

Movement, meaning and affect: the stuff childhood literacies are made of

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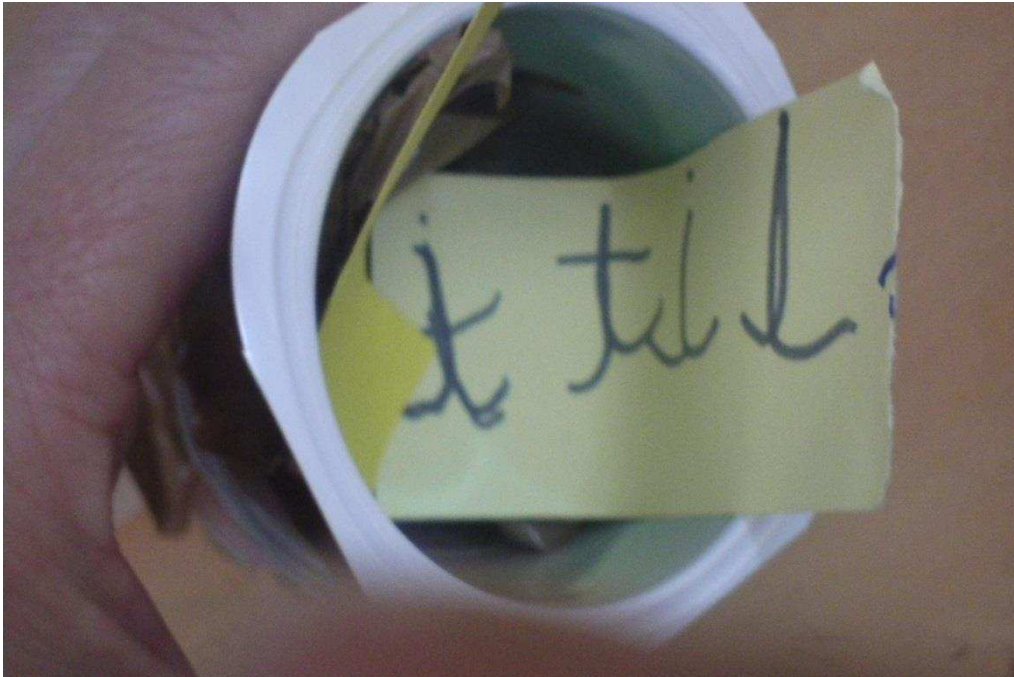
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**Movement, meaning and affect: The stuff childhood
literacies are made of**



Karen Dianne Daniels

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for the Doctorate in Education

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Dedications

I would like to thank my friends and colleagues, past and present, who live out positive visions for the world through the work that they do. I could not have done this work without you.

I would like to thank my two doctoral supervisors, Professor Cathy Burnett and Professor Guy Merchant. They have been the very best of teachers and their unwavering support, guidance, advice, encouragement and endless patience has been invaluable.

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I want to thank my parents, Doreen and David Harris, who have always taken such good care of me and taught me from an early age to ask questions and value education. I thank Stuart for believing in me and being my friend.

Last but certainly not least, I dedicate this work to my two daughters, Carly and Catherine. I acknowledge to you both that this really is 'Your Song'.

Abstract

This thesis emanates from an ethnographically informed study involving a close examination of the multiple ways that meaning making emerges in children's ongoing, self-initiated activity. I adopt a poststructuralist frame which provides conceptual tools of emergence, movement and affect and pay attention to activity that spontaneously arose across children. I present a detailed description of the significance of movement in young children's meaning making that involves the re-shaping, re-imagining and repurposing of materials and classroom areas. Movements are seen as integral to children's symbolic meaning making and the kinds of practices that emerge.

I make four contributions to knowledge through presenting new insights into movement during the process of meaning making in one Early Years settings as follows. I have shown the way children's interest played out in their movement and identified three prevalent interest/ movement formations. I have underlined the importance of movement by illustrating the ways in which movement is deeply implicated within material arrangements of the classroom. I have suggested that the quality or dynamics of movement are related to affective atmospheres. Through juxtaposing movement, materials and classrooms, I have generated a conceptual framework for analysing the way in which agency is distributed across children's moving bodies, the classroom, and its materials.

My account of children's activity has implications for the way that teachers might work to:

- see literacy as a collective endeavour deeply implicated with available materials
- be open to diverse pathways to literacy learning
- acknowledge literacy development as a non-linear trajectory
- take account of children's spontaneous exploratory movement in classrooms
- take account of the way that movement contributes to the affective atmospheres in classrooms
- offer children opportunity for spontaneous exploration of meanings, real and imagined, so allowing diverse child-generated sites for participation
- forge broader understanding of the relationship between literacy and play

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Chapter 1

Introduction

1.1 A personal introduction and some professional concerns

Ten years' experience as an Early Years teacher observing children on their journey to becoming literate was a very powerful experience. During my teaching career in school I was viewed as a successful teacher of early literacy. As English Co-ordinator I led developments in literacy provision in the school in which I was based and as an early years outreach teacher and lead teacher I worked for a local authority supporting settings with their literacy provision. During this time my reflections often focused on the minority of children who found acquiring the literacy taught in school challenging and my attention increasingly turned as to why this might be. Experience of working in school also seemed to indicate that the child who did not make good progress at this early stage very often continued in this pattern and was soon viewed in the school system as 'underachieving'. This was reflected in the way he or she did not make the progress as defined by the Early Learning Goals, and later in their school career, what were held for many years as indicators of success, the National Curriculum level descriptors. More recently, since the newly revised *English Programmes of Study: Key Stages 1 and 2* (Department for Education, 2013), a series of testing requirements have been introduced which include statutory assessments in Reading and Writing at the end of each primary Key Stage (see Standards and Teaching Agency, 2016a) . High stakes testing linked to school accountability processes sends powerful messages to teachers and thus has the potential to radically shape pedagogical practices (Moss, 2016). Literacy pedagogy and its related practices in turn shape children's understandings of what

literacy is, what it is for and who it is for (See Levy, 2011). How we conceptualise literacy in national policy can have significant influence on how it is experienced by children.

1.2 Thinking with theory and looking through lenses

The concerns stated above are used to mark a starting point of this thesis. The fact of the matter is that I wanted to go back to school and look again at what was going on, with fresh eyes and to look more closely at something that had always fascinated me. Suspecting that official discourses around literacy development were somehow only a part of the story, I wanted to investigate what else was taking place as a class of children took part in provision during the first year of formal schooling. In order to look again, I undertook an ethnographically informed research study which involved observing children's self-initiated activity in an early years setting. I observed their activity closely and talked to them, looking at and thinking about what was engaging them. I observed what appeared to be prompting their interests and described what being there with them looked like as it took place moment-by-moment. I collected field notes, photographs and film footage, which I was able to return to in order to carry out fine-grained analysis of children's movement and activity moment-by-moment as they interacted with the classroom, its materials and each other.

My study has been a story of looking through a range of different lenses, thinking with theory and recognising that this is all we can ever do, but that each lens offers something different and inevitably produces a different kind of knowing and a different way of explaining the world we experience. What the researcher chooses to focus on shapes what is seen, the ways we understand the world and to what we

attach significance (Law, 2004). With this in mind, where this thesis starts, where it leads, how it finishes, and its significance eluded me for quite some time. In this thesis my experience is given a linear existence, as a logical sequence of thinking, and theorising and other such events and processes associated with the discipline of empirical research. In one sense this makes it a misrepresentation of what happened, or more to the point how *I experienced* what happened. Looked at in another way, such an admission I hope, reflects the level of critical engagement and reflexivity of the research process.

1.3 It is just about what children do

Throughout this study I have constantly questioned the value of the data I have collected, often dismissing it as '*just what children do*', easily recognisable, strikingly commonplace, as familiar as the 'back of my hand'. Now I have come to realise that this focus on the familiar is a strength of qualitative work and that the value of my study is that it looks again, and very closely, at the kinds of things 'that children just do', things that are commonplace but that are not always read or seen in dominant discourses of early literacy in school. I acknowledge here that any literate act is embedded within a range of meaning making practices and therefore should be studied as such. I looked closely at what took place as the children *got on with* the endeavour of making meaning, seeing literacy as inseparable from the practices from which literacy is generated.

Ultimately, I argue that expansive accounts of children's activity are needed to counter the move towards narrow definitions of what it means to be literate that are becoming increasingly embedded in educational discourse and may be played out in

pedagogical practices. Narrow representations offer a way of viewing young children's journeys into literacy, but in marking that journey, construct winners and losers and deficit models of families and their cultural practices (Compton-Lilly, 2014). Early Years perspectives on pedagogy and policy guidance emphasise the importance of play (see for example Moyles, 1994; DfE, 2017; Early Education, 2014). Theoretical positions such as those of Bruner (1999) raise the importance of the child-centred learning environment and learning. Despite this, narrow representations of what it means to be literate may lead to pedagogical practices which obscure other conceptualisations of what literacy can be in school settings.

Ultimately, this thesis draws on a poststructural perspective in order to substantiate the need for participatory and open-ended pedagogical approaches. It documents a detailed examination of emergent dimensions of children's meaning making practices. In doing so, my thesis contributes to work that is generating expansive views of literacy with a particular focus on movement (Hackett and Somerville, 2017; Kuby and Rowsell, 2017)

1.4 A brief outline of the thesis

In Chapter 2, I provide an outline of current policy in the teaching of early literacy. I examine and problematise dominant accounts of print literacies and the ways in which these are presented in policy. Drawing on New Literacy Studies, I illustrate how literacies are multiple, socially constructed and ideological and therefore implicated in all aspects of social life. I summarise seminal ethnographies that have examined early literacy development from a sociocultural perspective.

In Chapter 3, I discuss an expanded view of literacy which sees literacy as ‘complex system of interrelated processes’ that ‘encompasses the visual and communicative arts’ (Flood, Lapp & Heath 2004, p273). I summarise current thinking around early literacy development from a sociocultural perspective and broaden the exploration of literacy by recognising the multiplicity of modes and materials that children employ in order to make meaning. I explore how literature from the field of social semiotics has generated rich insights into children’s meaning making activity and brought recognition to the significance of play and activities that take place around literacies (Kress, 1997; Genishi and Dyson, 2009; Wohlwend, 2008, 2009, 2011). Here children are presented as agentive (Corsaro, 2005; Genishi and Dyson, 2009; Rowe, 2010) as they engage with the environment and each other, actively taking-up and orchestrating new ways of being together, their participation in classroom life facilitated by increasingly sophisticated semiotic repertoires. I consider the above concepts in relation to the notion of the classroom and the enabling environment, observing how material resources are implicated in literacy activity. I end this chapter with my research aim and questions.

Chapter 4 outlines the methodological approach adopted for this study and describes methods used when investigating children’s activity in classrooms. I justify an ethnographically informed approach which includes a close analysis of the processes by which children make meaning making in an Early Years classroom. I explain and justify the methods of data collection, which included the use of field notes, filmed episodes and participatory methods and describe how I analysed and coded the data.

Movement emerged as a central theme and area of exploration in my data and my thesis focuses on the significance of movement in children’s meaning making

endeavour. In Chapters 5, 6 and 7, I present illustrative and detailed episodes drawn from the data. Here I use narratives based on field notes, multimodal transcripts and movement mapping diagrams, in order to present a detailed description of young children's activity as it took place moment-by-moment, focusing on their movement.

Through a combination of a narrative account of episodes, multimodal transcription and analysis, movement mapping and photographs, I illustrate the ways in which children's movements, including walking and the work of their bodies are central to the meanings they continually make and remake. Chapters 5, 6 and 7 each focus on different ways in which children's interest plays out in classrooms. They address three identified movement/ interest formations; converging, focal point to radial, and focal point. They illustrate how children's activity involves the constant production of meanings and how this is highly contingent on the classroom and its materials.

In Chapter 8, I summarise my observations of the significance of children's movement in classrooms. I discuss my data from a poststructural ontology and explain what this perspective brings to the fore in understanding the process of young children's meaning making practices and agency, complementing what is understood in sociocultural accounts. Through focusing on emergence and the related concepts of assemblage, movement and affect (Deleuze and Guatarri, 1987; Massumi, 2002), I further explain the significance of movement that I had observed in the study thus providing insights into the importance of young children's movement and its relationship with the process of their meaning making and how this appears to be relational to affective atmospheres.

In Chapter 9 I outline my contributions to knowledge and present the implications of my contributions with respect to pedagogy, policy, and further research, outlining

how we might work flexibly and sensitively with children and foreground the importance of movement in their meaning making and recognising diverse pathways to literacy.

Chapter 2

Literacy defined in a statutory curriculum and literacies in everyday life: autonomous views and sociocultural accounts

2.1 Introduction

Literacy practices vary significantly across time and place (Gutierrez, Bien, Selland and Pierce, 2010). This chapter explores why such differences arise and in particular, why literacies commonly associated with schooling often look and operate very differently to those that take place in the home and community. Children often inhabit many different social spaces, including school (Pahl and Burnett, 2013, p3) and therefore, they engage with 'varied and multiple literacies' as they move across such spaces.

In this Chapter I outline ethnographic studies that have examined what have been perceived as dissonances between home and school literacy practices from a sociocultural perspective, along with their theoretical framing. Exploring the work of scholars who have investigated literacy as a social practice, such as Street (1995) and Gee (2008), I substantiate the need to look more broadly at cultural practices that go beyond language, if we are to gain insights into children's experiences of literacy in schools. Seeing literacy as a social practice will be contrasted with ways in which literacy is conceptualised in current national educational policy. I will argue that seeing literacy as multiple and varied draws attention to limitations of studies that divorce literacy from its sociocultural context and instead view literacy as a set of skills to be acquired. Proposing that literacy is an ideological practice, the chapter

ends by setting the scene for summarising literature that has contributed to current understandings of the rich and diverse nature of children's literacy experiences presented in sociocultural accounts.

2.2 Contrasting home and school experiences from sociocultural perspectives

Linguistic and cultural diversity is a feature of contemporary society in England's schools. Children's home and school experiences can differ significantly as the kinds of language and literacy privileged in school may differ from those at home (see for example, Levy, 2011). Literacies involve a multiplicity of diverse practices and experiences which occur in home and community environments and these practices are shaped by cultural, linguistic, social and economic factors (Street, 2003). The dissonance between home and school literacy practices and the perceived effect of this on a child's literacy development has long been an area of research. Studies have examined relationships between sociocultural categories, such as language use and social class, and children's success in early literacy learning. The linguistic anthropologist Heath (1983), for example, carried out an influential study in Piedmont. She studied the language development of children of three very distinct communities within the region in order to understand the language socialisation experienced by children of each community. Heath noted that certain types of language socialisation are more compatible with school environments than others and that these impacted, positively or negatively, on the child's reading development as they entered school. The implication of this is that there is an inequality of culturally valued resources amongst children as they enter school, which is influenced by their language socialisation. One of the key recommendations from Heath's work is that practitioners should take time to understand and be empathetic

towards a child's home and community socialisation in order to support their school-based literacy development.

Social class and ethnic background are categories that have been explored as possible factors relating to children's success in literacy development. In England, Brooker (2002) carried out a study which followed the journey of 16 reception children with a diverse range of cultural backgrounds throughout their first year at school. Her project was inspired by findings of the Junior School Project (Mortimore, Sammons, Stoll and Ecob, 1988) and an infant study carried out by Tizard, Blatchford, Burke, Farquhar and Plewis (1988). These studies suggested that strong relationships exist between social class, as defined by parental occupation, and reading scores. The studies identified that social class differentials widened from age 7-11, further disadvantaging already disadvantaged groups. Carrying out an ethnographic investigation, Brooker (2002) acquired what she termed an 'insider' view of the reception children's and their families' perspectives on starting school and her findings suggested that teachers' expectations of children could account for many of the classroom practices associated with children's achievement. Brooker examined the social capital (Bourdieu, 1986) that both parents and children brought to school experiences and how this can support or hinder children's socialisation into the school system and consequently influence their success.

More recently, research has suggested that emerging differences in children's experiences of literacy as they cross sites may be related to children's engagement with digital and mobile technologies (Marsh, 2004a). Making meaning with such devices involves children in working with words, still and moving images, and sound

(Kress, 2010). It is clear that many young children frequently access and are avid users of digital technologies in the home but that such access cannot be assumed (Garvis and Lemon, 2016). On entry to school, many children have extensive experience of meaning making using digital tools (Levy, 2009; Yamada-Rice, 2011). Indeed, preschool parents download educational apps for their young children, for example, 'number or spelling games, as a preparation for school' (Chaudron, 2015, p30). Children's early experiences then may contrast with the learning focus on print literacies in early education settings and this focus can be seen as an explanation of why some children find literacy learning more challenging than others (Levy, 2011).

The language we use, the language socialisation experiences we encounter and literacy tools we engage with will inflect our cultural experiences in ways that far outreach simply the words we say. Gee (2008), writing from a sociocultural perspective, explores the concept of language development by explaining that the process of socialisation is reflected in our lifeworld discourses. Lifeworld discourses include the ways in which we read and write, think, talk, feel and act; they reflect the things that we value and who we are throughout our lives and are therefore bound up in ways of doing and being.

Studies carried out by Heath (1983), Brooker (2002) Levy (2011) and Marsh (2004a) expand the notion of literacy beyond simply the reading and writing of print texts, as they are more commonly perceived, and situate it instead within broader socially constructed phenomena of human activity. Interestingly, Gee (2008) proposes that all discourses we experience other than our lifeworld discourses are secondary discourses and that in fact, home and school are not 'disconnected' but, instead,

draw upon *different* discourses. Gee's ideas resonate with those of Street that I go on to discuss in the next section.

2.3 Young children, print literacies and early education contexts: constructed disjuncture

Expansive views of early learning that promote open-ended, play-based approaches are well-established in early education discourse. Brock (2015) stresses the importance of simulating environments and resources that will enable children to initiate their own learning and that it is the process of being and doing that is of significance. A number of international approaches to Early Years pedagogy, each with its own distinct approaches, have been highly influential. High Scope (Weikart, Rogers, Adcock and McClelland, 1971) for example, promotes a plan-do-review sequence of activities where children are encouraged to make decisions of what they want to do, explore the world independently, and reflect on what they have done. The Reggio Emilia approach (see Malaguzzi, 1998) is based on the understandings that children are competent and can act and think independently and is characterised by the way in which the curriculum is designed to build flexibly on children's interests and experiences. Reggio Emilia approaches to early learning view children as having the ability to construct their own learning. In addition, children are provided with opportunities to express themselves in many ways, such as through language, movement, building and play (Edwards, 2002). Te Whariki, originating in New Zealand, is designed to promote children's exploration through both directed and spontaneous play (Podmore and Carr, 1999). While these approaches suggest flexible and open-ended experiences that are often child-

initiated, when the consideration is early literacy, then such principles can be compromised. I discuss why this might be the case below.

