, *ketunleipä* (wood sorrel) was sought—a plant not found growing in the Danish or Scottish sites. The children ate its tiny leaves raw while collecting and added the surplus to omelettes fried over the open fire back at the hut. While further preparation was completed indoors, a connection had been nurtured during foraging that would be reaffirmed upon dining. Each child and practitioner share perceptual schema that have been shaped by their social position and play a constitutive role in maintaining uncontested, 'common sense', quotidian behaviours. Bourdieu (1979; 1984) asserts that food tastes are dependent on the notions that each class holds towards their bodies and the effects of food on those bodies. Contemporary, possibly romantic, notions of foraging compare against, for example, the novelist Victor Hugo, for whom only the poorest peasants were defined by their reliance on seasonal and local foods in the name of sustainability and survival. In my view, such taste contributes to current trends in foraging. I reserve further comment as my evidence of foraging is beyond generalisation here, relating only to a small proportion of nature-kindergarten participants within westernised cultures. What can be confirmed is that within the nature kindergartens under study, membership of a 'community' was influential in participants' practices and normalising codes of conduct were nurtured and significant, and I return to conclude on these points in Section 8.3 and Chapter 10.

An alternative reading is that opportunities to forage can be regarded as an affordance and, therefore, were integral to this study's design. My findings show the

extent to which potential affordances were actualised across the three different contexts. Such data have value to my inquiry in regard to into the wider, cultural and seasonal aspects that have an impact on nature-based practice. My use of Heft's (1989) version of affordance theory recognises participants using nature's contribution in mediated, locally situated and socialised ways. In other words, in the example above, nature-kindergarten environments may potentially afford wild mushrooms, but the choice to pick or actualise the afforded fungi or not is imbued with socio-cultural meanings within that group. In the example of birch sap, which I move on to next, was an 'eatable' affordance actualised only at the Finnish case.

8.2.2 'Winesap, tapped, fermented, flows from trunk to glass':⁷⁸ tasting trees

'Tapping' sap was not evidenced at Danish nor Scottish settings where, despite there being comparable local features (birch trees), such practice was *not* a socialised behaviour. In Denmark and Scotland, the birch tree (and its sap) is potentially there for the eating, but the participants in those settings did not use, or rather actualise, this 'drinkable' affordance. In Finland, by contrast, there were two foodstuffs unfamiliar to me afforded by trees—*mahla* (birch sap) and *pettuleipä* (barkbread). Sap, I was fortunate enough to observe being tapped, to document and taste; barkbread was commented upon by Mari during interview, but my taste sensation had to wait until a later date and a packet from a Swedish supermarket. *Mahla* or sap is tapped for local use (Photograph 25) but also extracted and retailed on a commercial scale to satisfy home demand and export.

⁷⁸ Extract from 'Birks' by Colin Will.

As Corbin and Strauss (2015) have questioned the uncertainty of the qualitative researcher's gaze, it is useful to turn in the next exchanges to ways Finnish adults share an experience of nature with younger generations through their sense of taste alongside the children's informed acceptance of the practice. Again, participants took advantage of seasonal produce by seeking foods when available in abundance. Sap, for example, is only foraged in late spring and in response to climatic circumstance after overnight frosts. On one such morning, Mari told of the 'signs of spring', and drinking sap was on her checklist alongside birdsong. Extraction or 'sap tapping' during data collection involved Joonas, several children, empty water bottles, string and straws. The bottles are tied by the group to carefully selected trees and the straws inserted into small, hand-drilled holes through the birch bark. I drew a quick sketch of the tap mechanism into my field journal and took a photograph (Photograph 25).



Photograph 25: A sap tap of a birch

I recall a thin, clear liquid gradually trickling into the empty bottles. I failed to comprehend why a tree was or was not selected and Joonas's shrugged shoulders to suggest that maybe he did not know either. Or maybe it was too much to explain to me. His accompanying smile helped me not to feel criticised by not knowing, just disbelief in how I could not know! Tapping and tasting *mahla* was both educative for the children and pleasurable for all. Here, I was experiencing the unfamiliar akin to Nan Shephard's frozen water. My empirical data evidences a contribution to new knowledge as I was unaware that sap could be drawn and drunk. I know now. Tasting sap was new to me and doing so with the participants, sparked conversation:

Mari: You have done this before?

Boy A: I drank it with dinner tonight ... my parents will drink too.

Girl A: I know this taste. My grandparents do this.

Joonas: Healthy drink ... coming up for us from roots. We have some and buds have some.

Girl A: My Grandfather gave *mahla* to nourish the cows after winter.

Mari: And girls use for shampoo for beautiful, blonde hair.

Joonas: I like the look on the face when *mahla* hits the tongue ... I like seeing taste, discover, learn. It fixes the memory.

There was a pride in this final sentiment but the comment also reflects the habitus of this 'conduit' adult (Nugent & Beames, 2015) and his wish to impress the taste upon the children as a formative element of their early life experiences (see Beames & Telford, 2013). While adult sentiments expressed enjoyment, there was

meaning ascribed to sap that was rooted in cultural history and folklore. The children were inquisitive, but several were clearly familiar with the technique—this was old news for these six-year-olds. Bourdieu and Passeron (1977) would explain this as the passing on of cultural practices or ways affiliated with previous generations, and conversations regarding sap invariably included reference to grandparents:

When I was boy, the sap was sold in jars at farm. Grandfather showed him how to do it and now likes showing children (and visitors from Scotland obviously!). Says prefers fresh from tree to any commercially bought. (Note in field journal from Joonas, 16 April 2011)

A point to be made here ties to my title for Section 8.5.1: ‘Tomatoes and oregano make it Italian’. The sap episode evidences that finding foods, outdoor places and culture can unite, or—to borrow from Redzepi (2011)—it is an example of being able to ‘taste culture’ through ‘wild foods’. Pink (2009) has note the role of taste in memory. As I can remember the sweet, subtle flavour of bilberries from my childhood (Section 1.1), so too is it perceivable through the Finns’ comments and existing knowledge (Chawla, 2002) that the taste of sap may leave the children with a connection to nature and a basis for their own adulthood. Analogous to Alice May Brock and her tomatoes and oregano, for me, bilberry flavour makes it a Welsh hillside, while sap and salmon on rye makes it Finnish. Seasonal change provided nature-kindergarten participants with opportunities to develop their relationships with nature throughout the year. Overwhelmingly, my analysis revealed that there were aspects of context that determined the amount of recorded foraging. In summer and

early autumn, it was the sun's warmth and the level of rainfall that determined what participants did, and berry picking and fruiting fungi are clear examples.

There is no ECE literature to support my next section of findings, and this is a gap that my data on hunting could address. That my findings relating to hunting and ECE were strongly critiqued at first review for an outdoor-learning journal (MacQuarrie et al., 2015) is indicative of negative attitudes towards a topic that combines young children and dead animals. While hunting may be deemed unusual, my data were reporting naturally occurring events and, as such, were valid. As with all my data, the child participants reviewed the data and their sentiments considered above, as advised by the literature (Einarsdóttir, 2007), any new or exciting insights.

8.3 Hunting and dead chickens

In my findings on fishing, the Finnish case stood apart whereas regarding dead animals, I recorded a Nordic versus Scottish divide. At the Danish case, a chicken was slaughtered and its carcass butchered to help children understand that animals are reared for human consumption. Both pedagogues competently assisted the task and one noted for translation:

Life is not Disney, we need to understand earth to mouth. (Morten, Danish case)

During scoping, I had seen a similar exercise with a dead chicken at another Danish setting where five chicken eggs—one laid plus four ova that would form and eventually be laid as eggs—were set out in a line across the table for the children to see how an egg increases in size as it moves along the oviduct and the intestinal route an egg takes on its way 'out'. We had had hard-boiled eggs at the kindergarten with

breakfast that morning and, like the children at the Danish case, talk was keenly inquisitive while the children handled the various ova, freely touching and smelling the slaughtered chicken:

When will the next one [egg] be out if the chicken wasn't dead?

What does this do?

There's no shell on that one.

The adults present were using nature in immediate and direct ways. We know from my literature review the widely documented benefits of direct experience with nature (Chawla, 2002; Kahn & Kellert, 2002; Sobel, 2004). We also know, however, that when litigation and anxiety stand as pervasive in contemporary society (Gill, 2007), complexities are revealed in adult attitudes towards children's actions that perhaps contributes to the scant commentary on authentic styles of ECE that include dead animals, even though direct experiences include 'the imperatives of feeding, surviving, reproducing and dying' (Kahn & Kellert, 2002, p. 125). Indeed Eleanor Gibson (1982) argued that children learn about affordances through observation and exploration, and Melson (2013) in her work on wild animals sees such affordances as a primary driver of perceptual-cognitive growth. During the Finnish autumn, I encountered one example of authentic ECE and nothing conveyed the contrast between the Finnish case and the other nature kindergarten under study as when a Finnish father stopped off in the forest to visit on his return from hunting. He stopped by to share his recent kill of a roe deer with the children. This father's visit, like his successful kill, was not planned, yet he was confident that his arrival with a bloody carcass and rifle would be met with interest not alarm. This was a uniquely Finnish experience steeped in their customary ways, not mine. It was necessary for me to

move beyond my personal reaction to hunting and be a sensitive witness to what Joonas and the father facilitated in this episode—butchering a dead deer while several children touched the carcass or helped with their own knives—my own habitus modified by this new experience. Carson (1998) suggested for children ‘it is not half so important to know as to *feel*’ (p. 56). These Finnish children were feeling, seeing, and as recommended by Law & Urry (2005) I had a method—a sensory-ethnographic observation protocol—that was ready and able to capture this. For me, the dead deer episode was arresting. The participants, however, habitually in this setting were not confronted with a new experience. Hunting was, for them, included in their understanding of seeking food and they saw significance in showing the children. As with the dead chicken, the children reacted with interest and this sort of action was evidently familiar in their emergent socialised ways too. These events invite attention to the situations and past experiences that shaped it, as well as the future impact of having experienced them. The nature-kindergarten participants who routinely forage food out of choice, including hunting and fishing, are modelling nature’s affordances in ways that demonstrate the cyclical significance of such afforded resources but also ‘normalness’ of such practices to all who observe. In that ethnographic description can account for emotion (Buchbinder et al., 2006), I return to Carson (1998) - the Danish and Scottish children were also afforded emotionally salient experiences with nature, and my descriptions of these can be found in this chapter, but in different ways to the group of Finnish children with the dead deer. Diverse interpretations hold firm from my research. For example, children eating wild berries or helping to butcher a deer will be regarded by some as acceptable and by others as not so. In my view, this is why nature-kindergarten practices between countries have to be seen as influenced not only by what a site affords in terms of its natural features, climate, and other

situated elements (MacQuarrie et al., 2015) but also that practices cannot be disjoined from the habitual interactions of subjects (Schweder, 1990). Specifically, Bourdieu's concept of habitus illuminates how nature-based ECE afforded deer—either to watch or kill—and funghi—either to eat or not—dependent upon socialised norms.

I advantaged my study by avoiding typicality in my purposive sampling of cases (Yin, 2009), however, my study of naturally occurring events, under natural conditions (Denzin & Lincoln, 2000; Miles & Huberman, 1994) had to admit dynamism. Here, examples of nature-kindergarten practices were not only intertwined with wider social and cultural influences, but also aspects that required reflexivity to contextual circumstances including dead chickens and shot deer.

The dead chickens and the shot deer served to convince me not only of a Nordic 'affinity' with nature (Sections 1.2.4 and 2.3.2) but also a different kind of relationship between humans and other animate beings that contrasted to that of the Scottish case to evidence diverse constructions. Heyes's (2016) recent insight into 'cumulative cultural inheritance' discusses the element of 'blind trust' (p.280) as children learn in socio-cultural contexts. Could the Finns' happy disposition associated with confronting a kill be influenced by learned attitudes and socio-cultural reinforcement? My analytical scheme must move from the bottom up from the observed actions and practices, to the practitioners' perceptions, interests, intentions (*habitus*) to, finally, the social structures in which they are formed. Simply stated, social positions generate socialised dispositions and socialised dispositions generate practices. I see Bourdieu's (1977) contribution to the sociology of nature-based ECE could be the role of the habitus in perpetuating practices.

Just yesterday during writing up, the UK news reported a furore: an autopsy of a lion at Odense Zoo in Denmark had been watched by young children as part of their

school trip⁷⁹ (see Section 2.2.2). I am writing up a thesis that has foregrounded wonderment in nature's simplicity—the snowflake, the flame and such like—as characteristic aspects of practice that can reveal the contribution of seasonal and sensory contributions to practice by using the 'quotidian everydayness of the world and its taken-for-grantedness' (van Manen, 2013, p. 139). In fieldwork, particularly between nations, the researcher must be alert to contrast (Broch, 2013). There was such a stark contrast between the quotidian simplicity of mud or snow that I am writing about and a lion autopsy that I see my findings on hunting and dead chickens might possibly fill a gap in child–nature relationship discourses. Episodes of human–nature struggle and death, while far from pretty and romantic, are equally a part of our relations with nature. Dead birds and mammals vividly illustrate how contrasting attitudes towards nature in three different socio-cultural settings are passed from adult to child through subtle cues surrounding what is accustomed and less so. Foraging, fishing and hunting will likely remain a peripheral constituent in both outdoor learning and early childhood fields. Indeed, Hall (2013) argues, why forage when you don't have to? Yet, to overlook the potential value of such activities would be misguided. The Finns in particular recognise that there is lifelong educational value in repeating fishing (Section 7.2), foraging and hunting rituals that mark the changing seasons, as such practices evidence not only a means of coming to know tastes redolent of the socio-cultural environment that one has grown and learnt in, but also a connection between person, place and 'wild' foods. This chapter now moves on to findings that relate to other food outdoors, including its cooking and its role in situated understandings.

⁷⁹ See <http://www.telegraph.co.uk/news/worldnews/europe/denmark/11934130/Danish-zoo-dissects-lion-in-front-of-children.html>

8.4 Cooking outdoors: foraged and free versus processed and reheated

All animals eat, only humans cook. As Lévi-Strauss (1966) says, ‘there is no society without a language, nor is there any which does not cook in some manner at least some of its food’ (p. 82). While cooking is a universal human activity and everyday phenomenon that has shaped our existence, Lévi-Strauss (1966) held that social convention determines what food is to be eaten and ways of cooking it. I stated that more research was needed into the common core that epitomises nature-kindergarten practices. From my findings, I see participant relationships with food when outdoors as notable.