Being literate in a literate society is highly prized. Underpinning this is the view that having access to print literacies brings with it a number of cognitive capabilities (Goody, 1968). Being equipped with a tool for maintaining abstract and objective thought is one such espoused quality of the individual who is literate. From such a perspective, disciplines such as science and history can only be realised by literate societies, illiterate cultures having no resource to organise information over time and space or to move towards abstract thought (Goody, 1968). This viewpoint, although commonly held, was strongly critiqued by Scribner and Cole (1981). The pivot of Scribner and Cole's argument was that attributing literacy to such competencies is drawn from 'cultural and social changes associated with the advent of widespread literacy' (Scribner and Cole, 1981, p59), and that such claims are based on the analysis of cultural phenomena, but attributed to the 'sole testimony to psychological processes' (Scribner and Cole, 1981, p59). The authors point out the limitations of this shift:

There is no necessary connection between the modality in which new operations come into being and the modality into which they are perpetuated and transmitted in later historical epochs.

Scribner and Cole, 1981, p59

Scribner and Cole examined a number of communities and their cultural practices, including the Vai community in Liberia. They noted that there was no relationship between the cognitive abilities of communities that were seen as conventionally literate and those that were not. In this way, the simple division between literacy and success/ illiteracy and lack of success is challenged.

Literacy (as I will expand upon later) is a complex phenomenon that is intricately enmeshed with many if not all, aspects of human activity. According to Kelder (1996) this complexity is what gives rise to reduced or more simplistic conceptualisations of literacy for the purpose of education. Building on the work of Scribner and Cole, Kelder (1996) aims to explain *why* literacy is presented in policy as central to success in life. Kelder (1996) argues that the concept of literacy, what it is and what activity it includes, is elusive. This results in a simplification of its conceptual complexity, in order that it can be 'known'. Kelder argues:

Only through this process can one know literacy; otherwise, how could governments and world organizations fund massive literacy campaigns based on something so intangible. Teachers, parents, administrators, policy makers all want higher levels of literacy and this higher anxiety level feeds the political, social and economic myths associated with the concept and further masks its reality.

Kelder, 1996, p.3

While not wishing to undermine the value of being literate and a literate society in this thesis, it is important to highlight the ways in which Street (1984) strongly critiques the view of literacy presented by Goody (1968). Street claims that seeing literacy in this way gives rise to what he terms the *autonomous* model of literacy. Building on the work of Scribner and Cole (1981), Street strongly critiques the autonomous view and its underlying assumptions that literacy can improve the economic prospects of individuals and society as a whole and make better citizens *regardless* of social and economic conditions. Instead, Street asserts that all literacy is enmeshed within broader cultural practices. The autonomous model, claims

Street, fails to take account of this. Furthermore, Street claims that when literacy is viewed as autonomous it is reduced to a set of decontextualized skills or a limited set of mental operations that can be acquired, regardless of socio cultural or economic factors.

Street's anthropological research was more concerned with exploring literacy within its social context and he examined the communicative practices of cultures in Papua New Guinea, Madagascar and Sierra Leone. From this work he proposed an *ideological* model of literacy which contrasts sharply to a view of literacy as autonomous. Stating that literacy is a social practice which is culturally determined, Street points out that literacy can never be presented as neutral and universal and that it is not merely a technical skill. Instead, he asserts that all literacy is an ideological/ and social practice where multiple literacies exist and, importantly, that these are embedded and contested in power relationships. He claims that an autonomous view in fact disguises cultural and ideological assumptions that underpin all literacies and deny the power relationships that are inherent in all literacy practices.

Street's conceptualisation of literacy as ideological has significant implications for literacy education. Gee (2008), for example, points out how the education system measures its success in how well it supports literacy development by focusing on the individual abilities of children and as such it fails to recognise how literacy is implicated in the power relations inherent in schooled literacy. Street (1995) elaborates on this as he sees how putting literacy in the 'hands' of the individual places them in a position where they can be individually accountable for any difficulty arising in literacy education, for example, by being declared unwilling or unable to learn. Thus, through recognising literacy as a discrete set of neutral skills, taking an

autonomous view of literacy has the potential to shift the focus of problems and inequalities in society into the hands of the individual and their individual shortcomings.

A further consideration that emerges from such a view is that literacy can be seen as the acquisition of a set of discrete and neutral skills. A child in an education system may be individually judged in relation to their acquisition of these skills and thus be viewed as either making progress or not in relation to such an acquisition. An autonomous view of literacy would substantiate the accuracy of such a judgement. Indeed, Woodrow, Arthur and Newman (2014) describe how children from low-income families are perceived as needing compensatory pedagogies to improve their literacy skills. The authors illustrate how this often leads to the implementation of narrowly defined pedagogical practices that focus on teaching such literacy skills. Pedagogical intervention for children deemed 'at risk' of falling behind in literacy development, such as those from low-income families or working class families is highly likely (see also Hayes, Hattam, Comber, Kerkham, Lupton and Thomson (2017)). However, such intervention is likely to be focused on more exposure to discrete literacy skills.

In the context of children learning literacy in school then, becoming literate is a complex endeavour and seeing literacy development in this way is of paramount importance. Literacy is embedded within children's everyday activity and therefore looking at contemporary literacy practices calls for an understanding of literacy that reflects the ways in which literacy practices are socially and culturally mediated as they are produced (Gee, 2008).

In the section above, I have illustrated how Street (1984, 1995, 2003) and Gee (2008) place literacy within broader social practices. Social practices from this perspective are fluid, changing and complex and they are inherent in all aspects of life. A 'fixed' curriculum which conceptualises literacy in certain ways will inevitably influence pedagogical practices, and this fixing in turn affords significant power to the version that is deemed official. The dissonances between the children's literacy practices that play out and evolve in their home and community experiences and the set of skills constructed as literacy in the statutory curriculum is therefore inevitable. As a consequence of this some children will face difficulty as the skills, knowledge, values and understanding of literacy they bring to the school setting may not be recognised, valued, drawn upon or useful in the acquisition of official or schooled literacies.

2.4 Researching literacy as an ideological practice

Barton, Hamilton and Ivanic (2005), made a distinction between *literacy events* and *literacy practices*. This distinction has important implications for literacy research. Literacy events are defined by Heath (1982, p93) as follows: 'any occasion in which a piece of writing is integral to the nature of participants' interactions and their interpretive processes'. Literacy practices is a term used to refer to the way in which literacies are situated and located in particular times and places, and so are indicative of broader social practices (Barton et al. 2005). By looking at events, the practices of literacy can be seen as 'the link between reading and writing and the social structures in which they are embedded and help shape' (Barton et al., 2005, p7). The notion of literacy practices then implicates literacy within the values, attitudes, feelings and social relationships that are embedded in particular 'discourse

communities' (Barton et al., 2005, p11). Street (2003) asserts that literacies can only be understood by the detailed description of literacy practices, and calls for a framework and conceptual tools that can characterise the relation between the 'local' (e.g. a child's literacy practices) and the 'distant' (schooled literacies).

At this point it is important to consider how literacy is conceptualised in the current statutory curriculum as this will impact on pedagogical practices and has the power to radically shape children's experiences of literacy in school contexts.

2.5 Literacy in the statutory curriculum: an autonomous view of standardised literacy

The prevalence of the autonomous model of literacy is clearly related to the focus on and concern over standards of literacy in the English education system today. Such concern was voiced by Ofsted (2012a,b) who stated that one in five children was failing to achieve the required level of literacy competency by the end of primary school and that one in three of these children were from what were deemed to be disadvantaged backgrounds. Similarly OECD (2016) reported standards in literacy in England amongst 16-19 year olds as being amongst the lowest in the world. As stated earlier, becoming literate and acquiring competence in the use of the alphabetic abstract written code is crucial to success in Western society, but the way that the debate has been constructed and the proposed ameliorating effects of high literacy standards may be far from the whole story. Here, it is important to note that I do not suggest that such concerns are valid or otherwise, but merely share what are current dominant messages in circulation within the English education system and the need to interpret these with care. Neither do I suggest that what is written into such documentation is the only activity that takes place in education settings.

Classroom studies have indeed shown how children and teachers interpret literacy learning differently and over-layer literacy learning with other activity (see for example, Dyson, 1993)

The current education system in England is structured by government- produced statutory curriculum frameworks. This includes the ‘English Programmes of Study Key Stage 1 and 2’ (DfE, 2013), providing guidance for children aged from five to eleven. ‘The Statutory Framework for the Early Years Foundation Stage’ (DfE, 2017), sets out the legal requirements related to learning and development for children aged from birth to five years. Statutory guidance for children aged 0-5 (DfE, 2017), promotes practice that would allow sufficient flexibility to allow practitioners to bridge practices from home and community experiences to those more associated with schooling. The statutory guidance also indicates that early education provision should contain both teacher-led and child-initiated learning. The need to work flexibly with children is indeed clearly stated in statutory guidance through the ‘guiding principles’ as follows:

- every child is a unique child, who is constantly learning and can be resilient, capable, confident and self-assured
- children learn to be strong and independent through positive relationships
- children learn and develop well in enabling environments, in which their experiences respond to their individual needs and there is a strong partnership between practitioners and parents and/or carers
- children develop and learn in different ways....and at different rates.

DfE, 2017, p6

Ongoing formative assessment through observation of play-based activity is a central part of the role of the Early Years practitioner. Such observations should support practitioners in planning future experiences and opportunities to support

children's learning. The statutory curriculum for children aged 0-5 then, promotes a framework that has the potential to support children's unique learning trajectories and provide them with opportunities to bring their own passions, experiences, capabilities and interests into the school setting. This, however, is not guaranteed, and I argue that such principles are at risk particularly in relation to the specific area of Literacy (DfE, 2017). The statutory assessment for all children at the end of the Early Years Foundation Stage is the 'Early Years Foundation Stage Profile: 2017 Handbook' (Standards and Testing Agency, 2016, b). The early learning goals for the specific area of literacy are defined as follows:

Reading: children read and understand simple sentences. They use phonic knowledge to decode regular words and read them aloud accurately. They also read some common irregular words. They demonstrate understanding when talking with others about what they have read.

Writing: children use their phonic knowledge to write words in ways which match their spoken sounds. They also write some irregular common words. They write simple sentences which can be read by themselves and others. Some words are spelt correctly and others are phonetically plausible.

Standards and Testing Agency, 2016b, p29

As explored in section 2.5, in an attempt to address the 'low' standards of literacy, statutory frameworks appear to have moved considerably towards an autonomous view of literacy and to promoting the teaching of literacy skills that are seen as separate or discrete. This narrowing of the literacy curriculum focusing on the teaching of discrete skills is now well-embedded in the Early Learning Goals for literacy. Likewise, the English Programmes of Study: Key Stages 1 and 2 (DfE, 2013) and its newly revised testing arrangements for Key Stages 1 and 2 (Standards

and Testing Agency, 2016a) have moved towards a narrower conceptualisation of literacy, despite concerns (see for example, Ellis and Moss, 2014). The changes to the statutory curriculum are likely to have a significant impact upon the way that literacy is understood by practitioners, which will in turn impact upon pedagogical approaches employed in the teaching of reading and writing (Austin, 2014).

2.6 The problem with researching literacy from an autonomous view

Law (2004) states that research methods may work to construct the realities they seek to investigate. Indeed, Folque (2010) explains how much of the research into early childhood literacy education makes links between children's experiences and a particular model or process and then measures the impact of the model or process on children's development. As these studies are often quantitative they 'establish causal relationships between some variable of the models and some measurable outcome in terms of children's development' (Folque 2010, p254). However, these studies are less powerful in identifying the processes and practices that might account for these results (Folque, 2010), often omitting the sociocultural dimension of literacy learning in an attempt to find solutions to the perceived problem of poor attainment in literacy. Over recent years, an 'evidence-based' approach to education research has been informing policy formation at national level (Arthur, Waring, Coe and Hedges, 2012). The report *Reading by Six, How the best schools do it* (Ofsted, 2010) provides a good example. This study was carried out across 12 sample schools in England. The schools were identified through the use of quantitative data based on end of Key Stage 1 reading and writing scores. Researchers then wrote vignettes about each school, outlining key elements of common practice and also presenting statistical evidence of the schools' statutory test results. Overwhelmingly, the results suggested that the teaching of systematic synthetic phonics was well-

embedded into the reading curriculum of the targeted schools and the report dedicates much of its discussion to this. The findings in Ofsted's study have been influential in recent policy development at national level. The significant point here is that studies of this nature influence practice and may become part of the structured pedagogy that children meet as they encounter schooling. Whilst such studies can be useful in enhancing policy development they may also be problematic. As they offer limited description of the actual practices that took place or how the children in the setting responded to the pedagogical approaches, they present a limited view of factors that may have been significant. Very often indicators such as socioeconomic background of the children attending the schools are cited. This may perpetuate viewpoints that some children are 'harder' to teach than others and presents a deficit view of children, their home language and culture where these do not align to dominant accounts (See Hayes et al. 2017). Moles (1993, p146) for example, noted how 'misperceptions, misunderstandings, negative expectations, stereotypes' can arise through differences in the language, values and goals of teachers and parents.

If we see literacies as social and cultural practices, isolating specific practices across schools and linking these with children's literacy attainment is problematic. It fails to show the interactions and relationships between children, their teachers and the learning environment: that is, it lacks qualitative description. Examining literacy learning without recognition of the ideological practices that are embedded within it presents literacy as neutral and autonomous and therefore reinforces pedagogical practices that focus on the teaching of discrete skills. Comber and Woods (2016) suggest a pressing need for teachers to work as researchers in areas of high poverty in order that detailed studies can be made.

In generating understandings of what might be considered effective practice, Street (1995) asserts that an investigation of literacy practices necessarily entails an ethnographic approach which will produce closely detailed accounts of the cultural context in which those practices have meaning. Street argues that without theoretical clarity, the empirical investigation of literacy will only produce or reproduce prejudices.

2.7 Meaning making, culture and developing understandings of young children's literacy practices

I begin this section by presenting a sociocultural conceptualisation of meaning making that explores the ways in which meanings are symbolically and socially constructed and represented (Bruner, 1996). This is an essential move in this thesis as literacy activity is seen as implicated within and inseparable from broader practices and human meaning making activity. Here I discuss the ways in which sociocultural accounts have provided more expansive understandings of early literacy development. Sociocultural accounts draw particular attention to the ways meaning making is mediated by the people and resources to hand, thus providing a rich and complex perspective.

My thesis involves observing the process of young children's meaning making during their ongoing activity in an early years setting. It is therefore important to illustrate the interrelationship of culture and meaning making. To achieve this, I draw on the work of Bruner (1996, p3) who proposes the term 'culturalism' in relation to the human mind, stating that 'mind could not exist save for culture'. Bruner explains how mind is:

linked to the development of a way of life where 'reality' is represented by a symbolism shared by members of a cultural community in which a technical-social way of life is both organised and construed in terms of that symbolism.

Bruner, 1996, p3

Bruner elaborates on the ways in which culture is '*superorganic*', that is, it exists beyond individual members and shapes the minds of individuals. He makes a distinction between the superorganic and the individual expression of meaning making:

Meaning making involves situating encounters with the world in their appropriate cultural contexts in order to know 'what they are about'. Although meanings are 'in the mind', they have their origin and their significance in the culture in which they are created. It is this cultural situatedness of meanings that assures their negotiability, and, ultimately, their communicability.

Bruner ,1996, p3

Here Bruner draws on relationships between knowing and communication, and learning and thinking, noting that these are always highly contingent on the symbolic meaning making systems to hand within a culture. Bruner (1996, xi) suggests that 'learning, remembering, talking, imagining; all of them are made possible by participating in a culture'. Literacy can be seen as one such meaning making system that is conveyed through the alphabetic code, but which is experienced nevertheless as a social practice and therefore embedded within the broader terrain of meaning making practices.

Theoretical perspectives such as those of Vygotsky (1978) and Rogoff (1990) drew attention to the significance of the social and cultural context of young children's experiences and the ways in which children's development is enmeshed with the collective ideas and conventions of a specific culture. Similarly, Bronfenbrenner

(1979) illustrated how children's activity and learning is embedded within and influenced by family, school settings, and the broader social and political, local, national and global environment. Earlier, I discussed how literacy was a cultural and therefore ideological practice, shaped by the child's particular home and community practices. The classroom is a place where a diverse range of children come together and Rogoff's (1990) ideas about the cultural-historical child are important here as they recognise that each child brings a different set of practices to their classroom experiences based on their own home and community histories and cultural heritage.

2.8 Insights from seminal ethnographies exploring young children's literacy practices from a sociocultural perspective

Explorations of early literacy learning have increasingly moved towards observations of young children's literacy events in relation to the range of activity taking place alongside the literate act, for example, the adult interactions which support and scaffold processes associated with reading and writing. Clay (1991) broke important ground in understanding early literacy by proposing an emergent literacy perspective which saw literacy learning as beginning at birth. Furthermore, Clay's perspective recognised literacy as a social process and promoted practice which drew on the interrelationship between reading, writing and oral language.

Focusing specifically on children's authoring practices, Rowe (2009) carried out a comprehensive chronological literature review involving 129 empirical research studies between 1990 and 2008. According to Rowe (2009) the focus of these studies moved from monitoring children's progress from early mark making towards more standard written forms, to observing young children's literacy practices in

detailed ethnographic studies. This shift has refocused studies from looking at children's texts as 'products' to looking at what is taking place at the point of text creation and the ways in which children's cultural experiences and histories shape such activity.

Sociocultural accounts have challenged linear trajectories, or the assumption that children move through a sequence of 'stages' in their literacy development and foregrounded that literacy learning is an active process. Studies by Genishi and Dyson (2009) and Rowe (2008), for example, argue that the perceived route from 'meaningless' scribble to recognisable depictions of objects or writing does not account for children's literacy practices. Dyson's (2003) close examination of children's classroom activity revealed variability in the forms of children's writing across contexts. Where there is some progression towards conventional writing forms, children will not necessarily abandon their old forms (Sulzby, 1996). This shift from attempting to map linear trajectories has arisen as researchers have become increasingly interested in the role of social interaction in literacy learning, the role of social relationships with adults, and the influence these have on the amount and type of children's writing.