Food, in my study, became more than sustenance (Section 8.1). Adult practitioners liked children to be well fed and found satisfaction whether that food was foraged for free, raw, cooked or reheated and served. Regarding the latter, cooking food outdoors could be seen as a symbol of our humanity and key to the generation of social as well as human–nature relationships. While far from traditional, ‘child-friendly, comfort foods’ (Steve, Scottish case) foodstuffs including hot chocolate were prepared at the Danish and Scottish cases on two of my visits. The Scottish case used a specially designed ‘pizza pan’ in which to cook fresh pizzas over the roundhouse’s fire. There was evidence, in photographs at the main kindergarten buildings and familiarity with the routine, that both these settings prepared such foods regularly, whereas the Finn’s preference was for sausages and hot berry juice. At the Scottish case, participants were also observed baking muffins and bread rolls using ingredients prepared in the kindergarten kitchen. For the Scots in particular, cooking and eating outdoors had significance and afforded opportunities for communal occasions such as toasting marshmallows (Photograph 26). Campfire conviviality and

the ritual of a meal were well regarded and treated as special rather than being reduced to a simple need for sustenance.



Photograph 26: Toasting marshmallows over a stove

At the Finnish case, lunch was usually fetched from the main kindergarten by one of the pedagogues or was delivered by ancillary staff, and the Finns were the only participants to partake of lunch outdoors in this way. The Scots' routine was packed lunches brought from home; the Danes returned to a meal at the kindergarten, cooked by ancillary staff. The Finns' lunch trolley, loaded with insulated containers of main course, bowls, cutlery, drinks, rye-bread rolls and fruit, was wheeled to the cluster of benches near the hut and, after lunch, wheeled away. The contents of the containers were always hot, substantial meals—stews, cheese and potato bakes or pasta dishes to fuel and warm. Of note was how both Nordic cases had a kitchen and staff to prepare lunch. Food sustains us and, in Denmark and Finland, sustained I was! I never felt hunger in these two settings as breakfast was filling and wholesome—eggs, cheese and fish for protein; cucumber; berries laden with vitamins; thick, fatty yoghurt; and

heavy rye bread for carbohydrate. In both Nordic settings, days began early and for breakfast, as with lunch, participants routinely ate together as children and staff arrived at kindergarten for this meal. Pleasurably sedate breakfasts with time to eat one's fill—what Morten called 'our king of breakfasts' (Morten, Danish case)—comforted adults in knowing the children had consumed energy needs for the session ahead.

8.5 Reflexive refection: 'Tomatoes and oregano make it Italian'⁸⁰

On a personal level, my food findings hold a particular appeal. Food was almost always shared and this profoundly social dimension might be understood as coming to know a place, a season or 'coming to know tastes redolent of one's culture and those of others' (Nugent & Beames, 2015, p. 89).

I interpret an intrinsic logic in nature-kindergarten participants eating foraged food. For example, it was edifying to observe foraging, fishing and hunting across my cases as socialised practices and food united to make food more than just a human need. Above (Section 8.1), however, I consider that opportunities to forage can be regarded as a potential affordance to see nature-kindergarten practice from an alternative direction—a view of potential affordances as determined by local climate, plant and animal species. The enactment of berry picking, for example, was done in a way that was the norm the Finn's knew what to do when afforded those treasures, at those times and places, year after year. *Habitus* helps me to understand observed practices as participants follow their intuition of the 'logic of practice which is the product of a lasting exposure to conditions [and] anticipate the necessity immanent in the way of the world' (Bourdieu, 1990, p. 11). In the Scottish forest, brambles were

⁸⁰ Alice May Brock is a New York restaurateur and chef. This title is taken from her saying, 'tomatoes and oregano make it Italian; wine and tarragon make it French; sour cream makes it Russian; lemon and cinnamon make it Greek; soy sauce makes it Chinese; garlic makes it good'.

the only edible berries growing and those consumed at the point of collection were all that were taken. By comparison, the Finnish case was afforded an abundant supply of lingonberries, cloudberry and blueberries, and participants ate directly from the bushes, assembled ‘berry kebabs’ on sticks (Photograph 27) and were afforded sufficient surplus to prepare cordial to freeze for a later time. The Finnish children’s ‘juice fingers’ were akin to my own ‘Halloween fingers’ (Section 1.1), and it was reassuring to see fruit cause excitement and child–nature relations nurtured in this way. In the Finnish winter, however, as I sipped hot juice served from the stove and heard that the cordial came from the berries I had helped pick the previous summer, I felt a heightened awareness of my own taken-for-granted notions of socialised behaviours. I recalled bilberries, yet realised one reason why I had not tasted cloudberry was because I had never previously foraged in a Finnish forest at that time of year.



Photograph 27: A Finnish ‘berry kebab’

There is, in looking between cases at the differing utility of affordances as mediated by socialised behaviours, scope to affirm the appeal of ‘quodidian nature’

(Kahn & Kellert, 2002, *xvii*)—the extraordinary in the ordinary and elementary, the direct and immediate to hand. One distinction, recognised by Rodaway (2002), in cultures which perpetuate close relationships with nature, is the different treatment of olfaction and my evidence of the Finns, in particular, would lead me to agree with that. There is scope to see the extent to which potential affordances are actualised as mediated by socio-cultural ways. One example is the Scottish participants whose opportunity to fish the loch was controlled by regulations beyond the conduit adult (Section 7.2). We must not overlook, however, a view that affordances are mediated by nature itself. My thesis was inspired by the bilberries of my childhood (Section 1.1) afforded, albeit in different quantities and juiciness, in ‘good’ years and bad—the amount of rain and sunshine influencing what berries (but sadly, not cloudberries) that there were for us to use. The weather may afford the Finn’s extreme lows of temperature over a five-month period and the potential to go ice fishing, whereas for the Scottish case, such climatic conditions may be a relatively more fleeting (or non-existent) feature.

Only the Scottish case had a vegetable plot as part of its garden space. Sadly, despite attempts to cultivate potatoes, herbs and vegetables, both rabbits and slugs saw off the best of the crops. Although tomato soup had been made just before my autumn visit, the tomatoes had been brought from elsewhere; and while such practice nurtured relationships with nature as connections were found in seasonal change, (Turner, 2011) the patch was not a focal point at the Scottish case. While the importance of cultivation is noted (Wistoft, 2013), growing food was not a pattern in my data for these three nature kindergartens. The children enjoyed their soup for lunch, yet talk centred on ‘Robin Red Breast’ (Section 1.3) rather than cultivation and greater excitement was evident in finding brambles. The Scottish children were

thrilled at spotting and picking a bramble—and would ‘Risk the sting and overreach, for that best one’ (Section 2.2.4)—yet, the vegetable plot’s lesser appeal perhaps evidences the ‘strategic’ and ‘empty’ interpretation from a Dane (Wistoft, 2013, p. 138). I questioned if the more contrived, less authentic (Beames & Brown, 2016) genre of activities such as cultivating vegetables could be suggested to be less appealing to young children than a quest for wild edible foods (Nugent & Beames, 2015). Childhood sensibilities could be an explanation for different attitudes to different foods. To suggest so, however, in the present study would overreach what my findings evidence: different nature kindergartens in different countries treat food differently and similarly using different and comparable ‘ingredients’ in different ways.

Through taste, eating food as a shared experience fed my ‘cultural history’ in a way that has endured across contexts. Rye bread with line-caught salmon, smoked then cooked over an open fire is an abiding memory of what Finland tastes like and to reiterate my earlier experience, ‘salmon on rye makes it Finnish’ (Section 8.2.1). Memorable too was observing those two Danish girls taste ‘snow pizza’ (Section 6.4) and no less real than ‘real’ pizza eaten while sheltering with the Scots in their windswept roundhouse in the woods (Section 8.5) and drinking hot chocolate (Section 8.5) or sap (Section 8.2.2). Evidence from foraging, fishing and cooking outdoors suggests participants knew their wooded playscapes well through tastes as well as through the smell of the air (Section 6.2). Moreover, eating (and cooking) outdoors in whatever forms that took, were subjective experiences of everyday life through which participants pursued the benefits of nature-based experience and, in turn, was how that practice at that case could be understood.

Chapter 9

Shelter

9.1 Addressing needs through dens and tools

Chapter 9 reports nature-kindergarten participants' endeavours to separate themselves from their surroundings and, as such, may seem contradictory for a thesis focused on being outside. This, my fourth and final findings chapter, comprises ten sections covering elements that relate to the human need for shelter, protection and feeling safe, rather than being about survival or safety from predators. According to Maslow (1943), shelter is a lower-level physiological need for humans and one that gives us the motivation to satisfy other needs, for example, rest and confidence. Meeting such needs is a requirement that child participants may benefit from during their preschool year at nature kindergartens.

Under the umbrella of 'Shelter' is my final evidence to support three central themes that have been woven through each of my findings chapters thus far: pursuing the benefits of nature; understanding in locally and socio-culturally situated ways; and nature-kindergarten practices as the tip of the iceberg. My findings in this first section (Section 9.1) cover temporary, semi-permanent and permanent structures to evidence creativity, imagination, resilience and strife. Again, as each of the three cases under study used forests, many experiences that characterised practice bear relation to trees and their features. Large amounts of time were spent modifying and transforming these natural environments into dens, bridges and other nondescript constructions, which were all built dependent on climate and context. I touch upon gendered aspects of such practice in Section 9.6. Opportunities for tool use are also evidenced both for

building and making artefacts in this first and the subsequent sections (Section 9.2 and 9.4). I cover findings on the use of imagination and folklore (Section 9.3) as well as physical struggles (Section 9.5), including tree climbing (Section 9.7). My two closing sections of findings evidence the adult as caregiver (Section 9.8) and relations with nature formed through continuity of experience (Section 9.9).

9.2 Choosing to have own experience: ‘Do a sign that says how much it costs to go across’⁸¹

In this section, I describe and interpret the ways that all three cases evidenced the use of dens and bridges across the seasons (Photographs 28, 29, 30 and 31). Similarly labelled, but each unique, the building processes involved in these different transformations, and the purpose of each, were distinct to those who built them and played there.

Across my four visits to each case, constructions morphed and developed from basic to elaborate. Some constructions, notably more dens than bridges, remained intact across my four visits, while some more temporary structures were either dismantled by the children or damaged through storms or, in the case of snow constructions, simply melted.



⁸¹ Two boys at the Scottish case built their bridge with an economic goal in mind.



Photographs 28, 29, 30 and 31: Constructions that cross boundaries: bridges in Denmark, Finland and Scotland

Transformations of the learning environment were both minor and more considerable. ‘Minor’, I interpreted from episodes including small-world play where the children used miniature artifacts to explore fantasy scenarios of their own creation. The ‘more considerable’ transformations were most frequently dens. It was interesting to record modifications and to see collapse and rebuilding, as well as note changes in favoured focal points left to derelict abandonment, as activities continued across different timeframes. There were building materials to be found and moved, and then knot tying, sawing and hammering to engage in. There was also evidence of seasonally specific practices, as evidenced in the next episode.

A *quinzee* is an igloo-type shelter made of frozen snow (Photograph 32). Snow, as a ‘loose part’ (Section 2.2.2), was identified by the Finns as affording the ideal building material for a *quinzee* and, in this Finnish context, in these prolonged sub-zero climes I understood such building as a customary practice.



Photograph 32: The 'Third Quinzee'

There was no scope for creativity in *quinzee* architecture as all followed a prescribed mode of construction and specification. Only when the build was ready for 'occupation' was imagination again rife and the children overcame any perceived limit to their freedom:

Oh yes, we have the *quinzee* as a den and the walls are [electric] to keep away the ones who can get through ice. (Boy, Finnish case – translated)

This child was so excited that he barely had time to express his game. Meantime, nearby, two girls had 'moved in' as their '*quinzee* in the sky' took a spaceship's form in their imagination and was to float softly away. The girls' shelter was about 300 metres from the first, yet worlds apart: one built one week, one the following week. My data collection captured construction of a third.

It was mid-morning and efforts were being focused on starting to build this third *quinzee* by piling a large mound of snow with shovels. A small group, shovels in hand, worked on assembling the snow pile. I joined the task and found it exhausting.

The build continued with several children away collecting around 30 sticks, all of the same length. At this point, I am confused, but decide not to interrupt to question the process. Inserted into the pile of snow⁸² were the sticks and my confusion lifts as Mari tells me that the sticks would ensure walls of even thickness. I am intrigued. Next, members of the group dig out the insides of the snow pile to form a cavity, and each time shovels met the end of a stick, digging stopped. At this point, I saw the clever technique employed to ensure *quinzee* walls of an even thickness throughout. The day's build over, and the structure left to freeze over night, the group had headed to the hut with its fire and sausages and the session continued on. Before packing away, I headed back to the third *quinzee* to take a final look as I was flying home the following day and these ice shelters would be long gone by my spring visit. There was a pair of child's feet sticking out of the doorway. One boy in his own silent contemplation was lying on his back, alone inside the freezing cavern. I returned to the hut and told Mari: 'Ah yes,' she said, 'ask his mum about this, this is always what he does'. Kals & Ittner (2003) studied the motives behind children caring for nature to conclude that such behaviours stem from moral concern for natural environments that they are emotionally attached to. In this Finnish boy's behaviour, and in adult comments about it, I interpret an emotional attachment that may have a constitutive role in his relationship with nature.

The two Scottish boys who gave me the title to this section were voracious builders. Each of their 'projects' showcased the boys' imagination and they used a variety of natural and man-made materials to resource their builds. I talked to the boys

⁸² To me, I had to say the pile of snow with sticks sticking spaced out into its circumference looked akin to cloves in an onion for Christmas bread sauce. Blank faces from the listening Finns when I remarked as much!

during ‘tea-break’ one day about several lengths of timber they had brought to kindergarten from one of their homes:

Boy A: My dad’s shed is full of things we can have. I like these planks because they’re straight and flat and the branches we get here aren’t right sometimes.

Boy B: ... and we can use what we want. Dad won’t mind if I cut this bit, I asked him.

It was the Scottish spring, and I talked with Steve as we walked back to the kindergarten at the end of the session about the boys and their build in the above vignette:

The construction of dens is really popular and really seems to nurture creativity. Some kids get really engrossed and build dens more than others, but we all love it and it’s great having the space and time to let the children build big, build long! (Steve, Scottish case)

The Finnish and Scottish children built in a way that the Danish children did not. The majority of resources in the forests did not present ready-made, prescribed routes as to their use, thereby allowing children scope in the use of their imaginations. When observing a den was labelled a ‘distribution warehouse’, ‘shopping mall’ or ‘dance academy’, I could readily understand references which were relevant such as Blinkert’s (2004) functionally unspecific and Broadhead and Burt’s (2012) ‘whatever-you-want-it-to-be’ (p. 2) analogies of the literature. Each of the woodland sites at the

three cases afforded deadwood, mature trees and other resources such as bracken and leaf litter. I could see that each forest's resources afforded these 'loose parts', as Nicholson (1973) would label them, but these resources were more than generic—they were special. Children saw these resources with subjective, keen eyes that were intimate with these spaces and resources. For one boy, his laser sword could only be a particular branch, from a particular tree, picked out as the right choice for his group's den. Pyle (2002) feels:

For special places to work their magic on kids, they need to be able to do some clamber and damage. They need to be free to climb trees, muck about, catch things, and get wet – above all, to leave the trail. (p. 319)

I want to take two directions from this extract and bring my overview of building to a close. In light of my time with children building in a Finnish and a Scottish forest, both points I take from Pyle's extract stem from his use of the phrase 'to leave the trail'. First, this is reference to the context of Pyle's (2002) discussion of 'manicured and chemically treated' (p. 319) pathways in parks, botanic gardens and managed nature reserves that dictate a lack of interaction with the natural environment. Pyle is referring to a need to get off the path, ignore the sign instructing visitors to 'keep off the grass' and experience nature first-hand, beyond the visual domain. Pyle (2002) recognises conservation agendas and the need to protect natural resources that 'represent high conservation status and potentially vulnerable spaces' (Nugent, 2015a, p. 4), and there are nature environments where guidance is prudent. This is, however, not to say that den building and movement of loose parts, does not occur in managed places, but rather that in the present context the nature

environments are more likely untended, ‘humble places where this alchemy occurs’ (Pyle, 1993, *xix*). The unrestricted, ‘leave the trail’ behaviours that I recorded in Finland and Scotland highlight a utility in quotidian nature visits. Important here—and what gives tangible scope to Heft’s (1989) version of affordance theory for analysing nature-kindergarten practices—is that the ‘trail’ that is left is in children’s memories and is a positive one (Heft & Kyttä, 2006). From their work in psychology, these authors argue for less structured child-nature pastimes (Kyttä, 2006). And my findings in Denmark, Finland and Scotland are in parallel to the notion that direct experience of nature’s simple aspects is significant (Stephen, 2004). I see interesting outcomes for both the ECE and OL fields when childhood knowledge is founded in sustainable experiences in locally-specific ways. While Berger and Luckmann (1991) would view such knowledge as created by participants’ interactions within their social world, and this view is central to social constructionism, it is through significant others—in this study adult practitioners—that mediate socialisation of child participants. Indeed, Burr (2003) comments that identities originate in social realms, of which I see nature-based ECE settings as an example.

My second inference from Pyle’s (2002) encouragement ‘to leave the trail’ is a reading of ‘the trail’ as the dens and other constructions that are left behind following a build. To me, a ‘trail’ implies a memory or a continuity of experience that remains for the children (and the researcher!) to revisit. Dens and other constructions allow such a return, even when the den has collapsed or the *quinzee* has melted.

To reiterate, I drew on Ingold’s (2011) advice to prioritise process over product (see Section 2.2.3), to situate the ‘weaver’ and define a build in terms of ‘specific relational contexts’ (p. 10), and my findings on den building confirm that

each particular weaver is only constructing as he does because of the context he is in. For example, in Finland, as the frozen lake afforded ice-fishing (Section 7.3) so did metre upon metre of snow afford sufficient resources to build a *quinzee* (Section 9.5). In Scotland, it was branches and materials brought from ‘Dad’s shed’ that were used in the absence of, for example, copious amounts of snow. In the context of constructions in ECE, some authors (Canning, 2010) report activities with what Ingold (2011) would term ‘determinate ends conceived in advance’ (p.10). Ingold (1986) uses the example of a stone to explain his view of our perception of the features of the natural environments in myriad forms. Here, in my den and shelter data, are examples of the specific ways in which participants across the cases define features of their natural environments in terms of action (Stoffregen, 2000b) and behaviours. My evidence from the three nature kindergartens suggests the more improvisatory process to which Ingold (1986, 2011) alludes. It would, however, be foolhardy to overlook the influence of nature. For example, the *quinzee*—its specification determined and preconceived—is the way it is because the climate affords the Finns the necessary conditions to transmit, generation to generation and winters round, this normative practice.

9.3 Fairies, Robin Hood, the *Kalevala* and folklore

Each of the three cases evidenced the use of folklore in their pedagogical practices. Both Danish and Scottish children showed an appreciation of fables. For example, they evidenced previous prior knowledge of stories, and it was clear from their talk that they had previously been encouraged to speculate over pots of gold at the end of a rainbow or the tooth fairy. At the Scottish case, there was talk of Robin

Hood, highwaymen and a ‘good place to ambush the goblins’ by the children. Artefacts, including houses, letters and treats, were recorded being left for fairies at both the Danish and Scottish cases and meaning making from such practice was evident. On one summer day, three Scottish girls had taken fine, multi-coloured wire from the kindergarten building and used it to model ‘a dream-catcher’ and ‘no, mine’s a fairy-catcher’. The girls attached woollen thread to their intricate models and a parent assistant helped to attach the ‘catchers’ on a tree stump next to ‘the Dragon Tree’. This was my final data collection visit to the Scottish case, but the girls were heard making plans for checking what the ‘catchers’ had caught, at points in the future. Meaning for the girls was long term and meaning for me was an understanding of how fantasy, while invariably subjective, could be used to pass on culturally specific practices.

Aligned with the burgeoning field of wilder spaces and place-based literature (for example, Kahn & Hasbach, 2013; Sobel, 2004), my findings offer evidence of imaginative readings (Canning, 2012) of the forests where all three nature kindergarten under study were located. Folklore and mythology were most explicit at the Finnish case. Finnish folklore was an important component in everyday practice and evidence was found to suggest that folklore and fairy tales were representative of an essence of the Finnish culture. The *Kalevala*, Finland’s epic national poem, is compiled from ancient runes, a bird’s egg plays a crucial role in the start of the world—the shell forms solid ground, from yolk the sun, egg white the moon—and such narrative is emblematic of nature relations rooted in Finnish mythology. Elves, goblins and the like featured heavily in the Finns’ pedagogical actions and children’s play, almost to the extent of a sinister maxim:

Girl: They are going to come in the night in the storm and take it away.

Mari: Good, look after the tree for the goblin of the forest wants you to help.

Joonas: Everyday a tale but similar messages ... others use the forest too.

Again, as with the Scottish girls, this Finnish example reveals that the use of folklore in pedagogical practice encouraged fantastic imagery amongst these young children. Practice was purposeful and dialogue was used by the adult to fuel and feed the children's imagination. In Mari and Joonas's talk, however, I saw a hidden agenda regarding environmental stewardship and a raising awareness that 'nature is for all of us and we must take care of the forest' (Joonas). In Section 2.4.4 and my exploration of place-based outcomes, I include a subsection on fantasy and fairies to look at place literature through an age-appropriate lens. In responding to Cutter-Mackenzie and Edwards (2013), my findings suggest that the use of fantasy and folklore in the delivery of ecological messages might be a route for the gradual introduction of concepts. In all three forests, environmental stewardship was presented in ways that helped children to cultivate positive attitudes towards the nature environments that they played in every day (and where fairies and goblins played when the children left every day!). My findings confirm Carroll's (2012) conclusion that folklore and fairy tales contain elements of enchantment that hold appeal for kindergarten children. This drawing of connections with wooded places offer children opportunities for imaginative readings of learning environments to enable the shaping of participants' relationships through place-responsive ways and gives nature-kindergarten practice meaning and possibility.

9.4 Whittling whistles, wounds and wars!

My findings now move on to tool use. I include these data here as there was considerable overlap in the use of tools, shelter-building practices, the production of artefacts, the mode of play and injuries sustained during such enterprise. There was clear evidence of why nature-kindergarten practices may be considered distinctive when practices involving young children and ‘real tools’⁸³ are considered (Photographs 33, 34 and 35).



Photographs 33, 34 and 35: Hammers, saws and knives across the three settings

I start with an example from the Danish case to evidence the adult’s role in mediating and steering practice to offer a safe, yet challenging and open-ended experience:

⁸³ ‘Real tools’ include, but are not limited to, wood saws, small knives and fire-lighting flint steels.

Boy 1: I need to cut the sword shorter before I sharpen it.

Hanne-Lise: OK, but sitting with your knife please.

Boy 1: Yes.

Boy 2: I want to have a dagger [standing up].

Boy 1: Sit.

Morten: Okay, but think how it is best to do these changes and work with care.

Boy 1: I am going to make two. This is one and the next will be not cut.

Hanne-Lise: It is your choice to make the sword, the dagger, but always respect the knife, can make a good weapon but can hurt you before the battle.

Deductible from this translated extract is the support offered by the adults to the boys to help keep them safe during the activity. Important messages regarding safety are shared in an authentic scenario to encourage the opportunity for children to decode meaning in the messages. This extract is useful for what it adds to a wider discussion about the dilemmas and possibilities involved in researching young children and their carers in situated circumstances.

I discovered a coincidence: Hämeenlinna, the town where the Finnish case was located, was the birthplace of Uno Cygnaeus—priest, physician and founder of Finland’s first nursery school and, as a young boy, his father taught him woodwork skills. A connection formed between Cygnaeus and Saloman, who founded *pedagogisk slöjd* or sloyd (Section 1.2.3), was through their mutual appreciation of craft education and the use of tools (Virta, 2013). Coincidence aside, I make mention here of sloyd for the importance it places on knives and other tools. In the Finnish autumn, Joonas was settling into whittling whistles and instructing those children who took interest in what he was doing to find birch twigs of a length and thickness:

Like your thumb ... [laughs] ... and if thumb already chopped off, measure the stick against another finger! We do not worry about the knife, the children have eaten dinner for six years! (Joonas, Finnish case)

I saw such jovial comments as customary of Joonas's and Mari's 'risk-taking' habitus. I had previously remarked to them on the sharpness of their knife blades to be silenced by the retort:

The sharper the knife, the cleaner the cut, the easier to stitch. (Mari, Finnish case. Note in field journal 20.10.2010)

Today, however, I took meaning from the practitioners' words beyond the joviality. Contrary to his jest, Joonas sought dextrous, safe knife use at all times. Akin to Hanne-Lise in the above vignette and Steve and Dan below, all practitioners at all three cases showed the children how to carve away from their torso and concentrate on their accomplishments while doing so. Joonas admonished one child who stood up from whittling and walked away with knife in hand, unsheathed. Another observation notes how one boy sits alone in the hut for 15 minutes 'to think about exposing others and his body to danger' (Mari, Finnish case) through inappropriate knife use. In his mention of dinner, Joonas was referring to whittling as an example of his confidence in the children's abilities to transfer skills, in relation to the situation that they were in.

Practical handicrafts such as whittling whistles, swords and arrows were seen as a tool by which individual abilities could transfer across learning situations. There was a deeper purpose in the use of a knife, whether that be for whistle manufacture or at the dinner table! In order to benefit and learn, the whittling child needed to trust that the supporting adult was close to provide guidance for their activity. The Nordic parent who buys then packs a small, sharp knife in a child's rucksack for kindergarten

does so in an act of reciprocity, and accepts the role of the pedagogue in teaching its safe use. Both parent and pedagogue are members of a bi-directional network working together to pass societal practices to the child. On one occasion, a Scottish parent was happy to talk to me on the topic of tool use:

I know it's a bit out of the ordinary and we keep up with the rules if he wants to use a saw or hammer at home. They really instil good practice here, and me and my husband know he's okay as the teachers are always looking out for misuse. He had one bad cut a while ago, but I liked that he could tell me the mistake that had made it happen and that's really learning isn't it? (Mum, Scottish case)

This parent's remarks about her son show that at play was not only a deliberate desire to educate children in learning skills (and risks) associated with tools but also a behaviour that crossed boundaries between kindergarten and school. The use of tools, and the potential that that authentic, "unsugar-coated" activity brought (Alexander, 2000; Alexander & Sandahl, 2014), was indicative of a like-minded community of practitioners and parents who saw practices where something was at stake (Higgins, 1996) to be of worth to the developing child. The dominance of ideas that authentic, first-hand childhood relationships with nature are good (Ergler et al., 2013; Grahn et al., 1997; Kaplan, 2001;) has led some to claim it as a component of the 'good childhood' (Halldén, 2009; Kernan & Devine, 2010). When such notions are considered in relation to nature kindergartens, we may begin to recognise parents'—who have alternative options for their childrens' preschool (Borge, Nordhagen & Lie, 2012; de Quetteville, 2008)—and practitioners'—whom likely have alternative career

options (Allin & Humberstone, 2006; Bixler, Floyd & Hammutt, 2002)—beliefs in nature-based experiences for children can be commonly understood.

A further episode at the Scottish case evidenced the first-hand pedagogical ethos, and ‘real’ tools were seen as bringing an authenticity to practice. The Scottish practitioners were confident and competent with knives and, although using them less frequently than their Nordic counterparts, were equally keen for each child to learn skills and have an artefact to show for their efforts. It was my summer visit, and it was a warm, sunny day in the forest with a light breeze and talk of bows, arrows, targets and battles. Work commenced on making the equipment needed ‘for a war’ (Boy, Scottish case). Arrows were observed being whittled and, together with bendy willow sticks, string and a felted wool target, the battleground took shape. The preparation for ‘war’ overtook the whole session and older siblings with parents became involved at pick-up time. The two practitioners, myself and the assembled visitors were involved in firing at the target, collecting fired arrows, making adjustments to targets and bows as well as discussing technique while one dad acted as an ‘escaping prisoner’. The good weather surely contributed to the length of time we all dwelled at the end of the session, but the companionable atmosphere was a sign of togetherness. I suggest ‘togetherness’ as important to any notion of a nature-based ‘community of practice’ (Lave & Wenger, 1993) for how it builds over time. There was a tangible unity felt and conviviality in such social practice.