Whilst many studies in the 1980s and 1990s focused upon the development of children's writing towards more adult forms, Heath's (1983) and Dyson's research studies differed in that they adopted an ethnographic approach in order to *describe* children's literacy practices. In addition, these studies looked much more broadly at a range of meaning making practices in order to view how children take-up and explore literacy practices. Dyson (2001) carried out a number of ethnographic studies in the USA working with children from a range of socioeconomic and cultural backgrounds (e.g. Dyson, 1991; 2001; 2003). Her work focused on how young

children's literacy practices play out in school settings and differs from other studies carried out at that time in that it draws upon the interplay of multiple modes of communication, for example, talk, song, action and the role of these in supporting children's writing and mastery of schooled literacies. Dyson (1993) documents a year-long ethnographic study in which she shows how children rely on their own cultural and social experiences in order to negotiate their ways into schooled literacies. The study focuses on a friendship group of 8 year old African-American children and Dyson noted how the children in the study drew upon popular music, film, sports media and animated shows when writing, and this in turn provided them with a range of cultural material including genres, models of text structures, technological conventions, spoken utterances and a pool of potential characters, plots and themes. Drawing on these things appeared to provide the children with productive challenges in their understanding of different symbol systems and social practices associated with those of school. Dyson's study shows how the children constructed what she terms unofficial worlds based around their interests, such as football, cheer leading and popular music. Furthermore, in these worlds the children constructed roles and identities for themselves. Children's interests became interwoven with the play and written texts that the children produced, thus merging elements of the written system of letters, words and syntax. Dyson (2001) describes how Marcel, one child participant, translated cultural material across the boundaries of different practices of home and school. In a single child case study of 6-year-old Noah, Dyson (2001) explained how Noah composed a text where he took a character from the video game genre, Donkey Kong, and merged this with a character from his formal text books, Little Bear. Thus, his writing composition became *Donkey Kong meets Little Bear*. Dyson noted how Noah regularly infused

texts from his home with those of school and illustrated how children created hybrid texts exemplifying the symbolic mixing that the children carried out whilst authoring. Dyson interpreted this as illustrative of the ways in which the children 'take hold' of literacies associated with school or 'official' literacies and combine these with the 'unofficial' literacy practices from home and community experiences. This process, or symbol mixing, asserts Dyson, has the potential to promote communicative flexibility and adaptability and is central to literacy development.

Dyson's research is of particular interest as it gives value to children's varied and diverse practices. The children in her studies are seen as drawing on their communicative experiences and 'unofficial' worlds in educational settings, sanctioned or otherwise. Dyson (2009) explains how adults shape children's entry into cultural practices, but that it is children that contribute to and transform these practices terming this as 'young children's entry into institutions' efforts to make them literate' (Dyson, 2008, p304). A focus on children's entry emphasises literacy as something that cannot be 'given' or transmitted, but that is only manifest as children intentionally or unintentionally integrate schooled literacy practices into their existing repertoires for making and sharing meanings. The merging and re-contextualisation of practices in children's activity is central to the ways in which children playfully explore possibilities. Dyson sees imagination and play as driving such transformations and she highlights the importance of children's 'unofficial' worlds noting how 'official literacy practices can generate and become a resource for unofficial childhood practices' (Dyson, 2008, p305).

Consistent with a sociocultural view of literacy practices, Dyson sees children's intentions as shaped by economic circumstance, cultural heritage and geographic

possibilities. Furthermore, Dyson presents children's histories as assets that they bring to the present, rather than linguistic deficiencies that impact on or limit their access to education. Local knowledge is collaboratively and spontaneously brought into their play and is generative of child cultures as it draws on societal themes from the adult and wider world. Drawing from the ideas of Geertz (1973), Dyson describes webs of significance that are 'superimposed upon or knotted into one another' in ways that are 'strange, irregular and inexplicit' (Dyson, 2008, p305), and explores the ways in which children's engagement in symbolic playful activity is generative of novel practices.

Dyson's work celebrates the diverse range of meaning making resources that children bring to their educational experiences, and challenges deficit views of children's home and community experiences. Furthermore it brings to question notions of linear trajectories of literacy development and draws attention to the range of meaning making resources that take place as children interact in classrooms. Dyson (2009) explains the richness of children's activity and the importance of children's flexibility and adaptability when working with meaning making resources in the following way:

They are not moving forward on some kind of imaginary pathway to literacy but manoeuvring with more control, more flexibility, on expanding textual landscapes of diverse voices.

Dyson, 2009, p235

2.9 Chapter summary

In this chapter, I have illustrated and contrasted conceptualisations of literacy.

Drawing on Street's (1995, 2003) seminal work, I defined literacy as autonomous

and explained how, in some educational policy, an autonomous view is presented. I have considered and problematised the links that are often made between success in literacy learning and sociocultural categories, such as ethnic group and socioeconomic status. In this chapter I have summarised seminal research that examines literacy from a sociocultural perspective and places literacy within the wider terrain of meaning making. Moving from this, I summarised how open-ended ethnographic studies that view literacy as a social practice have provided rich insights into the ways in which becoming literate is an active process and the ways that children draw on social and cultural experiences in order to make meaning.

Chapter 3

Expanding notions of literacy: sociocultural and sociomaterial perspectives

3.1 Introduction

In this Chapter I explore research which has examined literacy from three perspectives and that have helped to generate insights into what I refer to as an expanded view of literacy. I start by discussing the concept of agency and constraint as defined in social theory. I relate this to the ways in which literacy has been seen as an active process related to children's sociocultural participation. I then consider literacy learning from a social semiotic perspective and define this as a central to understanding the range of communicative practices that children take part in as meaning is constructed. I draw out links that have been made between early literacy learning and play.

Next, I summarise research that has considered how the materials available in classrooms have been seen as influencing children's literacy practices, including those practices that are mediated by digital tools. Thereby I frame literacy as semiotic and material, and implicated within children's experiences, memories and histories.

Finally, I explore the classroom resource of time and the ways in which 'school time' is organised and implicated in children's learning trajectories. The *process* of meaning making and the ways in which this plays out in classrooms during self-initiated activity moment to moment, I argue, is an area that requires further investigation. I conclude the chapter with my research aim and questions.

3.2.1 Agency and social theory

To begin chapter 3, I discuss how sociocultural accounts see learning and development as an active process which gives pride of place to learner agency. Rogoff (2003) for example, draws on Lave and Wenger's (1991) theories of communities of practice to explain how children take-up and incorporate the cultural and communicative practices of the groups of people with whom they interact. Before discussing further what is understood by an active process, it is important to examine the way in which agency is conceptualised in social theory.

Social theory presents a duality between structure and agency (Kostouli, 2009). This duality reflects different ways of exploring the relationship between the individual and society. In social theory, structure is often seen as fixed and objective and can refer to constraints posed by social institutions or systems, such as those in the education system. Agency refers to actions taken by an individual, or groups of individuals. Garfinkel (1967), for example, describes how social actors enact symbolic interactions daily in order to make the world orderly. Observing everyday social practice with an emphasis on the competence of social actors who work at making the world orderly, he suggested that the world has social structures which were produced by symbolic interactions, and that agency maintains these structures. From this perspective, society is viewed as a mass consciousness that exists through its interactions as the social world is performed daily. This view emphasises how agency is always present in social worlds, and how agency maintains such worlds as people go about their meaning making activity.

Theorists providing definitions of agency and constraint have differing viewpoints on how substantial 'constraint' might be. Giddens (1984), for example, questioned the division between agency and structure. Giddens proposes that structural properties exist, and then only fleetingly, in their substantiation by social actors as they carry on their daily routines. In this way, structural properties may have a virtual (or symbolic) existence which has implications for how they can be known. For Giddens (1984) the persistent patterning of social life occurs because social life is routinised and social actors make choices which reproduce existing structural properties (rather than make choices that lead to limited or fundamental changes in structures). This activity takes place with the active participation of agents. Archer (1990) levels a critique of Giddens' perspective on structure and agency, stating that Giddens underplays the significance of structures which work on humans in particular ways and that some are more binding than others. Archer argues that the degree of enablement of structural properties can only be determined by investigation of particular activities embedded in particular contexts. In a similar way to Archer (1990), Scott (2000) presents a view of agency and structure which foregrounds the possible constraints of structure. He describes the need to present human intention in descriptions of educational activities and to observe the relationship between agency and enablement, or agency and constraint.

In addition, Scott (2000) claims there is a need to identify social forms which work behind the backs of social actors and which he argues do not depend on the intentional activity of those self-same human beings. Scott (2000) proposes that educational researchers need to examine structural properties at each time point and the interpretations of these by relevant social actors. The degree of structural

influence and agential freedom for each human interaction is significant as these can have the effect of reducing the human actor to a position of impotency. Reflecting back briefly on the work of Brooker (2002) who examined children's experiences of pedagogy in their first year of school (see Section 2.2), it could be reasonably interpreted that the cultural experiences of the children she studied, and their perceived confidence or lack of confidence to undertake classroom literacy activities, meant that they were differentially positioned by the education system; some being empowered by what was on offer, and others less so.

3.2.2 Young children as cultural agents

More recently, sociocultural research has shifted from presenting agency and structure as a duality. Instead it focuses on the ways in which groups and individuals negotiate their agency in the 'dynamic contexts of social relations created by interacting individuals and groups' (Kostouli, 2009, p101). In the context of the early years classroom then, this would indicate a continual negotiation of agency as children and teachers interact and construct meanings together. Corsaro (2005), shows how historically children themselves have been marginalised in conceptualisations of childhood and socialisation and that this occurs because of their subordinate position in societies which view them with 'an eye to what they will become – future adults with a place in the social order' rather than 'what they are – children with ongoing lives, needs and desires' (Corsaro, 2005, p7). Historical conceptualisations of childhood position children as 'consumers' of the culture established by adults. Corsaro views such a perspective as deterministic: the child playing a passive role in being appropriated into becoming a competent and contributing member of an established social order. In contrast to this view, Corsaro

asserts a 'constructivist model whereby the child is positioned as an agent who actively constructs the social world and their place in it' (Corsaro, 2005, p18). In this way, children are not merely internalising the society they are born into, but are acting on it and bringing about change. Recognising how children take part in 'interpretive reproduction', Corsaro (2005) acknowledges the creative and innovative ways in which children participate and contribute to cultural production and change as they appropriate information from the adult world to address their own peer concerns. In attempting to make sense of the adult world, children come to collectively produce their own childhood worlds and peer cultures. This making sense of the world takes place through a process of 'appropriation, re-invention, and reproduction' (Corsaro, 2005, p18). From a sociocultural perspective then, we can see the classroom setting as a dynamic context where pupils and teachers, and pupils and pupils, negotiate agency within the structures of the education system. Indeed, practice and pedagogy which supports and values children's literacy practices is consistent with a constructivist model, children thus being seen as active participants who appropriate information from the environment to and construct personal interpretations of the world.

Classrooms are patterned by distinct pedagogical practices and by sanctioned and unsanctioned ways of being. It is highly likely that the child is in a position of lesser power. Enablement and/ or constraint therefore may be patterned across the interactions and activity that take place in the classroom. The balance of such agency/ constraint may be significant to young children who are developing meaning making practices and findings ways to participate in classrooms.

3.2.3 Taking up literacies and children as agents

Children's explorations of and engagement in literacy practices can be seen as a dynamic process. Investigations and interest in children's literate lives (See Chapter 2.3) has broadened the frame of what is examined as researchers attempt to understand early literacy. New Literacy Studies have considered the ways in which children appropriate schooled literacy practices into their activity and repertoires for meaning making (Dyson, 2001; 2003, 2009). Such studies place children as active participants in literacy practices, underpinned by the notion of agency. This work has fuelled significant interest into the nature of this 'taking up' and has drawn attention to the ways in which children and teachers might shape and take-up literacies in classrooms (Marsh, 2006; Lewis and Tierney, 2011; Luke, 1992). It marks an important area for consideration as it challenges notions of children as passive recipients of literacy practices. It provides an account of the ways in which some researchers have moved from looking purely at children's engagement with print based texts, to looking at the range of meaning making practices that take place as children interact with other children, the environment and resources. Finally, examining children as active participants has dissolved, to some extent, notions of dissonance between home and school literacy practices, as children are seen as hybridising practices across home, community and school experiences (Marsh, 2006; Dyson, 2009). The boundaries of home and school are thus rendered permeable.

3.3.1 Semiosis and young children's meaning making practices

Interest in young children's literacy practices and the ways in which this is implicated within the broader terrain of meaning making has been brought about partly by the

increase in studies from a social semiotic perspective. Social semiotics investigates human meaning making practices in specific social and cultural circumstances (Kress and Van Leeuwen, 2001). As a field, social semiotics acknowledges the broad repertoire of semiotic resources used in communication and thus presents understandings of the variety of modes used to communicate meaning in cultures. Kress and Van Leeuwen (2001) describe modes as specific sets of formalised conventions that are recognisable to others within a culture and as such semiotic resources are socially and culturally organised and shaped. In early studies of young children's literacy practices (see Rowe, 2008) talk, action, facial expression and movement between graphic representations on paper and other forms of symbolic meaning making were deemed 'developmentally and aesthetically unimportant' (Genishi and Dyson, 2009, p83). A semiotic account of literacy practices however, fostered the examination of the multiplicity of modes orchestrated in children's activity as they made meaning around texts.

According to Kress (1997), social semiotics asserts that all signs and messages are always multimodal. This means that no sign or message ever exists in just one single mode. Kress (1997) presents the example of the young child who draws a series of circles to represent a car. The child has drawn an analogy of wheels, turning, as movement in order to represent something that is culturally significant to that child. Here then the child is interpreting movement and image. The production of such a text would probably also be accompanied by talk, for example, a child talking about what they are doing, or expressing this to another person through gesture, gaze or facial expression. This example illustrates how when texts and signs are collaboratively created, there is an interplay of communication which will draw upon a range of modes. These acts of text creation both draw upon and produce cultural

meanings. Kress (1997) describes how as children are drawn into participating in culture, the modes made available to them becomes more and more that which the culture values and in turn makes readily available to the child. Furthermore, the texts the child encounters or creates are always seen as novel in that the child acts in a transformative way upon the signs they encounter. In this way, children are seen as the agents of their own cultural and social making.

Within the field of social semiotics, apparatus such as digital cameras and methodological tools such as multimodal transcription and analysis, have been combined with ethnographic approaches (for example, Wolfe and Flewitt, 2010; Taylor, 2006). These have provided insights into the ways in which children make meaning in complex social contexts. Jewitt (2009), for example illustrated how children shared ideas and learned by employing multiple modes in classrooms. Taylor (2014) noted how children collaboratively and creatively generated ideas and constructed knowledge via the employment of multiple modes, including gesture, facial expression, posture and gaze. Social semiotics therefore has provided theoretical understandings of the relationship between meaning making through multiple modes and children's learning and development. In addition, it has provided a valuable tool for considering inclusive literacy practices and participation in the Early Years (see Flewitt, 2009).

3.3.2 Meaning, modes and representation

Kress (2010) makes a distinction between semiosis and language-based definitions of 'text'. A social semiotic perspective views the social processes of text production as central to meaning, but according to Kress, there is a distinction between

semiosis and a text. This appears to suggest that semiotic activity gives rise to texts and representations. :

The process of social meaning making – of social semiosis – is what gives rise to the making of the text. But the boundaries of the text . . . are not the boundaries of meaning making . . . The text and its boundaries do not stop this process of semiosis: they provide punctuation only.

Kress, 2010, p134

Literacy is more commonly understood as involving written text. Kress (2010) argues that this suggests a language-based definition of text and points out that these may arise from meaning making, but do not account for all meanings that are produced. However, any text that is read or written is embedded within and arising from the processes of social meaning making.

Bezemer and Kress (2008) assert that humans communicate through multiple sign systems and that modes offer distinctive ways of making meaning. Children's explorations of the multimodal meaning making potential of resources around them have been a focus of early literacy research. Kress (1997) describes how when meaning making, children in the early years are predominantly guided by synaesthetic activities which draw upon all their senses and use visual, kinaesthetic, and gestural modes. Children's communicative practices involve transmediation, as children take meaning from one communication system and recast it in the context and expression of a new system (Kress, 1997, 2003). Kress suggests that this recasting of meanings signifies children's participation as they act in the world:

As the child engages with meaning making engagement with an aspect of the world, their resources for making meaning and therefore, acting in the world, are changed - they are augmented.

Kress, 2010, p175

The implication of Kress's assertion above suggests that children's learning is intimately connected to the types of meaning making tools available, and a child's increasing mastery of these tools (Kress, 2010). Here, meaning making tools involve the ongoing productive orchestration of communicative modes as described by Norris (2004) below:

.....the term 'specific modes' is somewhat problematical because modes are always only explanatory units, they are in this view not real and/or given in the world, but rather are viewed as cultural tools with affordances and constraints that are available to social actors if and when they have been learned through interaction with others and the environment. Through use, these cultural tools are continuously and to some extent newly re-constructed, re-developed and modified.

Norris, 2004, p129

Norris (2004) proposes that there is no enduring hierarchy of modes, although some such as proxemics, posture and gaze, are ever present. Modes, or orchestrations of modes, are given super-ordinate and sub-ordinate positions (Norris, 2011) which fluctuate across episodes of interactions. Norris is keen to draw attention to the modes of visual communication, such as gesture, and not to privilege spoken interaction. She states; 'rather than imposing a hierarchical scale where there is none, we can learn how social actors differently creatively utilise modes in interaction' (Norris, 2004, p156). This is an important concept as semiosis refrains from privileging speech and other linguistic modes, such as reading and writing. In this way attention shifts from a linguistic model of meaning making to one which values modes of communication beyond talk. This is particularly significant when attempting to account for the meaning making practices of young children who may

rely on diverse modes to communicate their ideas and thinking. It draws attention to the affordances of the multiplicity of cultural tools that are available to children and gives recognition to embodied modes of communication. For example, walking and running have also been identified as modes for meaning making. Hackett (2014) examined the meaning making and place making activity of young children in a museum environment. She noted how walking, running and gesture held a particular salience for the young children in her study and acted as communicative modes for young children to share their interests and to negotiate social relationships.