At all three cases, saws—hanging just out of a child’s reach up a tree at the Danish case—as well as hammers and nails were typical. Again, safety was a priority, yet accidents were accepted as a potential acceptable by-product of using sharp tools. Splinters, blisters and cuts were assessed by adults, usually cleaned but rarely dressed. Pedagogue supervision was predominantly passive with tool use (unless the tools

were sharp knives), and an understanding of this as ambivalence is returned to later in this chapter (see Section 9.8). Contrary to data reported by Little (2010), there were no gender variations in these behaviours that were comparable to ‘risky endeavours’. As discussed further below (see Section 9.6 on den building), to take any gender-related meaning from my findings would be an overreach. As such, I attach little scope and importance to my gender-related findings and suggest further work is needed to add knowledge to this field.

9.5 Resilience and struggling

Adhering to the view that roots resilience in the foundational experiences of early childhood (Peterson & Tuppert, 2013), I explored the concepts of resilience and challenge to suggest that these may be characteristic features for nature-kindergarten participants by virtue of the context of their ECE setting. My heading to Section 2.4.2, ‘This is really tough and my finger is sore’, was extracted from a conversation (7.4.2010) between a Scottish five-year-old and her practitioner during the girl’s exertions while sawing a sizeable branch in two and is a good segue between my findings on tool use and resilience. The Scottish girl, sawing a branch that she had opted to drag some 200 metres across to the sawing horse, had persevered for 45 minutes. By now tiring and troubled by a scratched finger, she tells the nearby practitioner as much. This example expresses one characteristic feature in the lives of nature-kindergarten participants, which is, ‘keep at it, it’ll be worthwhile’. For me, this example is a manifestation of nature-kindergarten practices deeply shaped by socialised behaviours and illuminates, for my conclusions, ways that remain largely opaque in the nature-based ECE discourses.

In Finland, I learnt the word *sisu*. It was a damp, grey, April day with no spring warmth and activities outside were sandwiched between bouts at the fireside. There had been some thinning of birch saplings by foresters from the municipal authority who managed the property and who had left the fell strewn around the nature-kindergarten site. The group had set about building a structure from the felled birch saplings, attaching them to standing trees with twine. In conversation, I asked Mari about the material left behind that was now resourcing the session and the ways it was being used by the group. We were in the hut fetching extra saws:

The foresters, we did not know they coming to the forest and when they coming here to leave something for us now. The wood [saplings] that we have here we can use and municipality happy with this. These wood are no value to them but good for us. (Mari, Finnish case)

This was the second attempt at the construction project. On arrival at the forest that Monday morning, participants found their shelter had been vandalised over the weekend as recorded in a translated exchange:

Mari: Look, what has been done here?

Boy A: It [the knotted ropes] has been cut with a knife.

Girl A: Not teeth, it's been cut with a knife.

Boy B: I saw some of our rope on the road coming . . . they went over there.

The resilience of the participants was clear as the children immediately began the task of repairing the shelter. Over the next two days, I recorded the participants'

build as they were moving resources, sawing to size, knotting without talk (Photograph 36). The structure was variously a shopping centre with adjacent multi-storey car park, a play centre and a house—ripe with unrestricted improvisation (Caillois, 2001). The rebuilding episode indicates how children retained positive attitudes, their composure unaffected, when faced with the inherent unpredictability of their setting.



Photograph 36: Birch saplings are knotted together to form the 'first floor' of the car park

I have a postcard above my desk—bought in Oulu in northern Finland—of a painting by Finnish artist, Joonas Vähäsöyrinki, that is a picture of four children hanging off (or onto!) a rope strung between two trees; the picture postcard is titled *Rimpuilua* [Struggling]. Higgins (1996) argues his belief that participation in outdoor learning, must ‘involve effort’ (p. 5). My belief has long been in the literature that grounds resilience and coping strategies towards challenge in foundational experiences of early childhood (Peterson & Tuppet, 2013) and past, previous experience (Sobel, 2004). My study has not only affirmed my belief, but found

evidence to support how affective and adaptive qualities such as resilience, grit and recovery are shaped by contextual factors. My data of the resilient struggles of this group of children suggests that their actions may be born in part from distinct characteristics of the nature environment or, alternatively, it may be because change is experienced personally, first-hand (Allan, McKenna & Hind, 2012). This second attempt to complete the den, which Joonas called this ‘big Monday rebuild’, was a struggle, and the word *sisu* was used by Mari to describe the gritty perseverance involved. She was noting a pervading characteristic of this group of Finnish children. I had seen this group during the winter and it was, therefore, easier to understand her recognition of their fortitude.

Shepherd (2011) wrote, ‘People who live strenuous lives value strength above everything’ (p. 119). While the Finnish group did not ‘live strenuous lives’ as such, my point from using this quote is that Mari, Joonas and their group of young children epitomised a trait that the Finn’s prided themselves upon. At her home one night, Mari shared a book of Finnish proverbs with me echoing Shepherd as she read, *Hankalimmissa oloissa kasvaa sitkeäksi* (‘Grow tough in tough conditions’). Her recognition of the struggles inherent in a day at nature kindergarten and the next exchange accentuates what I am alluding to. Mari respected her group of children for getting back to the task of repairing the vandalised shelter, but in a way that saw such actions as expectation. Rather than focus on the vandalism, the Finnish participants recap on the building design and possibilities it allowed for remodelling. Talk turned to how the children saw what I see as resilience:

Boy A: We will make a better job.

Girl A: Look what they have done! Working like us would be good for them.

(Translated by Mari)

Having been at the Finnish case, on a dreich day, struggling to repair the damage, I better understood *sisu*. I better understood what drove the participants on, and it was not solely the satisfaction that the completion of the den would bring; rather, it was in the shared graft and endeavour in getting to that point. My informed insight into *sisu* let me interpret the rebuild as a metaphor for Finnish tenacity and strength of character.

Using Bourdieu's (1977) habitus and Heft's (1989) version of affordances as theoretical concepts to underpin thinking about *sisu* and resilience is a constructive route to understand the connection between context and patterned behaviours that support such traits as connected to the endurance of local conditions. We know dispositions of resilience are social and generative (Hillier & Rooksby, 2005). At my examples of nature kindergartens—especially the Finnish case in winter—situations that call for 'internal assets' (Beightol et al., 2012, p. 318) and in such distinctiveness are implications that may help us resist shallow interpretation of the desired outcomes of nature-based practice. That same day, mid build, I slipped on a patch of muddied black ice and fell hard. There was no fuss or assistance offered to me when getting back up, and this was not out of any malice; rather, it was the Finn's expectation that I would get back up and carry on. Mari muttering, 'you'd make a good, strong Finnish woman' has stayed with me and is appropriate for a section on struggle. The traditional role of Finnish women as being strong, resourceful and tenacious and who toil ceaselessly and cope ably (Lipponen & Setälä, 1999) was translating itself to this

episode and different ways of knowing. When thought of in this way, it was easier to see how ways of knowing, or knowledge, and ways of living, or lives, may vary across socio-cultural environments and let us see how practitioners engage in a cultural pedagogy (Heyes, 2016). By being outdoors, and in Finland in particular, I was accepting 'a tough role' as an integral component of the context. As I watched the Finnish group, all reconciled to repair the vandalised structure, I saw *sisu*. My initial analysis codes this episode as 'struggling' because, despite it being tiring and uncomfortable, the participants keep going as 'we had started and working hard was all we needed to end it' (Joonas, Finnish case). Akin to the Scottish girl who was vocal about her struggle compared to an absence of talk in the Finns' endeavour (Section 6.6), she kept at it, to saw the log into two. I suggest that insights from across cultural boundaries are important because difference and resonance helps to recognise the traits that adults value, such as resilience, as well as place my analysis into broader discussions about 'nature' and 'culture'.

The Finns were well accustomed to prolonged periods of extreme, sub-zero temperatures compared to the Danes and Scots. The 15th and 16th February 2011, to date, have been the coldest days experienced in my life. I spent those two days collecting data in the Finnish forest in temperatures between -28°C and -36°C. In fact, on this, my winter visit to Finland, 'days' were only the four hours of daylight. I spent just two days in these conditions compared to the participants I shared them with who were into their fourth month of sub-zero temperatures. I accept that the brevity of my visit may open my account to challenge of the situatedness of my knowing body alongside those of others (Coffey, 1999; Pink, 2009).

Sisu may be difficult to translate, but it was easy to recognise the characteristic in the Finnish participants. My Bourdieusian approach adopted across social worlds is

‘more respectful of historical realities’ (Bourdieu, 1998, p. 2) and hence, for example, the climate that generation after generation have grown up in. My outdoor time in Finland was variously uncomfortable, restricting, beautiful, familiar and unfamiliar, yet time with the group was spent routinely, out in the forest experiencing exercise, fire, food, exercise, rest: the everyday routine. As a result, and only then, could I appreciate the determined conviction of those who live in such climes to keep going and get through winter months in ways closely enmeshed with the physical, nature environments.

That said, in my Danish and Scottish data, where the climate were relatively less harsh (and there were no incidents of vandalism recorded), the participant actions were similarly mediated by the contexts in which they acted, suggesting there is something more at play than just being in nature. Recently, ECE knowledge of this ‘interplay’ has advanced to address how actions and interactions are influenced by contextual factors (Obradović, 2016; Sandseter & Sando, 2016). My point is that at all three nature kindergartens under study, human action cannot be separated from the physical environment in which such action is situated and, as such, those physical environments contributed to observed outcomes. I continue with this notion next.

9.6 Baddie bases, hairdressers and memories of childhood

As evidenced by their variety, shelters can be seen as a characteristic feature of the three nature kindergartens in my study. In line with the literature (Evaldsson 2003; Karsten, 2003), and unlike my findings on tree climbing, whittling, foraging and fishing, only in den play could gender stereotypes be interpreted. Shelters and dens were frequently, but not always, gendered spaces across each of the cases. Boys’ play was ridden with war, army and rivalry, where windows became ‘lookouts’ to

‘shoot through when they are coming’ or ‘storm the baddie base and get their ammunition for us’. Girls, in contrast, used their structures as hairdressers’, shopping malls and homes. There were exceptions, however, such as a Danish girl I observed stockpiling small rocks inside one den. I was interested in talking about what she was doing to find out about her game and also hoping to discover something deeper. It was very easy to interpret a game as some superficial gender interpretation, however, it just felt that there was more to understand. Henrik translated and helped me to do so:

Henrik: Can you tell us a little more about what you were doing?

Girl A: It was a war that the others said to do.

Henrik: Did everyone survive?

Girl A: Yes, today. Yes, we are okay.

Henrik: What else? Was it boys against girls?

Girl A: No. That’s it. There is nothing to tell.

The girl appeared annoyed at being asked to explain aspects of her game that we did not see. Somewhat confused by our questioning and, certainly blind to any gender divide, discussing our adult constructions of the game was tedious to her. This is the topic to which Henrik and I would return and discuss upon interview, but for the girl, she felt that the game was the central theme, and in her reluctance to explain further, she chose to enjoy her own experience. It is not my intention to elaborate on why some children built shopping malls and some built enemy hideouts in preference to describing first-hand contact with nature. I see the ‘label’ of a den as problematic as it seems to overlook complexities inherent in deciphering child-nature relationships across societies and requires further inquiry.

Boys and girls grow to adulthood and the adults at my nature kindergarten were heard to reminisce that building 'reminded me of when we were kids' (Dan, Scottish case). Dens were frequently built as joint enterprises between adult and child and, at each case, adults were observed taking an active role in building. At the end of one afternoon session, as we walked away from a Scottish den, one boy and his adult practitioner pondered together their den-building labours:

Dan: Look at it from here ... I like the way we got the door just right.

Boy A: Yes, yes. We got it so everyone knows and I swept it out.

Dan: Do you have a best bit?

Boy A: It's all really good. The drainpipe looks like my house.

This conversation then developed into the boy recognising longevity in their work, but also hinted at a resilience akin to the boy's Finnish counterparts:

Boy A: It's like you know that tomorrow or whenever it'll still be here and we can do more of it. [Pause] It's not like ... the beach or something, when you do a drawing and then the sea comes and it's gone.

Dan: Does that mean you work at [the den] differently?

Boy A: Well, I do think it's better because it's just a storm or something that will destroy it. It will stay here and if a storm does come and it's blown down, then that's fine and we will build it up again and not be cross ... It's only wind.

When asked to further explain Dan's involvement in den building during interview the following day, Steve said of his colleague:

Maybe this is why he [Dan] wanted to work here? There's not many jobs where you get paid to be a big kid! (Steve, Scottish case)

I see reference in Steve's retort to the situated facets particular to the nature-kindergarten context, as well as to the task of practitioner. These findings are interesting within a discussion of different interpretations of human–nature relationships. My data align with what Änggård (2009) is referring to when she sees children having 'access to a world that was previously invisible' (p. 103), as what emerges are various levels of support and mediation of the child's interaction and relationship with nature through like-minded adults. Of course, one has to question whether adult habitus mediates practice to the extent that encourages or stifles practice, and one route to doing so is through a different aspect of shelter building. I return one final time to the notion of risk-taking.

9.7 'To build a tree house, you have to climb the tree'⁸⁴

Nature kindergartens are situated in social and natural environments rich in routine and shared expectations. Adults are in a key position in these environments to influence outcomes for young children; and one attribute for comparison is the climbing child.

⁸⁴ When on the early scoping visit to Switzerland, I met a group from France, 'Les Barons Perché', an organisation that uses tree climbing in their work with French disadvantaged youth. One of the instructors gave me this line as I stood harnessed (and yes, karabinered!) ready to climb a mature sycamore in a forest in southern Switzerland.

Across each case, the majority of shelters were constructed at forest-floor level. In Denmark and Finland, however, dens were also evidenced up in the tree canopy and this represented a fundamental departure from practice that characterised the Scottish case. Indeed, to build in the trees, one needs to climb up them (carrying tools and building materials). My evidence in this section came predominantly through my spring and summer visits. There was no tree climbing recorded during the icy months, when tree canopies were heavy with snow. During my summer visits to my two Nordic cases, the focus of activities had changed. One reason lies in the temporality of the learning environment as influenced by seasonal change, as Mari's words support:

The children love to build the *quinzee* and feel special as not here all the year. They like to have connection with the winter and for us is like we ski and enjoy while the nature lets us. (Mari, Finnish case)

With snow and ice gone, Henrik's explanation aligns with Mari:

Construction possibilities are changed ... Different to build and create with snow versus green stick. When we use nature to create, I see dens and the activities inside them fall apart, go rotten, melt and are going back to nature. The children can't see after the den goes, but they will remember it and do it again perhaps for this forest or some other somewhere. (Henrik, Danish case)

In the Danish forest, it was 15°C by mid-morning, and three small groups of children had gathered in two adjacent temporary shelters built from branches and

taraulins alongside some gorse shrubbery. Fantasy episodes were rife and the game, while unclear to me, was unimportant as the children suddenly began dismantling the tarpaulin roof and, over the course of an hour, relocated their den up in a nearby beech tree. Morten assisted them and the build, some 2–2.5 metres off the ground, was explained as necessary because of the children’s imaginary ‘flooding that was coming everywhere’ on the forest floor. In Section 6.2, I wrote of a Finnish boy whom I had met during scoping and an insight he shared during later data collection. This boy also talked for my Flip recorder on his return visit about a tree house:

We did not build that den [*pointing*], but we remember it always and we would eat there. (Boy, Finnish case)

The structure to which he referred was 4–5 metres up the tree to which he pointed. A ramshackle structure built of wooden planks, his den had clearly been up the tree for several years. A key importance of this place for this boy was the mealtimes he had had up the tree and, for me, it was important to talk to Mari about hot bowls of stew being boy-handled up part makeshift ladder, part tree trunk. She laughed at me:

If they spill the food, they come down. If they need toilet they come down. If the bell is ringing they come and if slip and fall come down [*laughs*]. I am not worrying like you, they know this place and this makes them love the forest and care for the forest. (Mari, Finnish case)

The Danish children whose den was ‘flooded’ did not build any lasting structure like the den in the tree that the Finnish boy was so proud of. The Danish den comprised at most of three planks. By the time the children and Morten started to drag the tarpaulin up the tree, there was a move ‘to a better place’. Morten was accepting of the children’s new plan. He saw his role as a conduit, saying, ‘I am here to help the children’ and that included helping to lift heavy materials rather than prescribe or direct the build, and I return to this role below (Section 9.7).

The point I sought to confirm by asking about hot stew and climbing children related to my concerns about risky behaviours. There was, however, something deeper to be considered. The Finnish boy’s recall of the significance to him of the tree house (and his ‘special hollow’ in Section 6.2) seemed to stir an emotional influence for him that Mari felt would encourage a fondness towards the forest that might lead to environmental stewardship. In my questioning of what factors make nature-kindergarten practices the ways they are, I recognise emotions and values as a valid ‘driving force underpinning engagement’ (Rickinson et al., 2009, p. 48). In the Finnish boy’s recall, as in the Scottish boy’s pride in his den, emotions indicate childhood immersion in experience, but may also be read as stimulating future behaviours that may determine career choice, as suggested by practitioners under study here.

9.8 Shelter, protection and adults as caregivers

Each adult at each nature kindergarten in my study can be seen as conduits and caregivers. Findings in my earlier chapters have evidenced the different ways that adults can influence nature-kindergarten practices. Here in Section 9.7, I describe and analyse these two adult roles through our human need for shelter.

Each setting had a main kindergarten building (see Appendix A) with mains heating, hot water, toileting and washroom facilities, and these facilities were routinely used by participants at the start and end of a day's session. Out in the Finnish and Scottish forests there were further permanent shelters, namely, the *laavu* (hut) and roundhouse respectively. The Finnish case also had the composting toilet (see Section 7.3.1). In the Danish forest, large tarpaulins had been used to create three semi-permanent shelters in different areas of the site. Dan said of the Scottish roundhouse:

It's useful just to have somewhere to chill, re-group, rest a while, just get a bit of protection from the weather. (Dan, Scottish case)

In fact, because of the main kindergarten buildings, Dan's use of 'protection' can be taken in its loosest sense as each forest used by each of the groups was at maximum a kilometre, and often much less, away from the kindergarten building. All adults carried mobile phones and at each case, at some point over my 16-month data collection, each group stayed indoors at nature kindergarten.⁸⁵ In conversation about the tarpaulin shelters, Hanne-Lise explained how her Danish group, 'know [the shelters] are there if needed', and in these simple words, expressed a reminder over the pastoral responsibility of the adults to protect the children. What was being evidenced, rather than any vital protection, was *how* to take shelter should any such urgency arise, and in these actions I recognise the education of the children in humans' persistent vulnerability.

⁸⁵ On the second day of my winter visit to the Danish case, there was more cold, heavy rain and after the group got extremely wet during the morning session, opted to stay indoors at for the afternoon session; on my winter visit to Finland, the group stayed indoors until 10.30am waiting for the temperature to rise above -30°C; and on my autumn visit to Scotland, dangerously high winds brought the group back indoors by 11.15am.

Ejbye-Ernst (2014) uses the word ‘ambivalent’ in concluding that Danish pedagogues at nature kindergartens prefer not to direct the learning and experiences of children in their charge. Passive or ambivalent, there was evidence of the impact such characteristics in the conduit adult may have. On the first day of my two-day visit, the Danish group had gone to the woods with carrots to feed the wild animals after the tracks of deer and rabbit droppings had been spotted and discussed the previous day. It was winter, and Morten explained that several children had asked about how wild animals find food in the winter. It began to sleet and, as the forest turned uninviting, part of the group headed for cover. We were close to one of the tarpaulin shelters, but the movement to go inside was without any adult edict to take shelter, and four boys chose not to come inside at all. In contrast, the Scottish site, despite mature cover of beech, sequoia and other trees, was a site that could get the full force of the weather, particularly driving wind and rain. In this exchange, one Scottish practitioner insists that three boys take shelter from a heavy downpour:

Steve: Folks, you need to come under cover. You will get wet and then cold and that’ll make us uncomfy and grumpy, won’t it?

Boy A: It’s like *Star Wars*. It’s the hitting with lasers.

Steve: May the force be with us [*laughing*].

Dan: In here now guys, we’ll have a quick chat to decide what to do next.

The tone of this exchange is somewhat contrary to the Danish example in that both adults in the groups are caring, yet enact this characteristic in different ways. In these episodes, as with risk-taking behaviours, the child is intrinsically motivated to act (Beames & Brown, 2016), yet when considering the adult role of caregiver, a

mediating influence is seen to enter the frame. Getting wet is a consequence expected when outside in the rain that Ellen Key (Key, 1990) might delight in. I posit that my study, in unison with recent literature that advocate a ‘freedom to engage’ (Brussoni et al., 2015) in nearby nature (Skår, Gundersen & O’Brien, 2016).

9.9 A relationship with a tree stump

Children went up and came down trees. Trees also came down. The felled birch saplings in Section 9.4 were one example of a ready building material. There is an episode from the Finnish case that expresses human–nature relations to be integral to nature-kindergarten practice and that prompted me to think differently about relations between participants and place.

Near the Finnish hut lay the remains of a fallen mature birch’s stump. When I first visited the case, no more than a metre of stump and exposed root (Photograph 37) remained of this tree. Two girls sharing one saw were persevering to cut a ‘slice’ of the trunk (Photograph 38) in an endeavour over an hour-long, according to my observation schedule. Girls were sawing, this time in a Finnish forest rather than a Scottish one (Section 9.4), but the two episodes were ripe for looking between. With each scan, I recorded:

10:00 am	2xG turn taking, lg saw, kneeling standing, cont’d.
10:30 am	2xG sawing trunk – slow progress. Turn taking with saw.
11:00 am	2xG rtnd to trunk after snack. Changed saw? Slice almost through.



Photographs 37 and 38: The tree stump at the Finnish case

My series of schedules and photographs captured the Finnish girls' progress. At this point, there are dimensions of resonance between the sawing girls in Finland and Scotland: each persevering in their respective goals to saw through a tree stump and a log. In conversation, Mari enlightened me with an insight into a tradition her group had with the tree stump. The tree had come down in a storm several winters previous, and the municipal foresters had left it to that year's group, much the same as the saplings for the present group. Over the years following the storm, participants had nurtured a depth of relationship with that tree trunk (by now tree stump) that, had I not discussed it with Mari, I might have interpreted differently. I might, as with the Scottish girl and her sore finger, have described determination or *sisu* or the risks involved with a real saw. With Mari's contribution, the tree-stump episode became much more. When I returned to Finland for my winter visit, I asked Mari about 'the stump' as being concealed under the snow, lying deep on the forest floor, it was not part of that season's discourse as the winter snow concealed the stump.

Bourdieu sees the primacy of relations and we know that his concept of habitus is one tool with which to examine these relations. Bourdieu (1990) emphasises that habitus attributes the social agent(s) with actively contributing to the construction of a social reality. Understandably—in my example of the two Finnish

girls with the tree stump—when knowledge was being constructed, differences occurred as roles play out during the course of the girls’ behaviours. While complete confirmation was not possible (Stake, 2006), researcher, adults and children were situated in a way that built experience sensitive to time and place. The following spring, upon snowmelt, the trunk was completely gone and the patch of earth where the tree had grown, stood, fallen and been sawn was difficult to pinpoint. That said, under the bench in the hut, Mari uncovered a ‘plate’ made two years previous from a disc of tree trunk, and on the wall a ‘clock’ made from another disc was etched with a clock face and the year 2008, and so the discs took on new meaning to me. My interest was in how these tangible objects revealed relationships and memories of times spent at nature kindergartens. The children who made these artefacts had moved on to school and the tree trunk from which they were cut was long gone, yet these simple, age-appropriate objects held a story with local relevance and played a role in meaningful human–nature interaction.

What I see as key is that the child–nature interaction happened; temporary or more permanent, it happened. In these ‘first-hand moments’ (Mari, Finnish case), child participants could be interpreted as constructing meaning according to their inclination and the affordance of the environment ‘in the specific relational contexts of their practical engagement with their surroundings’ (Ingold, 2011, p. 10).

9.10 Chapter summary

To summarise my findings ordered under Shelter, I see two facets of nature-kindergarten practice that help my inquiry on ‘What is a nature kindergarten?’; namely, the benefit to children of continuity of experience and the value of memories in season-round data.

First, while my findings evidence dens and tool use at a surface view, the data go beyond mere description of what children did or what structures looked like. All the ‘builds’ and the characteristic practices, including tool use, that they bred were, alternately, imaginary, beneficent and challenging, yet stand as central, pervading features between human and non-human to play a part in human–nature relations by affording a return and continuity of experience that contributed towards traditions, values and memories. Dens, swords, bridges and the like provided outlets for establishing and maintaining relations with nature as fairies, warriors, warehouses and shopping malls were accepted as meaningful to these young children.

Second, the findings that I have ordered under Shelter reveal a temporality that influenced what was seen. Dens were built and artefacts were created, but there were subtleties beneath each group’s ways of being with nature. Before spring’s rising temperatures ultimately reclaimed the *quinzees*, the participants would move on, perhaps build another *quinzee*, play with it a while and move on. While whistles and swords were proudly paraded, many artefacts were also burned on the fire or discarded. While the bilberries (and pies) of my childhood are long gone, I fondly recall the experience of them and believe in the small part they played in my life course. It is obvious to read that snow structures, including *quinzees*, were temporary and ephemeral resources when compared to the majority of tree houses and other structures that (I like to think) still stand in the three forests today, yet more subtle impacts and outcomes surfaced upon analysis. My concluding chapter is next.

Chapter 10

Discussion and conclusions

10.1 Chapter Overview

In his introduction to his revised edition of *The Irony of School Reform*, Katz (2001) writes of the response from his doctoral supervisors upon submission of his thesis in the mid-1960s, which paraphrases as ‘Great, but what do these case studies add up to and what are you trying to say?’ He admits to having had no good answer. Terrified by hearing similar from my own two supervisors and being stuck for a clear answer, I approached my final chapter with Katz’s retort at the forefront of my mind.

In Chapter 10, I begin by returning to my study’s rational and research aims (Section 10.2). Second, I present an overview of how I answered my research questions through a multicase study approach using sensory ethnographic methods (Section 10.3) as a basis from which to present my four findings chapters and yield the three principal findings from across them (Section 10.4). Next I evaluate my four contributions to the subject and methods literature (Section 10.5). I draw attention to unanswered questions of where and what next (Section 10.7) and identify three directions for further investigation, namely, further exploration of the adult role, the child participant’s transition to school and more examples to build a worldwide picture of ‘What is a nature kindergarten?’ In concluding my research, there must also be considerable reflection on my own dispositions and values that form my habitus and how they have influenced and, indeed, been affected by looking at my specialist field. If social science and its methods help not only to describe social worlds, but also enact them, then investigations such as this one can, to an extent, provoke

thought about the world it wants to help to make. I close Chapter 10 (Section 10.8), and so my thesis, therefore, with some final thoughts on my thesis journey. My key hope is that the common characteristics that epitomise nature-kindergarten practices are seen for their tangible capability to advance locally-specific, sustainable nature-based practices.

10.2 A return to my study's rationale and research aims

My rationale is twofold behind wanting to write this thesis. First, for my own love of the outdoors fostered during childhood made me inquisitive to the relationships of others with nature. Second, my MEd research at Scotland's 'first' nature kindergarten left some unanswered questions into nature-kindergarten practices elsewhere. The starting point of my thesis—my one big idea (Nightingale, 1984)—was the description of everyday nature-kindergarten practices by revealing what participants actually do. My study has approached two research questions through the investigation of three cases of nature kindergartens: one in Denmark, one in Finland and one in Scotland. I asked in RQ1: How do nature-kindergarten participants use nature environments as for everyday practice? RQ2: What are the influences that shape the participants' use of each nature environment? My thesis or 'one big idea' was to show a clearer understanding of 'What is a nature kindergarten?' as framed by my two research questions.

10.3 Multicase study and sensory ethnographic methods

I applied sensory ethnographic methods to understand how comparable characteristics yield difference and resonance across examples of nature-kindergarten practice. I visited cases across the seasons and devised an observation protocol

(Section 10.5) to capture contextual and agential aspects of my research environments that called for an approach sympathetic to their unpredictability, ephemerality and sensoriality.