3.3.3 Synaesthesia and affordances

Kress (2010) proposes the notion of 'affordances' of different modes. This refers to the temporal and material qualities of modes, which are determined partly by the materiality of the mode's expression (i.e. a mark on paper, a bodily gesture, a sound or 'word') and partly by how that medium is used within a particular culture. The affordances of different modes offer distinct possibilities for meaning making, and therefore different potentials for learning. As children's repertoires for meaning making evolve, this involves them utilising the affordances of modes in order to construct meaning. Kress (1997) argues that children in the early years are predominantly guided by synaesthetic activities which draw upon all their senses and use visual, kinaesthetic, three dimensional and gestural modes. In his analysis of young children's activity, Kress (1997) draws attention to the significant role of material objects that children engage with in order to express their ideas and make meaning collaboratively. In their use of communicative practices such as role play and mark making, young children explore and innovate through synaesthetic activities where they use multiple modes and materials around them in order to create meaning.

3.3.4 Semiosis and participation in the cultural world of the classroom

From a semiotic perspective then, schooled literacies, rather than being a body of separate practices and ways of being, become part of a repertoire of a child's growing mastery of a semiotic system; other expressions of meaning can be seen as of having 'equal value' and transmediation, as children shift meanings from one sign system to another, can be seen as a valuable process (Wolfe and Flewitt, 2010).

From a semiotic perspective, the process of transmediation not only maps the child's journey into acquiring schooled literacies (Dyson, 2009), but it gives recognition to the ways in which the child manipulates and innovates with the available modes of communication. Knowledge then becomes related to the everyday processes of meaning making by individuals in their engagement with their world and Kress (2010) assert that this meaning making is both generative of meaning and of semiotic processes and forms; that is, it creates meanings whilst creating new ways of expressing meaning and forms.

These perspectives are consistent with a view of children as agentive, or of being a cultural agent (Corsaro, 2005). Here agency is seen as manifest in the ways children develop communicative repertoires that enable them to make and communicate meanings and thus co-construct social worlds, drawing on the affordances of the semiotic and other materials to hand as they do so. There is an implication that children actively integrate tools for meaning making into their existing repertoires, and as they do so, they imbue them with their interests and experiences, and thus embellish them.

3.4 Drawing relationships between play, the meanings children make and early literacy

Kress (1997) reminds us that children are predominantly guided by synaesthetic activity and communicate by embodied and visual, as well as linguistic, modes. It is not surprising then that there are strong relationships between conceptualisations of play, early literacy development and semiosis.

In accounts of early childhood development deriving from developmental psychology, play is considered to have a 'developmental usefulness', particularly with regard to providing the 'psychological formation of the social and intellectual skills that human adults need to function in the increasingly complex social environment' (Jarvis, Brock and Brown, 2014, p6). While there is not the scope in this thesis to examine the expansive literature related to play, this overarching perspective draws attention to the centrality of play in early learning.

Developmental theories such as those of Hutt, Tyler, Hutt and Christopherson (1978) categorise play into three categories: epistemic, where play is associated with the development of cognitive and intellectual skills; ludic, where it is associated with social and creative skills; and games, where children learn to take part in games with rules. Collaborative free play is considered important for social development and learning (Jarvis, Newman and George, 2014). However, accounts of the value of play as these are written into policy documentation have been seen as problematic. Wood (2014), for example, found that assessment of pre-determined outcomes was at odds with notions of play-based learning. Similarly, in previous work (Daniels, 2013), I have discussed the tensions I experienced as a classroom teacher when observing children's activity and charged with the role of assessing against the Early

Years statutory framework. Rogers and Lapping (2012) highlight how there are inherent tensions between understandings of play and the aims of schooling, describing play as a 'contested resource in the turbulent terrain of Early Years policy and pedagogical practice' (Rogers and Lapping, 2012, p247). Such tensions, the authors claim, arise from 'paradigms of liberal romantic philosophy where play is associated with childhood innocence and the expression of instinctive desires', and 'developmental psychology where the emphasis lies with the functions and benefits of play to cognitive development' (Rogers and Lapping, 2012, p247).

The relationship between literacy and play is equally contested. Certain types of play have been deemed as 'helpful' or as a pre-cursor to early reading and writing. For example, collaborative narrative play which appears to span Hutt et al's. (1978) conceptualisation epistemic and ludic territory has been linked with children's literacy development: Nicolopoulou (1996) asserts that children's narrative play supports narrative competence:

If narratives are generated within the context of children's everyday social life, the implication is that socially embedded activity dramatically accelerates the development of children's narrative abilities.

Nicolopoulou, 1996, p204

Narrative competence is said to provide children with the tools to shape meaning when taking part in collaborative play and has also been cited as an important factor in the transmediation between sign systems (Kress, 2010). Sawyer and DeZutter (2007) describe how the symbolic transformation, metaplay and narrative competence that result from engagement in narrative play supports children's representational skills. Representational skills, they argue, are a pre-requisite of engaging in the symbolic representation involved in reading and writing. One could

reasonably argue though, that children's narrative play goes far beyond the purposes of supporting the mastery of print literacies, and that it has much deeper relations to the formation and maintenance of cultural meanings. Bruner (1997), for example, suggests that narrative is central when considering how humans make meaning and may be considered as a primary act of mind (Hardy, 1997). Representation of human experience in order to understand it better is a feature of human thinking occurring in children's play (Whitehead, 2010, p105). Bruner (1966, p130) described how humans use the 'narrative mode for construing reality', proposing that such construals are essential for life in a culture.

The proposed value of narrative sits in close relation to the notions of make believe play (Singer and Singer, 1990) and of 'play texts' (Bateson, 1955) where children play out narratives that are related to their imaginary and social and cultural experiences. Bateson (1955) describes how such play shapes children's social and cultural identities. In this way, children's play can be seen as a 'text' as the children underpin their activity with an imaginary story or narrative that is familiar to their community experiences. Working with older children, Colvert (2009) examined ten and eleven year old children's play around an alternative reality game. Story-telling and the imagined worlds co-constructed by children brought to bear rich learning opportunities. The above accounts usefully broaden what might be considered as literacy activity, and consider the role of narrative and ludic play in the meaning making endeavor that often arises from or gives rise to the production of 'text'.

3.5.1 Materials and classrooms

Providing children with opportunities to access the environment and its learning resources so that they can follow their own lines of enquiry is a key principle of England's Early Years statutory curriculum (See DfE, 2017). This thesis is concerned with what children do in classrooms and classrooms are considered to be highly specialised areas that are designed with pedagogical goals in mind.

Brock, Jarvia and Olusoga (2014, p17) drew on Siraj-Blatchford et al.'s (2002) definition of pedagogy, suggested that 'pedagogical framing' involved the 'provision and organisation of materials, space and routines'. Burnett used the term 'educational space' (Burnett 2011, p218) to refer to the material, connected and textual dimensions of classroom space. The material dimension is particularly pertinent to this study as it relates to the classroom's 'physical organisation- its division, for example, into classrooms, corridors and other areas, and the people and artefacts contained therein' (Burnett, 2011, p218). This implies that the physical organisation and the resources and materials of classrooms will influence the meanings that are made by children as they interact with the enabling environment and how what children do will shape what materials and spaces become. Teachers select tools, materials and other resources to support young children's learning and strategically position these for children's use. It is therefore important to consider how such materials might interplay with children's meaning making.

In the sections that follow, I wish to further develop the discussion of sociomaterial perspectives on literacy, so foregrounding the material resources that children draw upon in order to make meanings in classrooms. Recent studies from a sociomaterial perspective have focused on the ways in which 'literacy practices can be understood as materially situated' (Pahl and Burnett, 2013, p7). Tools and materials are seen as

integrated within literacy learning and as playing a dynamic role in the production of local meanings (Pahl and Burnett, 2013).

The materials that children are provided with in classrooms are common features of Early Years pedagogy. These include tools such as scissors, pencils, and materials that are malleable and can be shaped and changed, such as paint, clay and sand. These also include the books that are shared, puppets, number tiles, pegs and boards, play people, wooden blocks, and so on. As children interact and play flexibly with such things, they ascribe meanings to them in line with their play interests. A wooden block can easily become a front door of a house, or a boat. Pieces of playdough can soon become cakes to share. Children readily appropriate the materials that surround them to explore their interests and concerns. The materials children interact with in classrooms are significant to and will influence the meanings that are made. As children play and imbue materials with meaning, they may become appropriated into something of significance to the child.

3.5.2 Play, literacy and materials

Conceptualising play as early literacy, Wohlwend (2011) discusses the relationship between play, literacy and materials. Wohlwend (2011) explores how meanings are made in diverse ways as children interact with others. She suggests that play can be recognised as 'a literacy for creating and coordinating a live-action text among multiple players that invests materials with pretended meanings and slips the constraints of here-and-now realities' (Wohlwend, 2011, p3). Children's peer interests and concerns are integral to such play, and children construct social identities through their play texts and activities as they play in classrooms (Wohlwend, 2011). Wohlwend (2008) draws attention to the visual, audio, gestural

and spatial modes of play and the ways in which these are of significance to children as they 'directly explore the material world through multimodal play' (Wohlwend, 2008, p128). Such play, according to Wohlwend, shapes players immediate worlds, shapes their friendships and their participation in peer cultures. The materials children are surrounded by are readily integrated into children's play and imagined meanings.

In earlier work, I observed collaborative multimodal play and its relation to children's cultural agency (Daniels, 2014). Drawing on Wohlwend's notions of live action play, I examined children's collaborative play and the ways in which children's shared interest in little green alien figures shaped the direction of the play and appeared to provide navigation for the emergence of peer cultures. The appearance of the aliens was a thread running through the episodes of play from collaborative narrative enactments to small figures drawn on the paper texts they produced (painting, writing, maps). Central was the way in which children's collective interest in aliens fuelled the direction of the play. I noted how the ways in which children drew upon their knowledge of narrative texts and likely events in space stories shaped the direction of their play and how they used the resources in the setting to construct and shared ideas, and recast them in different forms and sign systems. In conclusion, I noted how it appeared that children's desire to express cultural agency and play together drove them to use classroom resources in order to create hybridised texts. I argued that this process may be supportive of the mastery of schooled literacies (Daniels, 2014).

3.5.3 Classroom materials as 'tools' for literacy instruction

The work of Bomer (2003) adds something distinct about materials in classrooms. Reflecting on children's use of the everyday materials in common use in classrooms, Bomer (2003) draws a relationship with these and the notion of a *'tool'* from Vygotsky (1978). From this perspective a tool can be a word, a diagram, a gesture, a process, or a concept, that is, signs can be understood as tools. In this definition, tools function as signs, they have a material dimension but their mental or ideal function establishes their status as signs. Bomer identifies the classroom as 'site for the employment of tools, for learning what to do with concrete objects' (Bomer, 2003, p223) and suggests that systematic attention to materiality in classroom cultures can provide valuable insights into young children's literacy learning. Interestingly, Bomer suggests that the emphasis on the *tool of talk* may have shifted our attention away from other tools. Describing literacy itself as a tool, or mediational means, Bomer (2003) draws from activity theory (Engestrom, 1999) in that he acknowledges the interrelationships of people, their histories and motivations, culture, the environment and the artefacts with which people engage. Bomer proposes that tools' meanings are gained from the way that they are embedded or nested within action and discourse. Tools are 'always completely local in use and are simultaneously situated into larger activity systems and their motives' (Bomer, 2003, p.243).

Bomer asserts that the actions and intentions of tool use are what give tools their meaning and purpose. In other words, it is the *intentional* use of any particular object where it was employed towards the acquisition of literacy that makes it a tool of literacy practices. Bomer's argument is that the concrete tools of literacy instruction that surround texts, for example, staples, pointers and pillows, can be used as mediational tools for 'thinking' in that 'users assign meanings to tools in the context

of using them to do intentional things' (Bomer, 2003, p237). Bomer's exploration of tool use (in this case scissors and tape dispensers in a classroom) places agency as dispersed across the motivations of the person both placing and using the tool, but also on the role of the particular tool within a specific environment. By examining the affordances of concrete tools supplied by the teacher, Bomer explores the ways in which such tools are designed to 'mediate culturally-sanctioned states of mind' (Bomer, 2003, p223). Tools in classrooms, then, are part of the cultural orchestration of sanctioned and recognised meanings, and ways of being and doing in classrooms.

In Bomer's study, tool use by the children signified children's theories about use, and these often did not correspond to those of the teacher. Bomer (2003) called these unanticipated affordances *surpluses of meaning* and *robust materiality*. Unintended affordances referred to incidents where an object was used for a purpose other than the one the teacher had in mind. Robust materiality was a coding used by Bomer where he observed handling of objects but where such handling of the object did not reveal the child's hypothesis of the tool's purpose. Bomer illustrates how children 'crash into the objectness of the object and get tangled up in materiality, rather than using it as any kind of symbol/sign/tool' (Bomer, 2003, p.236). Surpluses of meaning were incidents where children assigned more than the intended meaning of a particular tool. Tools (and other materials) in classrooms then, have established and sanctioned uses, and carry the intentions of the teacher or practitioner who has placed them there. This is a significant consideration when considering children's meaning making practices and how these might be shaped by the classroom and its materials.

3.5.4 Digital tools shaping new literacy practices

Bomer's work suggests that tools implicated in literacy education shape practices. Recent changes in available tools, such as those offered by information and media technology, present new ways of shaping and making meaning which will differ from the predominantly print-based experiences of past generations. Children and adults interact in an increasingly diverse world with tools that have a range of different modes. More recent digital devices such as mobile phones, iPads for example, are shaping young children's meaning making practices and the practices that take place in education settings.

Wolfe and Flewitt (2010, p387) remind us that new technologies have introduced new dimensions into young children's literacy learning and that the implications of these have not yet been fully realised in 'early years policy, guidance, training or practice'. Wolfe and Flewitt (2010) propose that for literacy learning to take place, it is necessary to have the human and material resources available and the skills to operate or engage with them effectively. The authors assert that without this understanding of the process of meaning making, the potential of the mediating digital tool and its usefulness may remain untapped. Wolfe and Flewitt (2010) explored how three and four year old children develop literacy knowledge and skills using traditional and new technologies at home and in pre-school. The research gathered a range of perspectives such as interviews with parents, a review of documentation, staff questionnaires and a multimodal analysis of dialogue taken when children were engaged in literacy practices both at home and in pre-school. The study noted that there were profound differences in the ways that the participants drew on different verbal and embodied modes of meaning making when interacting with different technologies. The authors propose that the ways in which

children engage with a multiplicity of texts, including digital texts, may underpin metacognitive development and that these understandings are crucial to children's ability to act strategically in future situations.

Recent research has aimed to examine the complexities and implications of the emerging digital and increasingly complex semiotic worlds of early literacy development that young children are experiencing (Wolfe and Flewitt, 2010; Yamada-Rice 2011). Access to digital devices and the multimodal affordances of these has been seen as influencing the 'semiotic possibilities for communication' (Dyson, 2009, p243) that are at hand. It is clear that digital tools in the classroom shape the types of interaction that take place there (Merchant, 2014). Walsh and Simpson (2014) and Merchant (2014), for example, draw our attention to the ways in which the mode of touch appears to generate novel repertoires involving gesture. Kucirkova, Messer, Sheehy and Flewitt (2013) illustrate how touchscreen devices stimulate novel orchestrations of adult child interaction. Marsh (2004b) and Giddings (2014) explore how children access digital resources with playfulness, agency and creativity. If we are to consider children's early meaning making practices, then any account of early literacy development would need to also account for their digital practices.

As children play, they integrate their understandings of the digital into their play and activity creatively and flexibly. Wohlwend and Lewis (2011) and Bjorkvall and Engblom (2010) observed how young children often improvised with classroom resources such as paper in order to create their own versions of digital devices from their home and community settings. Burnett (2017, p17), observing 10 and 11 year old children's activity with tablets, illustrated how these 'come to mean different

things when taken up in practice as they come into relation with different things, people, purposes’.

The sections above focused on how children appropriate materials flexibly, and often collaboratively, into their play and imbue them with meaning as they do so. The materials within a classroom can be seen as tools of instruction and its digital and non-digital materials can radically shape the meanings that children make.

3.5.5 Classrooms as organised learning spaces for early literacy

In further recognition of the human and material environment and its influence on early literacy, I draw on the work of Rowe (2008) and Lancaster (2014). In a study with two year olds working at a pre-school writing table, Rowe (2008) examined the way the space was used during interactions between the children and their teachers. The embodied and spatial features of child-to-child and adult to child interaction during literacy activity illustrated ‘the ways in which children’s understandings were socially constructed in joint social activity’ (Rowe 2008, p388). Rowe’s study illustrates the significance of organised learning spaces and the materials and resources to which children have access. Furthermore, it draws attention to the role of interactions that take place around activity that involves writing.

Similarly, Lancaster (2014) found that the material environment was significant in the way that it shaped early writing. The second principle proposed by Lancaster is that all sign making activity is interpersonal and as such involves communication or *interaction* between children and adults present. Lancaster (2014) proposed that in early inscription ‘effort is distributed across a wide physical and intellectual environment’ (Lancaster, 2014, p.30) and challenged the notion of a hierarchy of

skills and noticed that children's notation evolved within networks of 'co-participants, tools, materials and the physical environment' (Lancaster, 2014, p30) from which children derive generic structures. From this, Lancaster proposes that 'early engagement with symbolic frameworks relies on a process of distributed, rather than individual cognition' (Lancaster, 2014, p30). Lancaster articulates that early signs are produced with intentionality, that is, meanings are assigned before, during or after the production of marks and in doing so children draw on social, cultural and bodily experiences. Lancaster suggested that such marks show how children explore representative principles and notation that are features of symbolic systems and as such they have a logic and integrity in their own right. She argued that children's production of signs cannot be fully accounted for by existing semiotic theory and noted how such signs are 'unbounded and flexible'. Lancaster's work is important to this thesis, as it positions children's meaning making and production of signs as novel, beyond the frame of the individual, and also illustrates the ways in which the material and human environment influences sign making.