All the stages that comprised my research—from early fact finding to scoping to data collection and data analysis to this, my concluding chapter—have run alongside the development of an understanding of the enactment of nature-kindergarten practices within the socially constructed nature of realities. Connections were continually being made between the socialised patterns, behaviours and other socio-cultural considerations as manifest in observed practices. As introduced at the outset (see Section 1.2.2), and justified in my methodology (Section 4.2), I preferred to ‘look between’ cases rather than compare them. My multicase study (Stake, 2006) was not intended as an exercise in attaching positive or negative values to cultural practice, but rather seeking difference and commonalities as expressions of how participants actualised their identities as actors in their ‘intentional worlds’ (Shweder, 1990, p. 2) through the ways in which they interacted with nature (Ingold, 1996, 2000). My approach captured nature-kindergarten practices in all their ‘complexity, and situated uniqueness’ (Stake, 2006, p. 6).

10.4 A summary of findings: 53 days across 16 months

The structure for my four findings chapters was determined through their hierarchy for human survival with the aim of foregrounding human-nature relations and keeping to mind that ‘needs’ are adaptable according to contextual circumstances. The chapters—Air, Water, Food and Shelter—have brought to light how looking between nature-kindergarten practices can be interpreted to yield three principal findings: first, a description of nature kindergartens as a distinct form of ECE; second,

my findings show difference and similarities across cases and across seasons notably, in the ways that nature kindergarten support relations with nature, the ways that local facets such as climate and plant species shape practice and the mediating influence of adults; third, to borrow from (Fetterman, 2010) my findings show a ‘commonly shared focal point’ (p. 17) of connecting child with nature yet, any statement on a fixed definition or ‘norm’ would be misguided. My four findings chapters will next be considered together to succinctly summarise the description of nature-kindergarten practices that I have taken from analysis of my data to restate the evidence that my conclusions are built upon.

First, my findings have identified ways that nature kindergartens are distinct in their use of nature’s quotidian simplicity, season-round. My confidence in nature kindergartens to empirically evidence features that are typically held as characteristic of nature-based ECE, including risk-taking and sensorial immediacy, was central to my choice of this arena (Section 1.1). Each case shared physical characteristics that set them apart from mainstream preschool provision in their localities, notably, their season-round use of wooded, outdoor environments and watercourses. Whether it be an exposure to risk by running fast across uneven ground (Section 6.2), children touching icicles to their lips (Section 6.5), sawing a fallen tree stump (Section 9.8), cooking food at an open fire (Section 8.4) or providing lessons for environmental stewardship by recycling cartons from that morning’s milk (Section 6.4) or through nurturing close relatedness to nature by experiencing how berries taste (Section 8.2.1); my findings across the cases gave room for a reading of ‘nature the educator’ (MacQuarrie et al., 2015) as and when situations arose. My findings show a simplicity in setting and resources that overcame the need for an overtly ‘didactic or ‘one-way’ transmissive model’ (Beames & Brown, 2016, p. 45). Young children were found to

seek experiences—the thrilling and the more mundane—within their own subjective thresholds, as mediated by adult caregivers and parental attitudes. By virtue of ‘quotidian everydayness’ (van Manen, 2013 p. 139), an interplay between human participants and their nature-kindergarten environments was apparent and distinct from other forms of ECE.

Second, my findings show difference and similarities across cases. My three selected cases of nature kindergarten each provided nature-based ECE for children in their preschool year. My study’s participants were recorded doing similar things, for example, eating food cooked on an open fire and building dens. They were also recorded doing different things with comparable natural resources, for example, the contrasting practices of using snow to building a *quinzee* shelter (Section 9.2) versus building a snowman (Section 6.4). Spending a preschool year, variously shivering and sweating, exhausted and exhilarated, eating berries and eating snow—bred familial relations with nature.

My findings evidence how local climate, plant species and other situated facets influence the description of nature-kindergarten practices. Seasonal conditions brought not only learning *with* nature, but *surviving with* nature. Granted, as all three cases had central heating and double-glazing, while children wore technical clothing and food came from supermarkets a short drive away, hence, the verb ‘to survive’ is used loosely. By describing practices across the seasons, I have identified not only that nature’s affordances influence practice, but when human-held dispositions—for example, the vital importance to the Finns to acquire skills to endure their winters—shape relations with nature, and therefore what nature-kindergarten practices look like, by mediating the use of those affordances.

My findings show the mediating influence of adults are complex and shape relations with nature at nature kindergartens. Practitioner and parental control were found to influence the experience of the child participants. Overlapping, interlinking issues and tensions around the efficacy of, and accessibility to, experiences within nature-kindergarten practices drew attention to the complexity of the adult's role in the child's experience. Parental choice of nature kindergarten for their child's preschool year and their further involvement in everyday routines evidenced that practices were supported by parents. My study has shown the adult participants care about the natural environments that they work in, or send their children to, and they will help younger generations care for it too through facilitating the children's engagement with nature; albeit parental involvement took different forms in different countries, including, sharing a kill in Finland (Section 8.3) to helping with art activities (Section 6.5). Using existing literature, I outlined the two-fold role of nature-based practitioners as caregivers and conduits; my findings evidence their interplay of these two roles. The 'care-giving conduit' adult does not push but rather allows children to eat wild berries or touch the carcass of a dead deer. The adults value the child's engagement in such practices not only because they admit behaviours dominant in their socio-cultural environment, but also because they care and feel a duty to equip young children for later life, for example with resilience or *sisu* (Sections 2.4.2, 9.4) or with positive relations and attitudes towards our natural environments (Sections 8.5, 9.6, 9.9) that might shape future choices. Adult participants evidenced that they strove to preserve behaviours through engaging in socialised practices.

Finally, my findings show that while there is no norm that a fixed definition can be attached to, nature kindergarten share a common focus of connecting child

with nature. The *products* of nature-kindergarten practices may be different or resonant—relations with nature variously stem from eating berries, eating snow, catching a fish, blistering a finger or building a den—the *processes* are similar as evidenced by each case placing value on ‘quotidian everydayness’ (van Manen, 2013, p. 139) through season-round, outdoor days that ‘follow the ways of the world’ (Ingold, 2011, p. 216). I see a difference in product and outcome. My findings also evidence the product (the observed tangible, description) may be diverse, but the outcome (the hidden desires, values and beliefs behind the cases nature kindergartens) were closely aligned. The products look the way they do because they reflect formative contexts that include socio-cultural influences and nature’s affordances, but the outcome/the reasons ‘it works’ is because the adults want it to work and across each case, the commonly-held goal was childrens’ lifelong relations with the outdoors.

My study presents evidence to question not only any description of a ‘Nordic norm’ (Sections 1.2.4, 2.3.2)—as my research has shown that practices at the Finnish and Danish cases were distinctly dissimilar on a number of key aspects—but also presents evidence to support that there is no ‘nature-kindergarten norm’ either. I see the ‘norm’ is not practice based, but is the shared belief in the value of building relations with nature. My thesis tentatively suggests that a Community of Practice (Wenger, 1999) underlies the adults’ commitment that this form of ECE has as its basis, however, further work is recognised (see Section 10.4). The Finns, Danes and Scots in the nature-kindergarten ‘community’ under study wanted to preserve affinity with nature for future generations and, thus, each generated practices in accordance with that desire, but at a situated level as determined by what nature afforded them.

10.5 Evaluating my contributions to knowledge

In my title to Section 1.2.1 ‘What is in a name?’ I posited a thread that I have repeatedly returned to by asking ‘What is a nature kindergarten?’ It is against this questioning that I set out to investigate nature kindergartens and, hence, against which I evaluate my contribution to new knowledge. My findings yielded four contributions—three to the ECE and OL literatures and one methodological.

As a result of my three principal findings—and mindful of Katz’s *faux pas* (Section 10.1)—now is the time to ask myself ‘What do these findings add up to and tell me about the utility of nature environments?’, ‘What am I trying to say?’, ‘Does the evidence describe how nature-kindergarten practices manifest everyday?’ and ‘What shapes practice so that it looks this way?’ In response to Katz’s supervisors question, my four findings chapters yield three areas that can be considered a contribution to subject knowledge; my multicase study of three nature kindergartens add up to:

1. An empirical description of the common core that epitomises practice at one Danish, one Finnish and one Scottish nature kindergartens to confirm this form of ECE as distinctive through evidencing season-round, sustained relationships with nature environments in locally specific ways.
2. A deeper understanding of the reasons that influence nature-kindergarten practice to look the ways it does.
3. Evidence of how socialised practices and patterned behaviours (embedded in adults and emergent or developing in children) can play a constitutive, rather than solely causal, role in nature-kindergarten practices.

In addition, my findings comprise a methodological contribution (see Section 10.2.1). I saw an opportunity in the methods literature and any methodological advance in the field of nature-based ECE has to be considered valuable because barriers remain for this field in its rigour and quality (Humberstone, 1997). My observation protocol, as devised, is straightforward and has been used in subsequent work (Nugent, 2015a) as a lone researcher and with other researchers (Nugent et al., 2015). My study, therefore, also adds up to:

4. A sensory-ethnographic observation protocol, supported by interview, conversations and visual data, to record the dynamism of nature-based practice.

By describing practices, my study has reached a deeper understanding of what influences nature-kindergarten practices to look the way they do. My findings from three examples of nature kindergartens show that beyond the label or name ‘nature kindergarten’, we cannot place confidence in the description of nature-kindergarten practices without deeper investigation. What has served well the reflexive element of my thesis journey is my recognition that words, as colloquial phrases and as categorising labels and definitions, have different uses in different situations by different people and I return to this point below (Section 10.6). We must see nature-based ECE labelled ‘nature kindergarten’ as inclusive of various forms of practice. By taking the view that a description of what participants do at nature kindergarten is shaped by their social, as well as natural, environment is important for guiding us away from a ‘one-size-fits-all’ conceptualisation (Section 3.2.1) and towards a situated understanding. We know our relationships with nature emerge over time and are rooted in social and cultural experience (Clayton & Opatow, 2003); equally, as

Brookes (2002) stated in his critique of ‘universalist environmental education’ (p. 73) one need to know a place and community before we can be educated and educate others about it. I accept that ‘local knowledge is not monolithic’ (Brookes, 2002, p. 81), however, this does not obscure my view that nature-kindergarten practices, situated in time and place, need a singular conceptualisation. Forest School has been noted as an emerging field (Power, Cree & Knight, 2015), however, with taking a situated perspective with my examples of nature kindergarten, each example is emergent, in its own context.

My study makes a contribution to methodological knowledge. I devised a sensory-ethnographic observational protocol to use in my research. And in doing so, responded to Law and Urry’s (2005) call for social scientists to develop methods responsive to difference, change and the sensory. I developed the observation protocol to systematically capture what comprises nature-kindergarten practices, day-to-day to reach a description to satisfy RQ1 and make a contribution to new knowledge. It was not surprising that the context of my study—as viewed through a social constructionist mindset that encouraged sensitivity to the richness of relationships and experiences (Gergen, 1985; Gergen & Gergen, 2003)—led to a new observation protocol. My protocol emphasised a holistic capture of participant interaction with the natural and social environments where their nature kindergarten are located that strengthens the researcher’s position compared to what could have been achieved through a target child (Sylva et al., 2003) or event sampling approaches (Rolfe, 2001). The ability to look at practice and record situational responses to what participants experienced helped my analysis to tease out ‘diverse ways of knowing, distinguishable sets of meanings, separate realities’ (Crotty, 1998, p. 64). My study design—of which my the observation protocol formed a part—was epistemologically

significant in that I made sense of the three different groups by recording ‘the way things [were]’ (Crotty, 1998, p. 64) thus avoiding tendency to overgeneralise nature-kindergarten practices.

10.6 My empirical and practical implications for practice

My findings yield two implications for practice: one empirical and one practice related. The aim of my study was to address the lack of knowledge on what nature-kindergarten participants do day-to-day. I have done so by looking between three examples of nature kindergarten case-by-case, season-by-season. Accordingly, the practical implication of my study is that it provides empirical evidence of day-to-day practices. Such descriptive evidence is important for understanding that there are nuances in the social, cultural and physical environments that influence what nature-kindergarten practices look like. A label or name is merely that, and without understanding deeper layers, we are misguided in placing confidence in the label ‘nature kindergarten’ that speaks of ‘nature’, yet overlooks situated relations and local facets that hallmark the ways these environments are used. Recounting season-round practices will inform policy makers what nature kindergartens actually do and authors of policy documents, for example, could better understand that practitioners may interpret such directives in locally-relevant ways. The second implication of my study is that, for adult practitioners, there is worth in observing other practitioners outwith their own norms.

10.7 Conceptual framework: a review

As shown in Chapter 3, a bespoke, conceptual framework was built to suit this study. As a basis for my conceptual framework, I required methodologies and theoretical framings that would consider nuances in social, cultural and physical

environments. I have used Bourdieu's concept of habitus in unison with Heft's version of affordance theory to support a multi-layered understanding of the constitution of nature-kindergarten practice.

A conceptualisation of nature-kindergarten practice as socio-culturally constituted practice has been enhanced by a Bourdieusian reading as it allowed my thesis to account for subtle, hidden dimensions. Thus, in analysis, I may posit why comparable natural environments when used for nature-based ECE practice are evaluated similarly or differently by participants. Marrying habitus with affordance theory (Section 3.3.2) helped me to see practice as routine behaviours patterned by social and natural environments. For example, in extreme weather, I got the feeling, that this was not only what has to be done, but more than that, I considered practice as what has to be *done for a reason*; these reasons being for the good of the natural environment and the good of the children who live with it.

Our shifting yet evolutionary relationships with nature are not only a part of our history but an enduring, human need and necessary condition. It is the form our relationships with nature take where my study has evidenced difference and commonalities. Grix and McKibben (2016) explain how:

Philosophers have mostly made reference to ends like survival and harm avoidance. The continued existence of a human being is a precondition for living well, as is the avoidance of harm—but neither of these captures the full sense of the word. While human beings need things like very basic nourishment to survive and avoid (serious) harm, they need significantly more than that to actually live *well*. (p. 292)

Living and developing ‘well’ includes sufficient conditions to feed passions that we have, do what excites us and feels fulfilling. The main aim of my study was to better understand nature-kindergarten practices and to examine the influences that shape such practice. As my research progressed, however, my focus shifted somewhat—perhaps not surprisingly, given the characteristics of an ethnographic approach within a social constructionist paradigm—and, with hindsight, I feel my thesis has benefitted for the, longer than anticipated, journey.