3.5.6 Classroom time as a resource

The notion of an enabling environment, and a classroom that provides access to a range of material resources that would support early literacy, has been a theme throughout Chapter 3. Kell (2009) describes how understanding and utilising semiotic systems involves recognising the aptness of the mode, 'tool;' or material in the production of meaning. In order to explore such aptness, it would seem that children need time to explore the meaning making potential of the materials and each other in classrooms. As well as appropriate adult mediation, an enabling classroom environment then would involve making time for children to engage in

self-initiated activity and follow their own lines of enquiry. Time is a precious resource in schools. Compton-Lilly refers to the 'multiple dimensions of times that affect schooling and literacy learning' and consider how 'children operate and become literate within rich temporal contexts' (Compton-Lilly, 2013, 83). Compton-Lilly (2013) argues that literacy studies often focus on the physical settings of particular events but often lack attention to time as they consider context. Compton-Lilly (2013, p84) argues that 'considering *'time as context'* references time as a constitutive dimension of experience'.

Time in school has been considered in different ways, for example, Adam (1990) considered patterns and routines that emerge across time and that can be considered as linear, but also as cyclical, such as terms, weeks, or a school day. In the introductory section of this thesis, I raised concerns over the notion of the linear trajectory that presents a journey of literacy development over time. Turning attention to time in classrooms can provide insights into the ways the environment provides children with opportunities to make meaning and take part in literacy activity that aligns with their own purposes and interests (see Dixon, 2011). Furthermore, time is important when thinking about children's prior experiences and histories. Lemke (2001) highlights how we draw on multiple timescales to make sense of experiences and construct meaning in the present. In this way, histories, family, home and community experiences that have taken place across timescales, are manifest in the meaning making endeavour of the present. Compton-Lilly (2011) provided an illustrative account of one student who drew on family and historical events as she moved through school, invoking selected discourses of literacy education and schooling in order to make sense of her own ongoing experience. When considering time from multiple timescales the idea of a neutral trajectory of development is called

into question. Lemke's work (2011) and Compton-Lilly's illustrations suggest that meaning making and making sense of literacy learning is tightly bound with family discourses, memories, and experiences, brought to the fore in children's ongoing experience. Furthermore, meanings are made are constantly made and re-made across time and are therefore temporarily contingent. The landscape of learning may be far more complex that can be accounted for in a simple linear trajectory of individual competencies.

3.6 Chapter summary and research questions

In Chapter 2, I problematised the conceptualisation of literacy development dominant in current educational policy in England and compared this with more expansive accounts drawn from ethnographies examining literacy from sociocultural perspectives. In Chapter 3, I provided insights gained from sociocultural accounts in order to focus on the ways in which literacy practices are implicated within broader aspects of human activity and experience. I introduced sociocultural conceptualisations of agency and drew attention to the ways in which the child has been seen as an active agent in taking-up literacy practices.

A semiotic account of meaning making draws attention to the multimodal and embodied nature of young children's meaning making and focuses attention beyond meanings generated purely from a linguistic frame. Play has been seen as supportive of literacy development, and such play has been seen as the construction of narratives and play texts as children investigate the multimodal and material affordances of the environment. By examining literacy as a culturally embedded practice, I have explored the significance of the materials that mediate such practices. Young children here are seen as drawing increasingly on the multimodal

affordances of the materials and people around them in order to communicate culturally significant meanings. I have highlighted how children playfully innovate with semiotic resources, materials and the ways that this gives rise to young children's literacy practices.

The early years learning environment is organised in very distinct ways in line with pedagogical intentions, and as such it can be seen as a 'tool' for literacy instruction.

The enabling classroom environment is one of the four themes in *Development Matters in the Early Years Foundation Stage* (Early Education, 2012, p2). The guidance suggests that children should be offered 'stimulating resources relevant to all the children's cultures and communities' and 'rich learning opportunities through play and playful teaching'. It is clear from the studies consulted in this thesis so far, that that the learning environment is highly significant to children's meaning making.

There is little research however, that provides a rich description of the *process of meaning making* that takes place in direct relation to children's interaction with the classroom and its materials in a school setting with children aged 4 and 5. I argue that gaining further understandings of the ways in which children interact with each other and with the enabling environment during self-initiated activity is a significant area of research. It is clear that resources are carefully selected and organised for young children in very specific ways to support learning. It is also clear how classroom resources and their organisation, and the pedagogical intentions for their use, will influence what children do. However, currently there is little research that examines in detail what children do moment-by-moment in the classroom environment during self-initiated play activity, or the way that the environment shapes children's activity. Therefore, my overarching research aim for this thesis was as follows:

To investigate 4 and 5 year old children's meaning making moment-to-moment during self-initiated play activity in a classroom

This overarching aim was guided by sub questions raised as significant in Chapters 1 and 2 as follows:

- What kinds of material resources were available to children and how was the learning environment arranged?
- What did children show interest in?
- How did the children transform the classroom and its materials?
- What meanings did children produce as they interacted with materials?
- What was the relationship between material resources and meanings made?
- In what ways could the children's activity be seen as agentic?

In order to investigate the above aim and questions, I chose to carry out an ethnographically informed study of a group of children during their first year of formal schooling. I describe, justify and critically reflect on this process in Chapter 4

Chapter 4

A methodology for observing young children's meaning making practices

4.1 Introduction

The research study presented in this thesis was an ethnographically informed study during which I observed the meaning making practices of a group of four and five year-old children in their first year of formal schooling. In total I made 15 two-hour visits to the school between September 2014 and June 2015 (See table 4.1 for a summary of times and Appendix 1 for dates of visits). During this time I focused on the ways in which children accessed the continuous provision in the setting, largely when undirected by an adult. Themes of agency and the value of children's exploration in 'the enabling environment' (Early Education, 2012, p2) are clearly brought to the fore through the literature discussed in Chapter 3. Therefore, I was interested to explore children's meaning making practices in the classroom environment where children were seen to have more control over the direction of their activity.

In this chapter I will justify why I chose an ethnographic approach and detail the process I undertook. I will explain how the methodological approach taken was both cognisant of and consistent with framing literacy as situated and sociocultural as explored in Chapters 2 and 3. After justifying my use of an ethnographic approach, I will describe the methods I used which involved observation of children's self-initiated activity. This led to the generation of field notes, filmed footage and photographs. Following on from this, I will explain my approach to analysis, showing

how and why I selected particular episodes to analyse further. I will explain my approach to coding data and the decision I made about which episodes to use as illustrative examples in Chapters 5 to 7. I will explain how I addressed potential ethical issues at each stage of the study, present the limitations of the methods I used and reflect on a number of the dilemmas I encountered as I undertook fieldwork.

4.2 Justifying an ethnographic approach

In Chapters 1 and 2, I summarised the ways in which differing approaches to researching children's literacy practices have generated different kinds of knowledge, making a case for qualitative enquiry that can provide detailed and rich insights. I drew in particular on those studies that examined literacy as a social practice, such as Heath's seminal study (1983) and the classroom ethnographies carried out by Dyson (2008). These studies inspired me to use an ethnographic approach in order to follow my own research aim: to investigate 4 and 5 year old children's meaning making moment-to-moment during self-initiated play activity in a classroom. It is important to state here that due to being on a part-time professional doctorate course, I was unable to conduct a full ethnography of prolonged day-to-day observations.

Heath (1983) was clear to critique educational studies dependent on large-scale comparisons which correlate measurable variables with outputs on students. Instead, Heath argued that detailed descriptions of what *happens* to children need to be considered. Similarly, I reflected on Moss's (2012) plea for detailed empirical research studies that examine how policy shapes children's experiences of literacy in the 'here and now'. Ethnographic research studies are largely qualitative, and

'qualitative inquiry that explores the lived experiences of young children has the potential to shape early childhood theory, research, policy and practice' (Hatch and Coleman-King, 2015, p442). It is on that note that I further justify an ethnographic approach.

The aim of ethnographic research is to understand people and their motivations for the things they do (Aubrey, David, Godfrey and Thompson, 2000). Ethnography emerged from anthropological studies that sought to understand cultures and ways of life and involves researchers focusing in-depth on a particular context or group of people (Savin-Baden and Howell-Major, 2013). Key characteristics of ethnography include the researcher seeking to understand what is usual within a context over an extended period of time. Research questions are examined through detailed recorded observations of individuals within the contexts in which they interact to explore patterns of behaviour, the assumption being that such patterns can be seen as manifestations of internalised ways of being (Aubrey et al. 2000). In ethnography, the people being studied are often referred to as participants, situating them as equal in the research endeavour. Ideally the researcher works with and alongside the participants so that they gain a closer understanding of the setting or context and then presents the findings from the participants' points of view. An ethnographic study then can be a mutually supportive process in which the researcher and participants might understand themselves better (Aubrey et al. 2000).

Traditionally, ethnographic research has focused on social, cultural and linguistic ways of being (Aubrey et al. 2000). Ethnography was a particularly pertinent approach for my study which constitutes an examination of a group of young children's meaning making practices. I needed to look at the range of activity that was taking place in close detail. Furthermore, I needed to be in the midst of the

research site to see and experience the activity as it was taking place in order to understand it better. The decision to carry out the study over time was also important, not because I was looking at progression or a developmental trajectory, but because my intention was to gain an account of what was usual, which required a 'prolonged and repetitive data collection' (Punch, 2009, p128).

Ethnography offers an opportunity to carry out naturalistic observation. Adhering to this principle, the research site of the classroom was 'not contrived for research purposes' (Punch, 2009, p154). This led to making open-ended observations and allowed me to observe 'behaviour as the stream of actions and events as they naturally unfold' (Punch, 2009, p154). Ethnography is an appropriate approach for learning about young children and seeing what they do from an asset perspective as it seeks to understand what they *can do* and *what they do bring* to the classroom. My starting point for the observations was seeing the ways in which children make meanings. Aubrey et al. (2010) remind us that ethnography:

...includes in its focus, sociocultural knowledge which is understood as playing a crucial role in the ways people learn the appropriate social behaviour that is necessary for socialisation and enculturation into their own community. Ethnography also assumes that the participants themselves don't exist in as *tabula rasa*, but bring knowledge and understandings with them to the context and events in which they are participation and where they are being observed.

Aubrey et al.,2010, p115

Discussions regarding how long an ethnographic researcher should spend in the research field vary. Key for Spindler and Spindler (1992) is that the researcher observes the field as activity takes place:

The requirement for direct, prolonged, on-the-spot observation cannot be avoided or reduced. It is the guts of ethnographic research.....The primary obligation is for the observer to be there when the action takes place.

Spindler and Spindler, 1992, p63

Woods (1992) argues that this prolonged observation is essential if the researcher is to gain insights into patterns of behaviour. Punch states that 'closure is achieved by recognising the point at which nothing new about its cultural significance is being learned' (Punch, 1992, p128). As stated earlier, the actual time I had to conduct field work was limited and constrained by a number of factors such as my workload as a full-time lecturer in a busy Teacher Education department, fitting in with the school routines and commitments of the setting. This meant that there were many activities that I missed during the children's week. During my research study I conducted fifteen visits of two hours duration in order to observe children's self-initiated activity in continuous provision. At that point, I did begin to see examples of similar activity and was able to draw some conclusions that I report in this thesis. I explain my process of data generation and analysis, and how this led to my thesis in the sections that follow.

4.3 Systematic empirical inquiry through observation in a naturalistic setting

In preparation for the research study, I carefully planned and trialled the methods I would use in order to generate data that I believed would provide useful insights into young children's meaning making activity. Foster (1996) describes how the researcher first needs to decide what will be observed and why. As my study was investigating children's meaning making practices, I made the decision to observe children's activity during the time while they were accessing continuous provision. I made this decision as I was aware that adult intervention in children's activity shapes

the children's responses in very particular ways and that indeed, this is an important part of the pedagogical role. While also acknowledging that the classroom, its materials, and the children themselves would shape the meanings that were made, I wanted to observe children's meaning making in instances when it was not *directly* mediated by adult intervention.

Hatch and Coleman-King (2015) summarise common elements of qualitative research. Firstly, and as described above, it was important that I carried out the research in a natural setting, observing children's day-to-day, self-initiated activity in the early years setting. Secondly, as the researcher, I was present in the field and whilst present, the direct generator of data. I followed children as they followed their interests. I observed their activity, wrote field notes, gathered film footage, and took photographs of classroom areas, the things children made and did. Where I deemed I was not being intrusive, I talked to children. I spoke to the teaching assistant, Michelle (pseudonym) and Alice (pseudonym), the class teacher, as I went about my fieldwork. I met with and discussed the project with Michelle and Alice prior to the study, part way through the study, and after the fieldwork was completed. We looked at extracts of data together and discussed our perceptions of what was taking place.

The primary method of data collection in ethnography is in-depth participant observation that comments on the actions and interpretations of meanings of the participants. Observation is a fundamental human social activity which is utilised as a systematic technique for collecting and analysing information about how people behave (Scott, 2000). This may be naturalistic observation which presents a narrative account of what people say and do. It may include unobtrusive or non-reactive observation where the researcher avoids intervening in the action being observed. As far as I could, I tried to keep my observations unobtrusive and non-

reactive. Data collection involved weekly visits during which children's activity was observed and filmed. I also talked to children about their activity as it took place in 'real time' as they played. I went into school and observed the children in order to see what they were doing, what was concerning or interesting them, observing them and talking to them about their activity.

In order to make my process of observation and data generation clear, in the next section I describe the research setting and provide an overview of the process I followed during each field visit. Then I will provide a more detailed reflection on the research methods, including a reflexive account of the strengths, drawbacks, dilemmas and issues I experienced through the implementation of the methods.

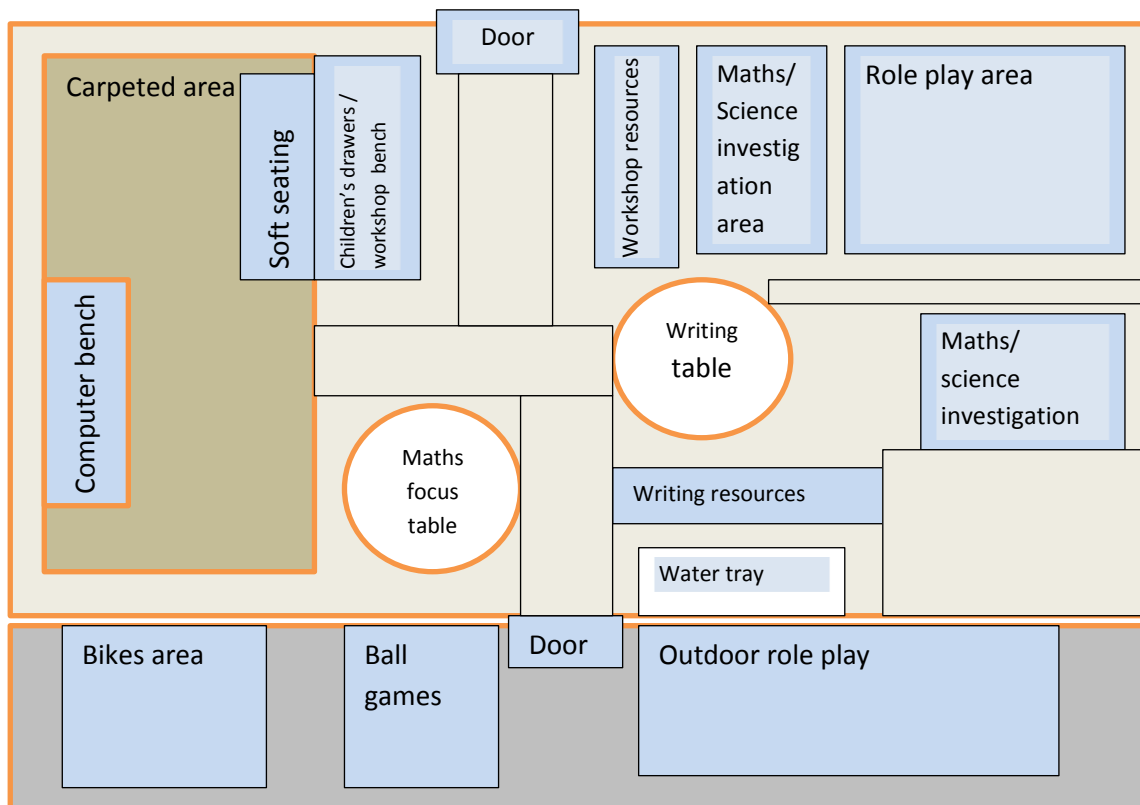
4.4 Introducing the research setting

The children in this research study were a group of twenty-four, 4-5 year olds in a Reception class within a school. The setting is in the north of England. Census data (link withheld) illustrated that the school serves a social, cultural and linguistically diverse community of pupils. The Foundation class that took part in this study included those of White British, Portuguese, Asian and Afro-Caribbean heritage. Census data suggested that the number of pupils supported through pupil premium, the proportion of disabled pupils or those with special educational needs and those supported at school action plus or with a statement of special educational needs, was slightly above or above average.

Provision in the setting was in line with that recommended in England's statutory curriculum for children aged 0-5, the 'Statutory framework for the Early Years Foundation Stage' (DfE, 2017). The class in the study were part of a Foundation Stage unit which comprised of two classes of four and five year olds. Each class had

its own class teacher and teaching assistant, and they had their own carpeted area where teacher-led activities took place. Much of the day allowed children to flow between the different areas and access the resources freely. Alice and Michelle, the early years practitioners, paid much attention and care to resourcing the areas to stimulate and cater for children’s interests. Areas of the classroom included large, open plan spaces that were freely accessed by children for the most part of the day. Figure 4.1 shows the layout of the classroom, including the dividing cupboards that sectioned off areas.

Figure 4.1 Map of the classroom



4.5 A snapshot of a typical field visit

Regular visits to the setting involved conducting naturalistic observations of children's self-initiated activity. As I arrived on each visit the children would be assembled on the classroom carpet and working as a whole group with the teacher. I would often photograph the rest of the classroom before the children entered it to see what resources were on offer, such as the small world area, or the resources on the writing table, or in the sand or water tray. I would then sit on the carpet with the class and join in with the activity taking place until it was time for the children to move to the continuous provision. Continuous provision is an important element of the 'Enabling Environment' (DfE, 2014, p2) which should offer 'stimulating resources relevant to all the children's cultures and communities, rich learning opportunities through play and playful teaching' and 'support for children to take risks and explore'. This part of the children's daily routine involved opportunities for them to follow their own interests and lines of enquiry, and was the focal point of my study.

On each visit, after the teacher input session had finished, children left the carpet area. I would scan the classroom to see where their interest took them and move closer so that I could observe the activity taking place. On most visits, there was some particular activity or set of resources that seemed to be particularly appealing to the children that they gathered around. I followed what appeared to be their interests, observed them and took film footage of their activities, sometimes talking to them about what they were doing. The time spent was very fluid in terms of what I observed and where I moved in the classroom, and guided by that which children were showing interest in. My visits also involved informal chat with Alice and Michelle, usually focusing on our reflections on the kinds of activities children were doing. The fifteen visits I carried out across the fieldwork followed the process as

described above. Table 4.1 below summarises the data generated during these visits.

Table 4.1 Examples of data to illustrate meaning making moment to moment (See also Appendix 1)

Number of visits/ hours -- 15 visits/ 2 hours per visit	
Observation activities during each visit	Data generated
Photographing learning environment and activity	65 still images of classroom and children's activity
Talking to children Making field notes Ad hoc discussions with teacher/ teaching assistant Observing teacher led input session Observing children's free flow activity	10,500 words of notes Maps and plans of learning environment/ movement maps
Filming episodes of children's activity	159 filmed episodes*. 254 minutes of footage <i>* An episode here is defined by when I started to film, and when I stopped filming. I filmed between 6 and 17 episodes on each visit lasting from 0:11 seconds to 7:39 minutes.</i>

4.6 Summary of data generated during the fieldwork and moving towards inductive processes.

The methods of data generation during fieldwork were guided by the central aim of my research as follows:

To investigate the process of 4 and 5 year old children's meaning making moment-to-moment during self-initiated play activity in a classroom

4.6.1 Photographing children's activity in the learning environment

In Chapter 3 I explored how classrooms and the material resources in classrooms have been seen as important influences on young children's literacy learning and broader meaning making (for example, Bomer, 2003). During the field work I took many photographs of the environment and the positioning of the furniture and resources within the environment. A number of these photographs show the setting prior to the children's activity within it, or how it was 'set up' by the teacher. Some photographs were of the learning environment with children in 'freeze frame' as they went about their activity. I also photographed the artefacts that children made in order to examine the way the children transformed the available resources and materials through their ongoing activity. Again, I saw this noticing of the children's artefacts as recognition of what they could do and of their interests and ways of making meaning.

4.6.2 Field notes

As I carried out fieldwork, I tried as far as possible to note down what took place. This was not easy as I could either film or take notes, but not do both, so I had to

switch between the two. Ultimately, I followed and observed that which seemed to be capturing children's interests. This meant, that essentially, the observations I made were of children highly engaged or interested in an aspect of the provision. Of course this was often interrupted as I often used my hands to respond to children's pleas for assistance. I also found that there was an intricate relationship between my observations and reflections. I therefore found the University of South Carolina guidelines useful in relation to writing field notes:

Analysis of your field notes should occur as they are being written and while you are conducting your observations. This is important for at least two reasons. First, preliminary analysis fosters self-reflection, and self-reflection is crucial for understanding and meaning-making in any research study. Second, preliminary analysis reveals emergent themes. Identifying emergent themes while observing, allows you to shift your attention in ways that can foster a more developed investigation.

University of South Carolina, 2017

I found USC's recommended approach most useful as it acknowledge how it was impossible to separate out that which was data generation, and that which was the initial considerations of how I might begin data analysis. During observations, I was thinking about analysis simultaneously, particularly in later stages of the project when I had begun to distill themes. Useful in U.S.C.'s recommendations are its suggestions that field notes should include both description and reflection.

Descriptive content includes a description of the physical setting, the social environment and patterns of interactions, participant roles, as far as is possible, participant perspectives, exact quotes or close approximations, and the impact of the researcher on the research field.

Reflective content involves the researcher's ideas, thoughts and impressions of what was observed, arising and unanswered questions that occur to the researcher, clarification of points and questions raised earlier in the study, speculative insights into why specific phenomena took place, and points for future observation.

Mostly, my field notes contained what U.S.C. describes as 'descriptive' features. My reflective log, written after my visits fleshed out my field notes and focused on what USC describe as 'reflective content'. Again, it is important to note that it is impossible to separate description, reflection and analysis as often it seemed that these processes were interacting constantly. As Jones, Holmes, MaCrea and Maclure (2010, p481) state, 'Attention is not just on what is observed but also what is going on with the observer'.

4.6.3 Filming episodes of children's activity

Ethnography traditionally relies extensively on field notes to record events and perceptions in the field. In recent years, it has become more commonplace to use video to make it possible to look repeatedly and in-depth at what is happening (see Wolfe and Flewitt, 2010). As I was interested in the many communicative modes that children use to make meaning, it was important to try and represent as far as possible detailed accounts of children's activity and to recognise and acknowledge the multiplicity of modes by which they communicate and construct meaning. Therefore, I filmed episodes of children's activity using a small hand-held camera. This allowed me to spend more time looking at the activity in-depth away from the research field as I carried out inductive analysis. Where I deemed I would not be

intruding on the children's play, I spoke to them as I filmed to gain insights into their activity from children's perspectives.

For social research which aims to examine the multimodal communicative repertoires children use to make meaning, filming is an invaluable resource as this shows how children orchestrate words, sound, gesture, gaze, objects and facial expressions to communicate meaning (see Taylor, 2006, 2014). It offers an opportunity for the researcher to give recognition to the sophisticated ways that children make meaning and recognise and draw attention to their concerns and interests as they follow these across moment, often communicating their interest through gaze and facial expression. Filming also offers the researcher the opportunity to analyse the affordances of the classroom environment, such as space and resources and other materials influence children's activities and collaborative meaning making. The micro-moments of meaning making can be easily overlooked or missed as they are observed in real-time. Filming can provide the opportunity to look and then look again at what took place.

Filming, however, presents an additional layer of mediation between the researcher and the research field under examination. Ihde (1990), for example, describes this as the *technics embodied* as the person behind the camera embodies camera technology, and later screen technology. The observations through the camera then and the watching of film clips with sound can become taken into 'my own perceptual body self-experience' (Ihde, 1990, p73). This process presents a filtered view of the data that can shape and distort both recollections of what took place in the field and/or create a new kind of reality shaped by the software of the technology. It is my view that the film clips have enhanced my observations and representations in this thesis in the ways outlined above but it is important to note that employing digital

technologies in the process, not only adds detail to what can be seen and recalled, but can shape and distort it.

4.7 Reflective log and reflections on the data generation process

After each field visit, I drew on my field notes to write a reflective log of my visits. This was an important process as it brought together key elements of the visits. It often provided a context or summary of the data I had generated, which by itself, could at times seem isolated and detached from the daily goings on in the classroom. My reflective log contained key elements that stood out as significant from field notes, including the conversations I had with school staff. These often seemed like a kind of sharing of what stood out or was of interest as I observed as a researcher (and once early years teacher), and the teachers observed from the perspective of their pedagogical approaches and goals. We were all equally interested in many of the events that took place. My reflective logs also gave a direction to my thinking in that I reflected on what it was like to be in the research field, observing children and the kinds of uncomfortable feelings that being in someone's classroom often brought with it. Some of the moves I made in my thinking were captured in the reflective logs. My reflective log was also central in attempting to understand some of the dilemmas I faced during the research process, and the ways that I came to term with or resolved these. My reflective log then, underpins some of the reflexive processes I identified through the research process and the issues and challenges associated with the research tools I was working with.

4.8 The crisis of legitimacy and the crisis of representation

Savin-Baden et al. (2013) highlights two major issues with ethnography: the crisis of legitimacy and the crisis of representation. The crisis of legitimacy addresses the

issue of whether an ethnographer should measure the legitimacy of an action by their own world view or those of the cultural norms, beliefs and practices of participants. The crisis of representation centres on how ethnographers interpret and present the individuals and groups being studied. In my fieldwork I constantly questioned what I was attending to, what I was privileging and how I was being perceived. Although the methods I used were planned in advance, there were various shifts in how I saw myself and the children in relation to the data I was gathering through these methods. In some respect, this reconfiguring of my notions of observation and what it could and could not do continued throughout the study.

4.8.1 The challenge of the 'least adult role'.

An example of the crisis of legitimacy is the notion of how far an adult observer can ever play the 'least adult' role, or undertake 'unobtrusive' observation. Waller and Bitou (2011) claim that many research designs in early years settings are adult designed techniques. The main problem here is that the researcher may engage children to respond and participate in ways that reinforce teacher-pupil power dynamics (Waller and Bitou, 2011). To account for this, Gallacher and Gallagher (2008) recommend that the 'least adult role' or the 'stepping back' of the adult may be more helpful than providing activities for the children to engage with as part of the research. As explained earlier, I had made the decision to gather data whilst children were engaged in self-initiated activity, rather than when they were directed by an adult. I soon realised that this was not as simple as I first assumed. I discuss this later.

Waller and Bitou (2011) ask the challenging question of how a researcher can record children's activity without changing children's activity in some way. Genishi and

Dyson (2009) pose a similar question when they raise the point that possible tensions arise as children may be unwilling to engage in their 'unofficial worlds' when an adult is present, preferring instead to take carry out activity that they see as sanctioned by adults in the schools setting. The mere presence of an adult can shape children's activity, whether they are intervening overtly in the child's activity or not. Initially this was a concern for me and I was trying to play the 'least adult' role.

See notes from reflective log dated 5th October, below:

I am trying really hard not to get too involved in what the children are doing, or influence this in any way. They see me as an adult, another pair of hands that can help them, and I find it hard not to guide them, so that they don't see me as a teacher. I know they will change what they are doing if they see me as this. I am taken aback at how quickly I become the early years teacher again. I resist what feels like an instinct to teach them. I avoid striking up conversation but of course keep getting drawn into this. My biggest new role that is impossible to resist is certainly due to me having hands that can do things - things that the children want doing but they don't have the dexterity for. Today, I spent some time putting on fluorescent jackets with one hand, while holding a camera in the other (the children cannot go out to play without one - classroom rules). This makes me slightly anxious. The children are being encouraged to be independent, and some are clearly confounded by the task of putting a tangled up fluorescent jacket over an already thick padded coat. I go to an old strategy as a compromise, 'backward chaining'. I do some bits and the child completes the final step or two. I untangle the jacket, put it onto the child's arms. The child pulls it together and fastens the Velcro so completing the task. The educational adage 'What I can do with help today, I can do on my own tomorrow' slips through my mind and serves me as a justification. My anxiety was

that I was to compromise the rules being set in the classroom and more so for children who can't participate as they don't have the resources to do this. On a happier note, I am also really good as a sellotape dispenser. I can't refuse their requests for help; bits of sticky tape are so important to them. But somehow feel that my presence is influencing what is taking place too much. I think I will just need to find a way to accept this.

The above reflections point towards my failed attempt to play a 'least adult' role during field visits. I had limited success with this of course, and needed to rethink. I could also think of what I was there; to the children an adult who could help, or someone interested in what they were doing, or even (though I tried hard not to be) an annoyance. I was also simultaneously a doctoral student, a cameraman, a visitor in another teacher's classroom trying to give something and not just take. Being the 'least anything' was impossible, for any of us. But I did try to watch quietly without intervening. The above reflection is also a central to my move to a poststructural position on researching children's practices and interpreting the data, which I move on to explain in Chapter 7. The point here is that as the researcher, I could not detach myself from the unfolding of events in real time. The example above marked a turning point in how I saw myself as the researcher. It also raised questions for me about the ethical implications. If I am there, an adult, with a pair of capable hands, I should and therefore must intervene and help. This took me back to Law (2004) and heightened my awareness of the ways that research methods construct that which we investigate. As Law (2004) points out, methods and practices of methods construct the reality of what they are trying to investigate. I was a prime example.

4.8.2 Challenges of ‘researcher bias’ in observation

In this section I will explore the challenges that I experienced during the process of data generation that is related to bias. Bias is inherent in any form of observation. As a person involved in teacher education, and once an early years teacher, it would be easy for me to bring along positions of subjectivity or bias. As Punch (2009) points out, I may find it difficult to maintain an objective approach to research. This could lead to bias in the kinds of activity I followed, what I chose to analyse and what I chose to present. My prior experience and indeed my initial interest in the topic as explored in the introduction to this thesis stems from my work with children and concerns about their educational journey. These experiences would influence what I saw as I observed. Phillips and Burbules (2000) cite Popper and Wittgenstein who argued that observation is theory laden:

What an observer sees, and also what he or she does not see, and the form that the observation takes is influenced by the background knowledge of the observer - the theories, hypotheses, assumptions or conceptual schemes that the observer harbours.

Phillips and Burbules, 2000, p25

The theory laden nature of any observation may undermine the part played in the understanding of the world by participants. As a researcher I have considerable experience of working in the field of early literacy education but also theoretical perspectives upon this. Atkinson (2017) draws attention to the need for observation to be supported by theoretical ideas and constructs. He terms these ‘sensitising concepts’ (Atkinson, 2017, p6) and argues that these give perspective to fieldwork and provide the researcher with ‘directions along which to look, and also which to develop our thinking’.

During my study, I arrived at the understanding that I could address the inevitable issue of bias by acknowledging that there is an inevitable subjectivity in research, and furthermore, by being clear about the theoretical constructs through which I was observing activity. I was clearly a big part of what I was investigating and it was impossible to 'remove' myself from the study. Indeed, Eisner argues that sensibility and perceptivity (which may be seen as subjective) are important in qualitative research as the observer perceives the world through their bodily senses:

The self is an instrument that engages the situation and makes sense of it. This is done mostly without the aid of an observation schedule. It is not a matter of checking behaviors, but rather of perceiving their presence and interpreting their significance.

Eisner, 1998, p 34

In my fieldwork, I aimed where possible to be guided by the children and follow what I perceived as their intense interest, attempting then, to interpret the significance of this. Adding a further dimension to the idea of self as instrument, Pink (2009) describes the multisensory nature of being in the research field. She suggests that when engaged in fieldwork, the researcher should consider the experience of being in a place, with attention to the political aspects of that space. For me this meant staying attentive to what was going on around me, and also being aware of the impact of my own presence in the setting. I was also acutely aware of the ways of being and expectations of children and adults in school settings, and how these things were influencing what took place.

In summary then, it was crucial that I was aware of and acknowledged my positionality and my present and past beliefs and feelings in my thesis, recognising the many ways these had been forged by my experiences. Being aware of that this

influenced what I paid attention to and how I interpreted what I saw and how I represented my data throughout the study was critical. I also acknowledge here that the study was based on empirical data and the level of reflexivity and self-criticality that came into play has been a continuous feature of the study that has continually shaped my reflections and interpretations.

4.9 Ethical considerations in observing young children's activity in a school setting

In this section, I draw attention to ethical considerations of the study. Hammersley and Traianou (2012) summarise ethical considerations as being inherent in the way that studies are conducted. He argues that there are common features that distinguish the ethical from the unethical. The ethical being:

1. To do with what is of ultimate value rather than what is only of instrumental value;
2. Concern for the interests, feelings, or rights of others versus following self-interest;
3. Consistently observing principles or rules rather than acting in the most expedient way in the circumstances;
4. Concern with higher values, such as self-realisation, the common good, or the interests of science, rather than other consideration such as financial return or social status;
5. Acting from duty versus responding to desire or inclination;
6. Behaving thoughtfully as against impulsively.

Hammersley et al., 2012, p20

The above principles are difficult to interpret as these are highly subjective. What might be considered 'ultimate value' is clearly impossible to define. And although I believe on a personal and professional level that the research I undertook was in the interests of advancing understandings of literacy, I cannot be certain that this will be the case. I do believe that it is important to continually ask oneself this kind of

question and to know that you can never be entirely sure that there are no ill effects of any work that you do. I did however find Hammersley et al's. (2012)

considerations valuable in the way that these informed my thinking in carrying out the research with as much care for participants as possible.

Miles and Huberman (1994, p290) suggest that a project must have 'worthiness', that is, it must be worth doing. My concerns, as voiced in Chapter 1, are what I see as potential inequalities in the educational system and the ways that this places higher value on some children's literacy practices at the expense of others. My decision to observe children engaged in self-initiated activity was underpinned by this concern. I wanted to see what they brought to their experiences and value what they could do.

4.9.1 Protecting the rights and interests of participants

Hammersley et al. (2012) provide practical steps towards maintaining an ethical approach which includes protecting the rights and interests of participants, preserving people's privacy, avoiding causing harm and protecting people's autonomy. I followed the Sheffield Hallam University procedures for ethical approval as part of the doctoral journey, and this has involved gaining the informed consent of all stakeholders in the study. (These documents are in Appendix II) Gaining permission from parents was essential, but this has an added level of complexity.

Flewitt (2005) raises the issue of the selection of participants and the way in which parents may feel compelled to give consent for their children if they feel that this may help them 'get ahead' educationally. Flewitt (2005) therefore recommends that opportunities are built into research designs which give parents 'safe' ways of opting out. The parental permission letter, written by myself but distributed and collected by

the class teacher, clearly stated that whether they did or did not approve for their child to be observed in the study, this would not make any difference to their child's day, activity or opportunities in the classroom. Permission was granted from parents, the head teacher, and to the adults/ teachers in the school setting. In order to ensure anonymity I have refrained from including any details in my thesis that reveal the location or the name of the school. All participants have been given pseudonyms and all photographs that contain the school name or children's faces have been pixelated. I was very clear that my presence was to be as least intrusive as possible and adhere to conventions of naturalistic observation. Where my observations were interrupting a child's play, or they ceased their activity as a result of my presence, I stopped observing and swiftly moved away from the area.

4.9.2 Children as research participants

Waller and Bitou (2011) suggest that the way in which children are positioned as participants holds the key to advancing knowledge of children and childhood.

Acknowledging that childhood is a social construction the authors call for researchers to consider the values and principles which underpin the methodology and methods they use. Pascal and Bertram (2009, p254) explore tensions which exist when children are seen as 'active citizens' who are 'powerful, competent individuals who are well able to express preferences and make informed choices'.

The authors assert that within early childhood research there is a continued lack of voice or power: 'Many English children are not listened to in their daily lives, whether at home or in schools, and the development of their capacity to participate effectively as citizens is thus restricted' (Pascal and Bertram, 2009, p.253). The authors draw upon a series of research and development activities that have taken place over the

last fifteen years which have aimed to look at children's perspectives on their lives. They claim that experiences of children cannot be fully understood by adults and it is important that children's voices are heard 'as they speak' and not as we as adults interpret them.