Of particular interest to my inquiry was the means by which different societies enacted relationships with nature through ECE. Seeing ‘situationality’ (Stake, 2006, p. 83), therefore, was vital for me, not only for a social constructionist viewpoint that takes account of local factors, but for allowing my description of nature kindergartens to be customised to unpredictable, ephemeral contexts and tailored to excite individuals to live well, develop well *and* thrive in modern times, including living sustainably. I acknowledge that ECE is differently organised in the four countries that comprise the UK and separate regulations and government are applied across the union. While my thesis included one Scottish example of nature kindergarten, its findings are relevant in considering the settings elsewhere in the UK to support positive relations with nature during early childhood.

Recognition is paltry in terms of seeing Stake’s ‘situationality’ (2006, p. 6) or Bourdieu’s ‘specificity’ (1993, p. 271). To define nature-based ECE exclusively in terms of its utility is narrow and overlooks subjectivity. In his later work, Bourdieu criticised utilitarianism for its rejection of relations as well as the influence of real world and past experiences in our social worlds (Susen & Turner, 2013), whereas my epistemology insists on the value of relationships (Gergen & Gergen, 2003). Any utilitarian view of education misses those elements of an individual’s beliefs and

character that form through their developmental experiences in different, situated environments; indeed, discussion of nature-based ECE exclusively in terms of its outcomes, while overlooking ‘situationality’ (Stake, 2006, p. 83), is no exception.

My use of ‘*with*’ nature, as mentioned above (in this and other work), is significant as it serves to highlight our human dependency on our natural environment. I believe that by spending time in three forests in three countries with three groups of nature-kindergarten participants has enriched my understanding of this form of ECE in a way that helped my study be informed by ‘cultural uniqueness’ (Broadfoot, 2000a, p. 234) in unison with human dependency with nature. I have generated a discourse that gives explicit regard to the needs that we cannot live without, but also focuses attention on ways we live with nature and the things the next generation ought not to have to live without in our great outdoors.

10.8 Unanswered questions and areas for further investigation

There are unresolved issues that my thesis has inevitably opened up and allied to these, are opportunities for further research which could be conducted in three possible directions. The opportunities centre upon further enriching our understanding of aspects of nature-kindergarten contexts and practices by widening the research. The three issues and directions I see are: first, adult dispositions and opinions of the wider community, including parents, are worthy of further scrutiny; second, it is timely to ask what happens beyond the preschool year by researching nature-kindergarten children as they transition to school; and finally, further investigation needs to widen its geographical coverage.

First, my thesis has not fully explored parental opinions. At each case, I came to recognise adult practitioners at nature kindergartens as distinct in themselves; the

literature hints at this view and my study's findings support it. Actually being there with these practitioners was to observe a deep strength of feeling and commitment to child–nature connections. For example, these are physical and tiring posts. My research has shown practitioners' own beliefs in nature's benefit to children are at the heart of what these professionals do every day and was a significant motivator. These adults helped to contribute, in their own ways, to providing access to environments for these preschool children (and for me) that made it possible and pleasurable to be there. I met and spoke to only a handful of parents, yet again, strong support for nature kindergarten was clear. Nature-kindergarten parents went the 'extra mile', literally; for example, one Scottish family commuted 16 miles daily to nature kindergarten. In addition, parents absorbed the cost of extra clothing and laundering it each day. Recognising a commitment to human–nature relations helped me to more deeply understand why adult participants do what they do when other ECE provisions are available.

My inquiry was never going to be about persuading parents or tempting teachers to use the outdoors, nor pit outdoor provision against indoor forms of ECE. Sending children to nature kindergarten for their preschool year is a choice; alternative ECE provisions were available at each case. I have shown, therefore, that nature kindergarten is a conscious alternative to more conventional forms of ECE. Nature kindergarten is a choice made by parents, possibly as members of a nature-based community, whereby their child's preschool is based outdoors. By seeing human relationships *with* nature, my work has highlighted one possible step towards building human–nature relations through a shared belief in the value of nature. Conduit adults can facilitate and/or control access to nature's affordances for children, but more than that, they can contribute to transmission of an environmental ethic in

that pro-nature adults work tirelessly to get their strength of feelings across in order that others within the community love and connect with nature too. What happens, however, after the child's preschool year has not been empirically explored. Such research could benefit from a conceptualisation of nature-kindergarten practice using Lave and Wenger's (1991) 'Communities of Practice' approach; in particular, how direct experience, interactions and relationships with nature reflect the socialised ways of the communities in which they are situated (Lave & Wenger, 1991; Rogoff, 1990; Wertsch, 1985). Situated theory emphasises the importance of interaction with a community of practice (Lave & Wenger, 1991) to extend Vygotskian ideas of scaffolding beyond the individual to focus on larger groups (Hogan, 2002). Taking a view of cognition as situated would be useful as it sees participants gain in competency within generative social practices. Equally, situated thinking recognises how newcomers to the community adopt socialised ways (Lave & Wenger, 1991). Situated theory emphasises looking at practice as sharing in social and cultural activities over time, whereby practices normally occur as a function of the activity, context and culture in which they are embedded (Lave & Wenger, 1991). Mediated action is used by Graue and Walsh (1995) to express how meaning and intentions bind individuals with their communities and has ontological relevance in that such an understanding of knowledge would grant the opportunity to consider what might influence nature-based practices.

That one is 'reliably participating in a communal custom' (Rietveld, 2008) is what matters to Wittgenstein's (1953) notion of normativity. Brown's (2009) position, however, on situated understanding would be that practices can be contrived and formulaic when we, outsiders, seek 'meaning beyond the immediate context' (p.1). A situated perspective has value for my study not only to consider the context of

practice, but also for investigating how nature-kindergarten practice is shaped by socio-cultural influences. I feel a situated perspective heightens the importance of the ‘hidden layers’ or complexities around which experiences with nature are informed and enacted to allow for a discussion of the ways practice is constructed in relation to customary ways of behaving. Indeed, the findings and the conclusions I draw from my research are the situated understanding of ‘an insider outdoors, an outsider outdoors’ (Section 1.4). As a former teacher of outdoor education turned mother and researcher for whom this process—the packaging of my thesis for its relevant academic audience—is framed by my hope that this and future research can be used to contribute to advancing nature-based ECE.

A second opportunity for further research, therefore, is to extend the data set into a longitudinal piece of work that explores child participants after their transition to school. The preschool children in my study have spent September to June—one academic year—at nature kindergartens, where their days have been spent as described above, yet after the summer holidays, each child will have entered formal schooling. A longitudinal picture would contribute to our understanding of the effects of a preschool year at nature kindergartens. Mari, at the Finnish case, has pursued this line of questioning by tracing children who attended the Finnish case between 2005 and 2011 and has asked the parents of her ‘graduates’ about their child’s transition to primary school and her evaluation shows some interesting findings (Suomela & Parikka-Nihti, 2014). In Denmark, Hartmeyer and Mygind (in press) report the impact of *udeskole* upon a group of primary school children and their teachers and focuses specifically on the impact of nature-school participation on social relations after

leaving school. Clearly, longer-term and lifelong impacts are important interests and further insights could be worthwhile.

My third suggestion for further research stems from unanswered questions regarding nature kindergarten's continued development around the world. I have shown nature-kindergarten practices to be situated in socio-cultural environments, climates and seasons where each plays a role in the shaping of evidence and each is inextricably entwined. We all live in different ways and my understanding of nature kindergarten's 'distinctness' and 'uniqueness' is limited when one considers the breadth of offer country by country, environment by environment, example by example.

Given that contemporary opinion is shifting in regard to 'that Scandinavian thing' or a 'Nordic norm' and building upon what has already been developed in my thesis, our knowledge would benefit from comparisons beyond the Nordic region and beyond a northern European focus. Other countries of mainland Europe, for example, the Czech Republic (see Section 1.2.5), are encouraging provision of nature kindergartens. Equally, in Australasia where nature kindergartens are often known as 'bush kindy', provisions are increasingly sought after (Buchan, 2015). However, as mentioned in my opening chapter (Section 1.2.1) each warrant their own situated understandings. My research has raised awareness of what provision might look like in other countries; however, research needs to continue to dig deeper until a fuller understanding is achieved.

10.8 'A fish in water' and a fish out of water: my reflexive turn

Bourdieu's thinking has served my thesis well. His notion of habitus was the key mechanism for recognising and understanding difference and commonalities

pertinent to a multicase study of nature kindergartens. The dispositions and values that form my own habitus have influenced and, indeed, been affected by looking at my specialist field. I have addressed the need to balance my stances as researcher, as insider, as outsider (Section 1.4) by reflexively considering my own contribution including subjective interpretations that I brought to my study.

My ‘looking between’ involved moving away from the familiar. A salient point is made by Atkinson and Delamont (2006), who call upon qualitative researchers to move away from familiar contexts as, amongst other reasons, this is likely to enhance one’s observational expertise. In other words, one looks closer at that which is novel. Bourdieu (1989) stated:

When habitus encounters a social world of which it is the product, it finds itself “as a fish in water”, it does not feel the weight of the water and takes the world about itself for granted. (p. 43)

Bourdieu’s ‘fish in water’ metaphor helped me to act, albeit as an ‘insider outdoors or outsider outdoors’ (see Section 1.4), by encouraging me to look closer at the novel and the familiar. Rather than being fearful of new discoveries or variations from my own ‘norms’, the ‘novel’ deepened my understanding of each setting (see Emerson, Fretz & Shaw, 1995). Bourdieu returned to his ‘fish in water’ metaphor in later work (Bourdieu & Wacquant, 1992), and I found it useful in thinking reflexively about my experiences at the different settings. At the two Nordic settings, my being outdoors in a social and cultural world other than my own reversed, for me, Bourdieu’s metaphor. The times that I felt surprise at what I observed, heard, smelt, tasted and touched, the more I felt akin to a fish *out* of water.

For the Scottish case, my position could be seen as an insider. Having worked and studied in Scotland and the UK, I felt like an insider both in the knowledge held, 'norms' adhered to, my understanding of ECE curricula and language spoken. My mother tongue meant that there was a temptation to 'participate' in the investigation at that setting, which differentiated my researcher position at both the Danish and Finnish cases, where nationality, culture, language and 'guest' status marked me as an outsider. The subtle, yet tangible, distance, whether real or illusory, pleasingly gave me space to take a step back from what I saw, heard, smelt, touched and tasted to reflect on differences and commonalities.

Emerson, Shaw and Fretz (1995) talk of how researchers may judge others, 'for better or worse, by their own rather than others' standards and values', then go on to warn that 'Prejudging incidents in outsiders' terms makes it difficult to cultivate empathic understanding and to discover what import local people give to them' (p. 27). I was no critic and my research was no probe into right and wrong.

Researching in an ethnographic tradition meant I had to interpret meanings behind the actions and words of others, words required translation and awareness that actions may be misread was key. That is, I may get it wrong. We are always in danger of being ethnocentric, of making sense of the world by relating it to what we already know and believe, and while there was an awareness of this tendency to right or wrong, Ingold's (2011) advice to prioritise process over outcome attuned me to participants' understandings of their worlds. In other words, without being prejudiced by the literature, my research was to stay alert to the likelihood that nationalities other than my own may 'do' nature kindergarten in contrasting ways for different reasons. From the outsider stance, my belief was that it was easier to identify difference and resonance by taking time and a step back to consider what I was learning. Data

collection was lengthy, yet in the time between visits, between collecting my manageable chunks (Section 5.5) of data, there was space for reflection and introspectiveness to look within myself and understand how I felt about participating in this research and how such steps could enrich the data.

My thesis was an exercise in self-awareness. What was vital as interpretations progressed was seeing each nature kindergarten's practice in relation to those participants' own, rather my own, subjective understanding. Through such self-awareness, researching practices could be done within a conceptual framework that helped me to understand practices in their broadest terms. From this position, it was easier to accept such practice as socio-culturally constituted behaviours. My bespoke conceptual framework and a reliance on my social constructionist perspectives helped my investigation acknowledge the dual perspectives of humans and nature in ways that may well have remained buried had a more limiting perspective been used. Particularly at the Danish and Finnish cases, I could better appreciate those practices that were different to my own dispositions rather than attempt to understand the patterns of an institution to which I did not belong. What became clearly apparent was that the Danes, Finns and Scots participants' emotional attachment to their local nature was akin to them being fishes in water; they were in a place that 'just felt right'. I return to Bourdieu's metaphor because the meaning I take from it is how it expresses what I believe about how humans' relatedness with natural environments relies on their lifelong respect for humans interacting with natural environments but each 'nature kindergarten' is embedded within its social and cultural environments. My belief is based on personal experience and through my interpretation of examples I found it possible to interpret season round, everyday activities that were observed

and try to bring a sense of personal meaning to their contribution to nature relatedness.

Nature kindergartens were an attractive subject to an outdoor enthusiast with a young, lively family into whom I wanted to instil my love of the outdoors. Yet, being asked to question my own relationship with nature-based ECE practice was tough and, at times, I struggled with the fragile sense of self it brought. In Chapter 1, I mention the Eyjafjallajökull ash cloud (Section 1.2.2). On reflection, being caught in Finland and unable to get home because of an extreme natural occurrence was an exercise in thinking deeply about my human position on earth and relationship with nature. The habitus of the adult, be they practitioner, parent, policymaker (Section 2.3.3) or researcher, will shape what he or she does, just as my thesis and the experiences throughout it have shaped me.

I want the reader to place confidence in my findings and hope that others might use my contribution to knowledge to further related lines of questioning. In critically assessing, therefore, my involvement in the process I was quick to respond to aspects that were a result of any bias and not truly a part of the social world I had experienced. What I was seeing, hearing, smelling, tasting and touching was routine to my research participants in their situations, yet not always routine for me. The purpose of my participation and corporal sharing in those situations was in order to scribe a productive account of them, whether they were extraordinary, novel, exotic or familiarly strange to me. The success of my resultant narrative depended upon whether my tales were believable for the reader. I spent time with the participants in order that we could reflect together on shared events. Further, our shared time encouraged me to develop my own voice and use writing as a part of my process of discovery. I am confident that such discovery is reflected throughout my thesis

journey and that my findings chapters do justice to the rich data as a mode of ‘telling’ and way of ‘knowing’ (see Richardson, 2000).

The advice from my reviewers (Section 1.4) to be reflexive about my research processes positioned me well in identifying differences and commonalities in the experiences of others between cases. My research design admitted reflexive thought by building reflexive thought throughout my descriptive narrative in response to questions of ‘how’ ‘why’ and ‘what’ during my data analysis. My being a part of the nature-based ECE community that I was researching helped in interpreting ‘how’ ‘why’ and ‘what’ participants were doing across the three cases as it raised my self-awareness to capture others’ perspectives. Equally, my seasonal visits created dedicated times at each setting and between visits in which to reflect. At the same time, however, I accept there is a limit to my reflexivity. A full understanding of what has shaped my research and, thus, the relevance of my claims may only become apparent as I move on, personally and professionally.

10.10 ‘Necessity by nature is the same, no matter how or by whom it be sought’⁸⁶

I close Chapter 10 by summarising my thesis journey that has described and interpreted the enactment of practices at three nature kindergartens over a 16-month period. At this point, my investigation can begin to think about the world it wants to help to make. My hope is that the value of quotidian nature to is recognised. Childhood relations with quotidian nature can contribute to meaningful relationships that impress experiences with emotions about the ecology of the natural environments we share, appropriate to local contexts.

⁸⁶ W. H. Auden, ‘The Quest’.

My first research question aimed to build a descriptive account of how participants at the three examples of nature kindergartens, across the seasons, spent their days, and my research has made it clear that while nature-kindergarten practices share differences and commonalities, each are socially and culturally constituted. The Danes were keen to expose children to ‘life is not Disney’; the Finns strove to make a powerful normative appeal to living with climatic extremes; and the Scots, while not displaying the same overriding need to truly know nature through educating how to deal with it and, hence, survive it, nevertheless strove in their own locally-specific ways to embed child–nature relations. My evidence indicates that each nature kindergarten represents a socio-cultural construction that, when one looks between examples, yield nature-based ECE practices that are unique and locally relevant. As such, what I found in my time at the three examples of nature kindergartens implies that each community is unique. Nature kindergarten is distinct to other forms of ECE but also, all nature kindergartens are distinct in relation to each other. For my study, using Bourdieu’s concept of habitus while being aware of elements that it lacks—for example, his focus on socialised norms guiding actions—made use of subtleties in Bourdieu’s thinking to alert me to the socio-cultural dynamics beneath a surface that is frequently described in romanticised terms. Nature kindergarten practices defined by context may be understood through Bourdieu’s sociological lens as situated practitioners act in response to deeply ingrained and diverse inheritances while taking full advantage of opportunities and constraints in their present situations.

There are limitations in my conclusions and, therefore, generalisations should proceed with caution. While I have robust grounds to speculate on other examples of nature-based practice, multiple realities and ways of knowing need a singular conceptualisation. For example, participants in my study appeared to muster

collective security in their belief in the importance of child–nature connections. Beliefs in a ‘commonly shared focal point’, namely, that child–nature relationships are beneficial and to be encouraged, are maintained by attending or working at ECE institutions that are intensely focused on human–nature connection. Adult members of any such nature-based ECE community may strive towards building lifelong loves of natural, outdoor environments using, for example, fantasy and folklore (Sections 2.4.4, 9.3) and activities on the edge (Sections 2.2.4, 8.2). However, as adult members subjectively value local, quotidian wonderment, local institutions such as nature kindergartens can provide for that, yet to generalise would be misguided absent further investigation. I have looked between three examples of nature kindergartens and now know that nature-kindergarten practices are profoundly influenced by situation. My study—in empirically evidencing direct, intimate experience with natural environments—is important to acknowledging our human place in them. My research makes a contribution to understanding what actually happens every day beneath the ‘nature kindergarten’ label and in doing so, recognises that our relationships with nature carry meanings that might make a difference. Ample evidence, beyond the scope of my study, tells us of the extent of environmental issues and the significance of living in sustainable communities. I boldly generalise that nature-based ECE communities are ones that engage in social and cultural practices that do not diminish the prospects of future generations through recognising that human disconnection with nature is one facet in our global crisis. Arne Næss coined ecology to be ‘deep’ by recognising an interconnectedness and intrinsic value of all living beings in a ‘web of life’ (Capra, 1999, p. 6). Nature kindergartens practise in ways that see the intrinsic value of living *with* nature. If we can offer children deep, yet simple, ecological experiences of being part of the ‘web of life’ (Capra, 1999 p. 6)

through the ‘quotidian everydayness’ (van Manen, 2013, p. 139) of the mud, rain, snow and the like, then they ‘*will* (as opposed to *should*) be inclined to care for all of living nature’ (Capra, 1999, p. 12). Nature kindergartens comprise an educational ‘community’ that is well placed to embed relations with nature during early childhood through direct, first-hand experience of the elements, plants and animals.

The words of others have threaded throughout my thesis, for example, philosophers, experts in the ECE and OL fields, poetic extracts and the words of nature-kindergartens participants have all helped build my account and I return to a nature writer to close. Macfarlane (2015b) writes:

Smeuse is an English dialect noun for ‘the gap in the base of a hedge made by the regular passage of a small animal’; now I know the word *smeuse*, I notice these signs of creaturely commute more often. (para 8).

Borrowing from Macfarlane, now I know the word *sisu* (Section 9.4), and now I know the phrase *is I maven* (Section 2.2.4), I am drawn to notice examples of them during my own practice. I also, however, recognise ‘situationality’ (Stake, 2006 p. 83) and ‘specificity’ (Bourdieu, 1993, p. 271) when these words are used in contexts outwith their origin. My hope is that for the children in my thesis, these words and phrases and the experiences they label (and more besides) hold lasting meaning for them too.

At the bleakest points in my thesis journey, I headed outdoors. I found breathing space in the Pentland and Eildon Hills, the forests of Galloway and the Scottish Borders and the beaches of the Mersey estuary. Fresher air, berry-stained fingers and other sensations all served to clear my thoughts and to restore my belief

not only in my thesis journey but also in my reasons for it. I love being outdoors; I have loved our great outdoors since my early childhood and want to help the next generation to love it too. We may all have the same biological needs—air, water, food and shelter—that extend across national boundaries. We may all have further needs in order to thrive, including love and enjoyment in what we believe in. We may well all have, by nature, the same necessities yet the ways in which they are sought and satiated are as rich and diverse as the worlds that have been studied herein. My study affirms the importance of the adult conduit's values and passionate beliefs in outdoor nature environments. In my view, the most essential thing is that children experience nature in all its 'ecstatic quotidianness'—the sights, sounds, smells, tastes and feel of it—and pass it on:

Uta på tur (Let's go out!).

I am off out, to 'walk *into* the pages of Shepherd's *The Living Mountain*' (Macfarlane, 2015b, para 10), and I am taking our two boys along.

Appendix A: The Danish Case

The Danish case was a state-owned kindergarten established in 1997. It is located in the south east of the Jutland peninsula of the town of Billund (population 53,000). In total, the kindergarten provides daily care for 38 children aged between three and six years old, from 6.30 a.m to 4.45 p.m. Monday to Thursday, and 6.30am to 4.00pm on Fridays. Within this, the focal group comprised 14 preschool children who had an average age of 5.4 years. Children were dropped off at the kindergarten between 6.30 and 8.00 a.m., depending on parents' requirements. Children ate breakfast, usually cereal, on arrival and then played freely or gathered for an 'assembly' type meeting before getting ready to go outside at around 9.30 a.m.

Two full-time pedagogues (Henrik and Hanne Lise) were with the group each day. On my winter visit, two trainee pedagogues (Morten and Dorethe) on placement from a nearby university were also present. The kindergarten has an auxillary staff of four, who cook and clean. The main kindergarten building was a modern, purpose-built, single-storey property. The nature-kindergarten group are one age group amongst four other groups that use this inside space comprising an open-plan central kitchen and eating area plus additional classrooms, changing facilities and offices. The building sits in a disused quarry site which affords the kindergarten an extensive, 'amphitheatre'-style garden space with a disused wooden boat intended for play, a man-made sandpit, a big swing (Photograph 39) and various sheds.



Photograph 39: The big, garden swing

The wider garden area comprises a coniferous plantation (approximately 15 years old), grassy slopes and a wooded area of birch and beech. This area extends to one acre beyond the upper level of the amphitheatre and children move freely between these areas. There is a perimeter fence and a locked gate at the exit on to the road. The structure of each day follows a routine. The focal group depart the kindergarten each morning around 9.00–9.30 a.m., and on occasion in the afternoons, and walk to make use of a public forest an 800-metre walk from the main kindergarten along a quiet road.



Photograph 40: Walking to the forest in winter

A stream dissects one corner of the large forest site (Photograph 41).



Photograph 41: Danish children at their forest stream

The group has the use of several semi-permanent, tarpaulin covered shelters and two separate fire sites and there are no built toileting facilities in the forest. The group followed the nationally devised curriculum adjusted to suit the communal values in agreement between the setting and the parents. The national curriculum was a guide offering six themes, two of which were focused upon each semester.

The Finnish Case

The Finnish case, which opened in 1995, was located in a residential suburb of Hameenlinna, which is a large town in southern Finland (population 68,000) forming part of a large, state-owned kindergarten that provides care for 65 children aged 2 two to seven years between 8.00 a.m. and 3.30 p.m. The case operates within the larger institution as a separate nature kindergarten for 15 children in their preschool year with an average age of six-years-old.

Two full-time pedagogues are with the group each day (Mari and Joonas).

The main building (Photograph 42) has a kitchen, an open-plan dining area, a gymnasium, changing facilities, toilets, classrooms, offices and a staffroom, all inside a single-storey construction.



Photograph 42: The main kindergarten building and fenced yard viewed from the stand of birch to the yard's western edge.

The nature-kindergarten group are one age group amongst five groups that use this space. The nature-kindergarten group use these indoor facilities for parts of some days, notably, the dining area for breakfast, and the changing areas and toilets before heading out to the forest. Auxillary staff members clean the building and cater for breakfast, lunches and snacks each day. The garden or yard area at the kindergarten comprises gravel and rock of approximately two acres with a small stand of mature silver birch trees along one side. The garden yard has two large sandpits, swings, climbing apparatus and a permanent wooden shelter and is enclosed by a fence with one exit to the road and one exit (Photographs 43) to a public path, that leads directly to the forest, approximately 500 metres away.



Photograph 43: In spring, the Finnish participants assemble at the gate before their walk to the forest

Each morning the group assembles at the main building, eat breakfast around 8.00 a.m., then change and move briefly to the garden area before walking to the forest. The forest is a hilly site of around four acres with predominantly silver birch and coniferous trees and is bounded by residential streets on two sides, a stream to its south side and cultivated fields to the west. There is no boundary fence. There is a permanent wooden hut called a *laavu* which inside has a large central fireplace and bench-like seating covered in animal skins, woollen and fleece blankets (Photograph 44).



Photograph 44: Interior of the laavu at the Finnish case

There is a composting toilet block and a padlocked log store. This case routinely uses a large lake five kilometres away to fish, swim and canoe.

The Scottish Case

Established in 2007, the Scottish case was a privately owned nature kindergarten in a rural area between Crieff (population 7,500) and Perth (population 43,500) in the region of Perth and Kinross, Scotland. It provides for 15 children who attend between 9.30 a.m and 3.30 p.m. While the children are aged 3–5½-years-old and are in one mixed-age group, a focal group of nine children all in their preschool year were recorded. There were two full-time (Steve and Dan) practitioners at the setting, both of whom had trained in outdoor education. There were no auxiliary staff at this case setting and children provided their own packed lunch.

The nature kindergarten is part of a large, private estate and comprises a small lodge building of stone construction just inside the front gates of the estate's perimeter wall. The nature-kindergarten group were the only group to use this building, known as 'The Gatehouse' (Photograph 45) by participants. This indoor space has four playrooms, a very small galley kitchen and one bathroom that is shared by adults and children, comprising two toilets and a hand basin. Through the back door off the kitchen is an outdoor, partially covered, changing area with coat hooks. There is one mains toilet in this outside area. There is a fenced predominantly lawned garden adjacent to the main building that has a small, man-made pond, large sandpit (Photograph 46), willow constructions, fruit trees and vegetable plot. At the start of the data collection, the garden included a semi-permanent geodome with a wood-burning stove, however, this structure was storm damaged and soon removed.



Photograph 45 and 46: The Gatehouse and its sandpit and garden area at the Scottish case

The group used the garden daily for up to three hours. Beyond the garden, the site extends to an area (approximately nine acres) of mixed woodland (Photograph 46), a small loch and one of its tributary streams (Photograph 47) that forms a natural boundary to the site's western edge. The entire site is relatively flat and there are no steep inclines.



Photograph 46: A part of the woodland beyond the garden area showing its proximity to the garden and gatehouse in the background.



Photograph 47: The tributary to the loch

There were two further buildings at the setting. The first, built along the western boundary of the garden, was a semi-outdoor kitchen called the ‘Kinder Kitchen’ (Photograph 48) with mains electricity and a water supply. This building was used for some mealtimes, activities, and as a gathering space. The second

structure, 'The Roundhouse' (Photograph 49) was a green timber framed shelter built in the woods approximately 750 metres from the main building. It served as a shelter and had a pit for an open fire in the centre.



Photograph 48: Inside the Kinder Kitchen at the Scottish case



Photograph 49: The Roundhouse at the Scottish Case

Appendix B

Observation Scan

Date: **Time (Start/End):** **DC identifier:**

Group Size: **Members of group:** **Adults present:**

Weather:

Notes:

Time of observation: Changes in weather/other conditions: Photo/Flip log:	Observation record:
Time of observation: Changes in weather/other conditions: Photo/Flip log:	Observation record:
Time of observation: Changes in weather/other conditions: Photo/Flip log:	Observation record:
Time of observation: Changes in weather/other conditions: Photo/Flip log:	Observation record:
Time of observation: Changes in weather/other conditions: Photo/Flip log:	Observation record:
Time of observation: Changes in weather/other conditions: Photo/Flip log:	Observation record:

Appendix C

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