Pascal and Bertram (2009) assert that the ideas about childhood, children's rights and democratic participation and voice inevitably lead to an ethical code which states that children are to be supported as active participants in any research and that their voices should always be central to the research process. An implication of this is that the researcher is accountable for the way in which the children's voices are represented in research. United N Convention on the Rights of the Child (1989) state:

Article 12: The Governments of all countries should ensure that a child who is capable of forming his or their own views should have the right to express those views freely in all matters affecting that child. And that the views of that child should be given due weight in accordance with the age and maturity of the child;

Article 13: This right shall include freedom to seek, receive and impart ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, of through and other media of the child's choice

Indeed, the UN Convention on the Rights of the Child (1989) gives children the right to be heard and have a voice. This has led Early Years practitioners into seeking ways to involve children's perspectives in the evaluation and development of practice and meant that researchers in the early years have become increasingly driven by the need to carry out inclusive research which views children as citizens with voice and power (See for example, Clarke and Moss, 2001; Levy, 2009).

Harcourt, Perry and Waller (2011) suggest that participatory methods have the potential to produce new knowledge of children's experiences which is informed by their perspectives. One of the key challenges of my study was gaining not only an insight into the ways in which children access the provision within the setting, but on gaining some sense of how they experienced the provision. Therefore, when I deemed I would not be interrupting children's activity greatly, I asked them to tell me about their activity.

Seeing and listening to children express their interests and priorities can provide unexpected insights into their capabilities (Pascal and Bertram, 2009, p255) and here again I find justification in seeing children's activity from an asset perspective, acknowledging what they can do and the ways that they can participate in classrooms. It is important to note that 'listening' here does not just mean attending to the spoken words of children, it means ensuring that children have the time and space in order to express themselves in whatever form suits them best and includes looking closely at children's body language, facial expression, gesture and movements. As stated above, listening in my study also involved noticing what children did with materials and resources and the artefacts they created. The attitude of the researcher towards children is crucial here. Where children are viewed as competent there is a role reversal of position and status (Waller and Bitou, 2011). In my study, I observed children at times when they were taking the lead in their own activity, following their own interests and lines of enquiry. I hoped that this would give value to what they chose to do.

I was keen that as far as possible, children would be research participants. Given my focus on children's self-initiated meaning making activity, this however, often sat in opposition to observing their naturalistic behaviour. At times, I would ask children to

comment on their activity and tell me about the activities they were undertaking. This also enabled me to partly address my concern that I could be merely projecting my own 'reality' onto the child's activity. Talking to the children at times when I suspected that I would not interrupt the flow of activity was important to the study and the data I generated.

4.9.3 The ethical challenges of filming children

Filming children brings about both epistemological and ethical issues. Research which aims to examine the multimodal communicative repertoires children use to make meaning, filming is an valuable resource as this shows how children orchestrate words, sound, gesture, gaze, objects and facial expressions to communicate meaning. However, the use of digital technologies presents further ethical challenges for early childhood researchers. Images and films are potentially very quickly disseminated across possibly unknown audiences or possibly to observers who have particular opinions about what they see. The gathering, storage and use of footage and photographs are of serious responsibility for the researcher. Flewitt (2006) proposes that as children get older, they may not feel that they would like their young selves being seen so protecting participants who are filmed or photographed is crucial here. Flewitt (2006) suggests reducing the quality of visual data by using techniques such as adjusting pixel settings in photographs to distort images. In the data presented in this thesis, I have pixelated images of children. In some respects, this reduces the impact of the data, as in many of the extracts it was the intensity of children's concentration, commitment and gaze on objects that signified their deep involvement in certain activities. But I made the decision to reduce the quality of the images in order to preserve the anonymity of the children involved.

4.9.4 Gaining children's ongoing consent to be observed and filmed

When observing in real time, the notion of 'informed' consent is paramount.

Alderson and Morrow (2004) argue that children should be seen as competent minors, and should be given opportunities to provide *consent* as oppose to *assent*.

Flewitt (2006) found children to be competent in giving consent. When working with 3 year-old children, Flewitt (2006) showed them recording equipment and found they could ask questions such as whether they would be able to hear their voice and who else would be watching and listening to them. From this Flewitt (2006) inferred that children could give informed consent on whether they would like to be filmed or not.

In my study, when I first went to the school, the class teacher introduced me and told the children I would be watching them and finding out what they liked to do. The children did not seem to be phased by my observation, or by the camera, although often children asked me to film them or take their photograph, so I happily agreed to do this. Some even did small performances of stories they had made up and asked me to film. In fact, the children were often filmed and photographed by the school staff, as the school had an electronic assessment tracker and they often gathered photographs and film footage as evidence and showed the footage to the children regularly. At times too, the children asked to do filming, for example, one child filmed a peg puppet he had made as it flew through the air. He kept crashing the puppet into the camera screen with a loud '*chink!*' It was not just my presence, but the presence of the camera that at times, greatly influenced what was taking place.

Flewitt (2006) makes a useful distinction between the processes of *provisional consent* and *negotiated ongoing consent*. She asserts that informed consent is very difficult to give prior to investigatory research, as the precise direction of the study may be unpredictable. Instead she presents the notion of 'provisional consent' which

is that consent is granted on the grounds that the research will continue to be negotiated and will develop broadly within participants' expectations. This process is built on reciprocal trusting relationships. 'Negotiated ongoing consent' involves the researcher being sensitive to children's responses and involves an ongoing dialogue between participants to ensure there are no ill effects of the research. In my study then, I followed similar principles to Flewitt (2006). If I was observing or filming and it seemed to be changing the child's behaviour in a way that seemed disempowering, such as the child looking away or shielding their activity in some way, I would stop observing and move elsewhere. I observed their body language, facial expression and gesture and acted accordingly to ensure that my powerful position did not stifle their activity. Furthermore, by reading their body language, I tried to infer whether or not they were comfortable in being observed or filmed.

4.10 Moving from data to inductive analysis and coding

As stated earlier, my reflective log acted as a bridge between my observations in the field, and the thoughts and inductive analysis. Below, in sections 4.10.1.1, I have included a sample reflection to illustrate the iterative process I undertook during the study. Consistent with Hatch and Coleman-King (2014) elements of qualitative research, I adopted a flexible design and followed an inductive process when considering the significance of the data generated across my visits. Induction involves the searching for regularities in the social world (Punch, 2009) and in relation to flexible design I became increasingly interested in the ways that children's interest was expressed through their continual movement within and across the defined areas of the classroom, and the ways in which they changed the available materials and resources. Essentially, my naturalistic observational tools of data generation and the decisions about what I was going to film remained the same

throughout the study; I watched, took field notes, talked to adults as appropriate, children, took photographs, and filmed activity where children were intensely involved with their self-initiated activity. In order to search for regularities or patterns in children's activity, induction was essential, and involved moving the data to a higher level of abstraction (Punch, 1994). The inductive process undertaken in my study led me towards a closer and more abstracted consideration of the significance of movement and materials in the process of children's meaning making. This in turn influenced the analytical tools I went on to develop, and the ways in which I came to represent my data. In this section, I illustrate my process of data analysis. This process involved a consideration of the composite data. I also provide a more detailed description of fine-grained analysis I carried out via multimodal transcription and analysis and movement mapping on two scales; that of walking movements, and that of more intimate child/object movements. Coding should 'identify salient features that will contribute towards identifying significant patterns of recurring behaviour' (Aubrey et al. 2000, p126). I began to code children's activity guided by my research questions as follows:

- What did children show interest in?
- How did the children transform resources and materials?
- What meanings did children produce as they interacted with resources and materials?
- What was the relationship between available resources and meanings made?
- In what ways could the children's activity be seen as agentic?

Salient features of the activity I observed were drawn from the composite data (i.e. my observations, field notes, conversations, photographs and filmed episodes of

activity). The quotation below by Marshall and Rossman (1999), sums up my experience of cataloguing and coding a year's bank of data.

Data analysis is the process of bringing order, structure, and interpretation to the collected data. It is a messy, ambiguous, time-consuming, creative and fascinating process.

Marshall and Rossman, 1999, p150

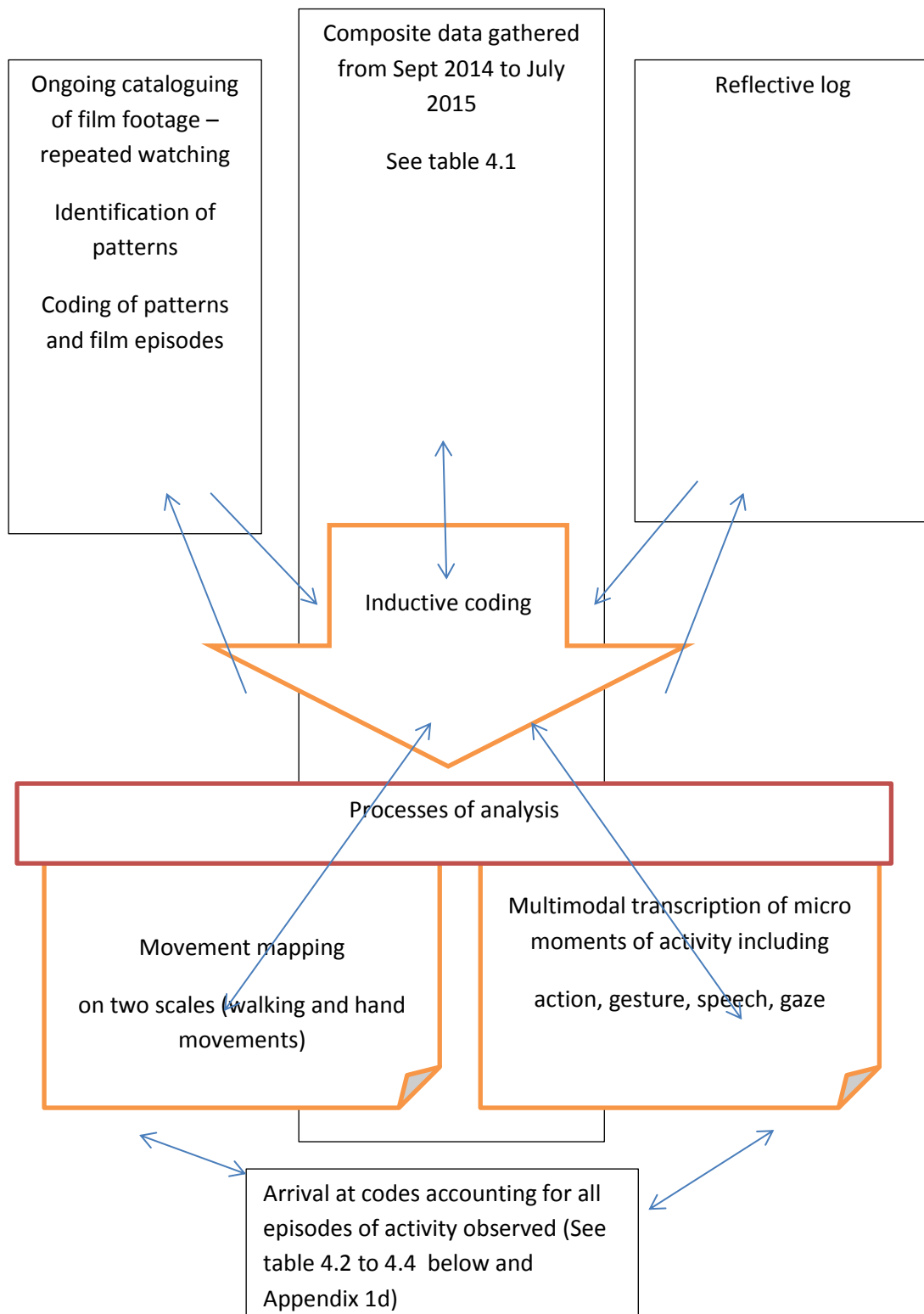
The inductive process began early in the fieldwork and was ongoing until I was satisfied that I had distilled key themes in my coding. This was also in a sense cumulative and emergent as what I became interested in sharpened as I gathered further data in the field and began to focus on specific aspects of what they did. Pahl and Rowsell's comments below are reminiscent of the ongoing and iterative process I undertook that moved across my field visits:

The research process then becomes a kind of dance between the field and the data, and the data themselves are part of a process of discovery and are not reified or rendered static.

Pahl and Rowsell, 2015, p2

Figure 4.2 below illustrates the inductive and iterative process that I moved through during the course of my visits.

Figure 4.2 Flowchart from data generation to analysis



4.10.1 The process of inductive coding

As I began coding I was concerned that all activity should be accounted for across the composite data within the codes and because of this, coding took a number of forms and drafts as the study progressed. My early stages in coding and cataloguing my data involved making links between children's chosen activity and those activities associated with literacy. These are presented in Table 4.2. below.

Table 4.2 Coding stage 1

Code	Activity associated with schooled literacy (SL)
RP	roleplay stimulated by materials/ organised areas/ literate 'behaviours'
ON	oral narratives shared with others
PT	play text introduced – imaginary story or situation created by child or children to underpin or explain the play action
WR/ R	practices associated with schooled print literacies (name writing/ drawing objects/ letter formation/ emergent writing/ reading)
DL	Children's digital literacy practices

The stage from initial analysis to beginning to formulate what might be of significance in terms of children's meaning making was an important one. A notable point to make here is that initially I was keen to observe activity that children took part in that involved any act of reading or writing. This is reflected in my first attempt at coding Table 3.2.1. My attention, although initially focused on events surrounding literacy, quickly shifted (from 22nd September) to a broader range of activity as I increasingly began to see the whole range of children's meaning making activity as inseparable from their developing literacy practices.

4.10.1.1 Refining the focus

My observations increasingly drew my attention to what children did with materials, and the high levels of absorption, involvement and energy that ran alongside certain

activities. Very often, my attention was drawn to how children used such resources in unpredictable ways. This refining of the focus of my attention is apparent in my reflective log from 29th September, below

*After the Frozen spot tray incident last week, it did appear that the classroom areas and materials children were creating were much more of interest to them (than the writing table activities, for example) and produced very open-ended responses. I started thinking further about the relationship between the classroom and the materials, and early literacy. I started to think about how life happens in spaces and with things... moving things and changing things ... ordering and shifting the environment – and the spontaneous emerging of this. Lena had an idea that she was creating a Seaweeds Sea. Where did this come from? I could suppose it was the sea in the film Frozen that swallows up Anna and Elsa's parents, or the sea that is a key feature of the Frozen port where the girls live. I could suppose that the green cellophane in the workshop area prompted an interest in seaweeds and sea. But the idea that **something** was being created became the trajectory followed by the group of girls as they made artefacts, cutting, shaping, joining and combining available materials. I can't know what prompted this activity apart from the desire to do things, to shape an environment, to take some kind of control over it by giving it meaning. But it was not a planned thing by either the teacher, or the children.*

The above reflection from my reflective log and field notes marks a significant change in my research focus in that movement and the changing and shifting of materials was emerging as a salient feature of the meanings that were being made. Children's interests and activity seemed to be stimulated by the *possibilities* of the environment as they moved and played alongside each other. By paying attention to

what children were paying attention to, I was drawn to how they shaped the classroom. I found that what I saw was startlingly familiar and for a time, I was mystified as to what there was to find out that I had not already considered. Despite this, I kept pursuing what I perceived to be of interest to the children, trying to record what they were doing, and trying to understand why such activity might be of significance. At about this point, I needed to re-adjust my coding. Table 4.3 illustrates this change. At this point, I kept the original coding regarding schooled literacies, and added coding for ‘children’s transformations of resources’.

Table 4.3 Coding stage 2.

Code	Activity associated with children’s transformations of resources
CMR -	changing materials or resources by innovative interpretation, repurposing
CMT-	Using tools to change materials and resources
	Activity associated with children’s transformations of the classroom
MeM-	merging materials / resources across more than one designated classroom area
MoM-	moving materials / resources across designated classroom areas
MiM-	moving materials/ resources within classroom areas

As I observed over time, I began to see patterns in the areas of the classroom that children seemed to use more than others, such as the workshop area, or the carpeted area. Observing children’s comings and goings to and from popular areas drew my attention to the pathways children took to and from these areas and I added the following two categories to produce Stage 3 of my coding (See table 4.4 next page), forming a distinction between those pathways that were designated, and those that children formed as they moved to areas of the classroom that interested them.

At this stage, I now had a range of codes which accounted for all observed activity, focusing on children’s interest and activity in the classroom. In the next section I outline the tools of analysis that I used during the study. As I present these, I explain how these evolved as I began to focus increasingly on children’s movement during the study and the flows of this. A full list of coded data samples can be found in Appendix 1d.

Table 4.4 Coding stage 3

	Activity associated with moving across classroom areas
PW	Creating new pathways between areas
PWD -	Pathway designated – pathway across or between classroom areas intentional use

4.11.1 Tools of analysis : Analysis of micro-movements

I used multimodal discourse analysis in order to examine the many and various modes of communication used in the children’s interactions (Taylor, 2014; Jewitt, 2009). Purcell-Gates, Perry and Briseno (2011) describe the tensions and strengths of conducting a study which uses both a well-established ethnographic approach, and also includes multimodal analysis in order to investigate literacy practices.

Similarly, Flewitt (2011) argues that tensions can arise between, ethnography and multimodal analysis, as these have potentially conflicting epistemological framings.

This tension is inherent in that multimodal analysis removes data from its framing, further withdrawing it from participants and their perspectives of the experiences.

However, Flewitt (2011) also states:

Incorporating a social semiotic approach to multimodality produces rich insights into the complexities of early literacy development which can inform culturally sensitive theories of literacy as a social practice.

Flewitt, 2011, p293

Flewitt (2011, p297) asserts that the combination of approaches can reveal 'how micro-moments of multimodal meaning making unfold in a complex networks of socially-situated norms and practices'. This was particularly useful for my study as I wanted to examine young children's meaning making practices from moment to moment. Furthermore, multimodal analysis can reveal the ways in which children's multimodal interactions are shaped by and also shape the ongoing environment.

Multimodal transcription then became a tool for analysis, as I took filmed episodes from the data generated and analysed children's semiotic repertoires closely. By combining ethnographic data in the form of researcher reflections on being in the field, I observed activity as it took place and so was able to situate such micro-moments within the broader context of children's activity in the classroom (see Taylor, 2014). In order to make detailed observations of what took place across moments I drew on the work of Taylor (2014) in noting that 'communicative practices are constituted of multiple modes and that semiotic resources are equally powerful' (Taylor, 2014, p6). I attempted not to privilege speech in my observations but was equally aware that when I spoke to children, I was asking them to recast their meanings into speech, and this changed them in some way as these were transmediated into a different sign system (Kress, 2010). When devising a grid for transcription I had to make a decision about what was to be included as is impossible to include every movement or nuance in semiotic orchestrations (Taylor, 2014). I was aware that much of children's meaning making is synaesthetic (Kress, 1997) and for this reason I selected the following as transcript headings:

- Gaze

- Action
- Gesture/ facial expression
- Speech

I am fully cognisant that action and gesture and gaze have overlapping definitions. For the purpose of this study I have defined them as follows. Firstly, I used children's 'gaze' as the starting point, as this signified what the children were paying attention to and therefore signalled their interest (Norris, 2011). In this study I use gaze to identify the direction of children's attention, that is, what they are looking at. Secondly, I included 'action' in order to record children's activity as they handled and manipulated the resources and materials to hand. In the third column I included 'gesture and facial expression' as I saw these as important to the ways that children expressed interest and communicated meanings to each other. Here I use gesture to mean a communicative movement of the hands or other part of the body. The final column includes vocalisations/ speech. This is prevalent in some episodes, and absent in others. By placing it to the right of the grid (see Figure 3.N below), I am drawing attention to the ways in which children's talk often seemed to follow their action. The time code in the left-hand column of the multimodal transcription grid shows how the transcribed extract sits in relation to the filmed episode. I transcribed these episodes 'by hand' after repeated watching of the filmed episodes. In analysing these transcripts, I was able to closely observe the multiple modes that children employed during the process of their meaning making in relation to the activities and resources to hand in the classroom. This enabled me to consider how interest is shared across children (as there are often a number of children interacting in any one transcript) and how interest plays out across small movements made by children.

Table 4.5 Multimodal transcription grid

Time code	Gaze	Action	Gesture/ Facial Expression	Speech

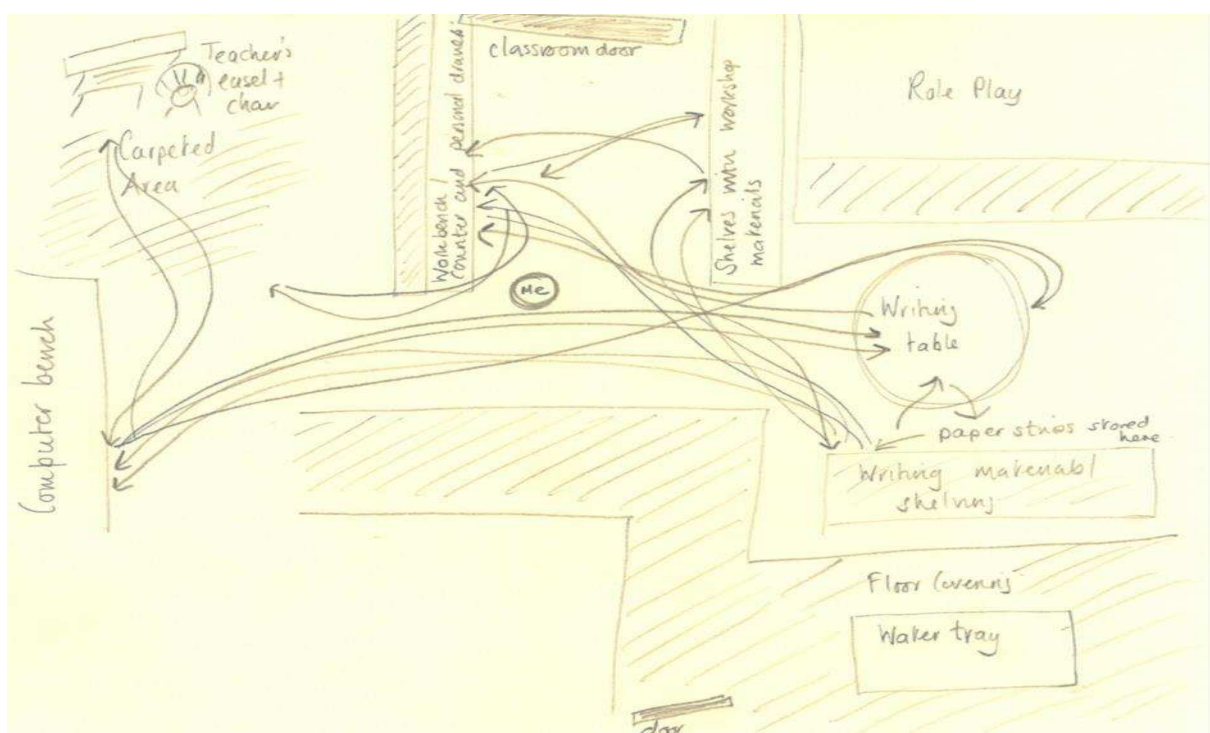
4.11.2 Analysis by movement mapping

As I became increasingly interested in the patterns of movements children made across the classroom and the areas of the classroom, seeing this as communication (Hackett, 2014) and of an expression of children’s interest, I began to map their movements and draw diagrams of the flows of movement that took place. I provide an illustrative example in Figure 4.3 below. Further exemplification can be found in Appendices 1a to 1c.

The first two photographs are still shots from my film footage. They show the hand movements of the child (See also Figure 4.3 below). Here starting point of the movement extract is shown by a small black circle, and the direction of the movement and resting point, shown by the black arrowhead. The second map shows larger movements as the children walked across and around the classroom from area to area during episodes of activity. These are drawn free-hand and not to scale. It is also important to say here that as I stood and moved as I was observing it was impossible to note all children’s movement. Similarity with the small-hand movements, as with multimodal transcription, it is impossible to account for all action

that took place. However, these maps to attempt to capture the patterns of children's hand movements and 'larger' flows of movement I observed across classrooms.

Figure 4.3 Movement maps



4.12 Further analysis: identifying interest/movement formations

Data collection began with observing children's interest and activity that could be constituted as schooled literacy. By observing their self-initiated activity and taking account of that which caught their interest in continuous provision, I was ultimately drawn to different kinds of activity that took place. This in turn influenced the analytical tools I was used as I attempted to account for children's action. I was clear from the start that I would conduct multimodal transcription and analysis in order to determine how children's semiotic repertoires emerged and how far this was stimulated by the classroom resources and environment. Furthermore, I could see how children's changed the classroom resources and areas as they ascribed them with meanings. The movement mapping illustrated in Figure 4.3 (previous page), arose as an analytical tool as I became increasingly interested in the interrelationship between children's interest and their movement around the classroom as they changed the spaces and materials/ resources.

Reading across my data I identified three different interest/ movement formations associated with what seemed to be different kinds of activity. In the chapters that follow I have therefore selected examples from each of these formations in order to show patterns of children's movements during episodes of intense interest. By interest/ movement formations I mean patterns of movement across and within the classroom that frequently occurred as children followed their interests. From my data I identified three interest/movement formations: converging, focal to radial, and focal. 'Converging' is a movement/ interest formation where children collectively bring materials and ideas together to one particular classroom area or space. This results

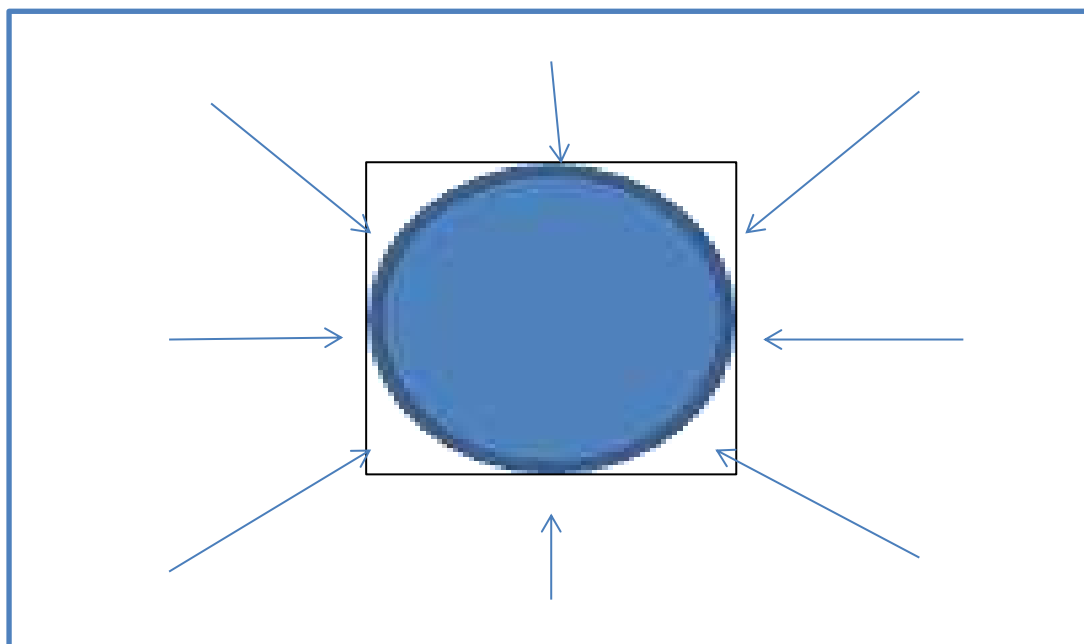
in children producing a shared or imagined space, usually populated with collected or jointly produced artefacts

'Focal to radial' is a movement/interest formation where children start with an interest in a set of resources or materials in one area and take these from that area to produce multiple artefacts/ or populate different classroom areas with the materials/ resources.

'Focal' is a movement/interest formation is where children gather around a focal point. A focal point can be an area and/ or a resource/ set of resources. Here an episode of children's meaning making is more likely to remain within that space or on that particular resource.

These movement/ interest formations can be represented as in Figures 4.4, 4.5 and 4.6, below.

Figure 4.4 Converging movement/interest formation



Figures 4.5 Focal point to radial movement/interest formation

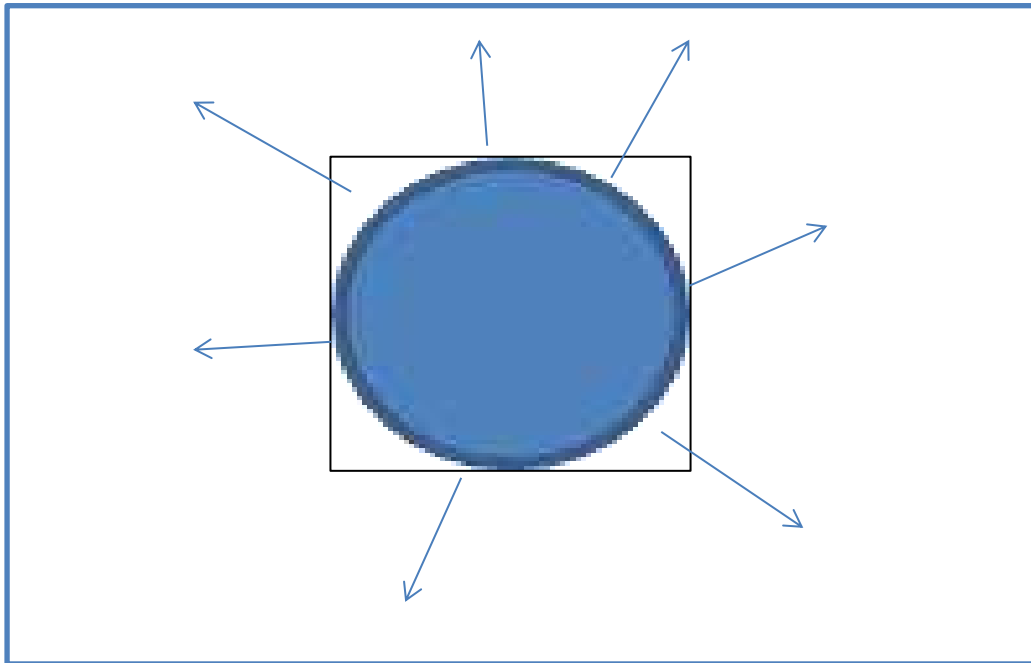
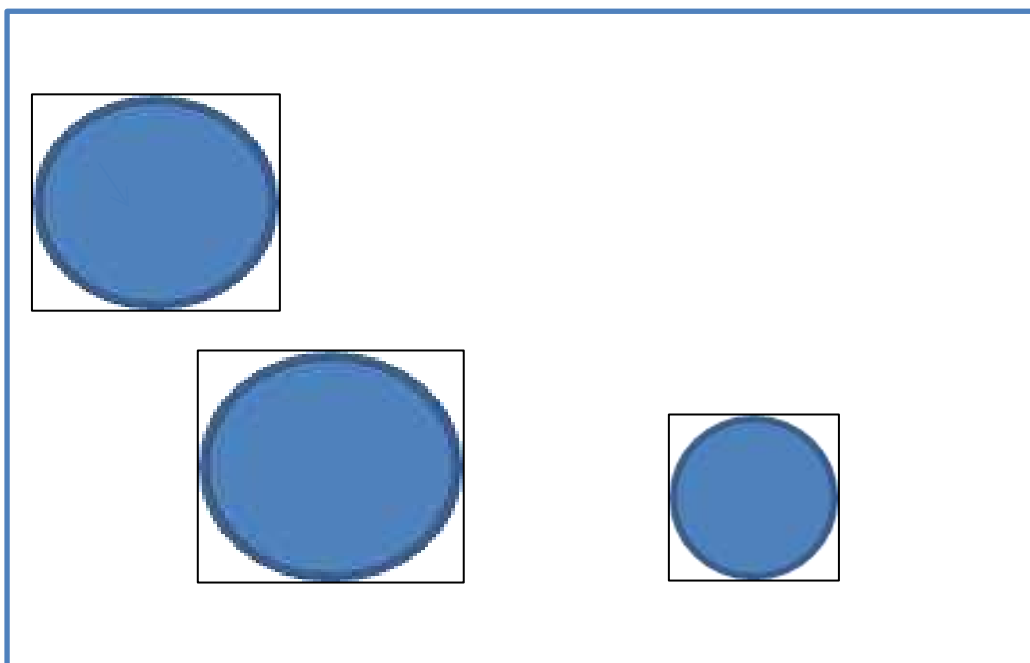


Figure 4.6 Focal point movement/interest formation



It is important to note that these three different types of interest-movement formation take place simultaneously across different groups of children. So in any one time in the classroom, a child or group of children might be engaged in any of the above. Likewise, patterns of activity can change or shift from one interest-movement formation to another as children intermingle across groups and chose to undertake a different activity. It is also crucial to state here that while utilising these categories involves isolating different sequences of activity, much of children's activity was fluid and did not present determined beginning and end points. In the chapters that follow I will present detailed examples of converging movement-interest (Chapter 5), focal point to radial movement-interest (Chapter 6) and focal movement-interest (Chapter 7) in order to illustrate how each category of activity plays out during the meaning making process.

4.13 Movement as multi-scalar

As I undertook analysis of children's movements, three broad scales of movement that played out through meaning making came to the fore. These scales of movement were evident in all interest/movement formations, and therefore are present throughout Chapters 5 to 7. However 'walking' was a particular significant feature of converging movement interest, and focal to radial interest/ movement. Again, it is important to point out here that movement is multi-scalar, but I have made a distinction between small bodily movements, walking (or moving around the classroom 'on foot') and hand movements, in order to generate insights into the role of movement in the meaning making process.

- Walking- Individual/ pair/ small group movement involving walking across and between classroom spaces

- Hands - Movements of the hands affecting changes on materials, sometimes with tools, giving rise to the reshaping or repurposing or re-imagining of classroom materials such as puppets and other classroom objects
- Small bodily movements – these include orchestrations of movements as identified in multimodal analysis such as gaze, gesture, action, facial expression, and gaze.

4.14. Representation of the data

In each of the chapters that follow I draw on excerpts of data to represent episodes that are illustrative of the different ways in which movement played out across and through children's meaning making. For each episode I juxtapose four different representations. These include:

- Narrative accounts based on my field notes which represent what I perceive as having taken place

Narrative accounts are the anchor to the representations as they deliberately places myself as researcher firmly in the field being related, drawing attention to the episodes as constructions or representations. These provide contexts within which episodes of children's activity took place. These are written in the first person, so the narrative voice is mine as the researcher immersed in the field. This draws attention to my presence and the interpretive framing of the study. It also signals the start and end points to my observations so that it is clear where I have made a cut in what is continual activity.

- Still shots of children and materials that were produced

These support the narrative accounts of children's activity, indicating the classroom layout within which children played and the nature of the resources to hand. They also provided a record of the kinds of places and materials that children produced.

- Multimodal transcription of moments from episodes of activity

Multimodal transcriptions are intended to slow down children's movements and actions and allow for more in-depth reflections on the multiplicity of movements, modes and interactions that children engage in. They also facilitate observation of the ways in which the material environment appeared to relate to children's responses.

- Diagrammatic representations of children's movements

Diagrammatic representations include plans of classroom spaces and the common pathways across such spaces that the children created. Diagrammatic representations also include episodes where children are in smaller spaces, moving objects and materials. These both represent and provide an analysis of children's movements, e.g. walking across classroom spaces, and children's movement of objects within classroom spaces.

4.15 Chapter 5 summary

In Chapter 5 I have provided my rationale for an ethnographic approach and a qualitative enquiry. I have argued that this approach has the potential to provide insights into young children's meaning making practices and to generate understandings of the ways in which such practices are shaped by the environment. I have outlined how this approach involved observation, recorded in the form of field

notes, but also as photographs and film clips. I explained how my approach to speaking to children whilst they are in the midst of activity and filming that which children choose to do, is central to seeing them as participants and as far as possible, to representing their views, interests and concerns. I have outlined how I have followed Sheffield Hallam University's doctoral student ethical procedures and ensured that all necessary consent was provided.

In terms of analysis, I have explained how I moved from an iterative process of inductive coding through to a combination of multimodal transcription and analysis, and movement mapping. This process led me to identify three movement/ interest formations that represent patterns in young children's movements in classrooms and which, I argue, are significant to children's meaning making moment to moment. In the chapters that follow, I illustrate the significance of movement in young children's broader meaning making practices against the three categories, converging, focal to radial, and focal movement/ interest respectively. I draw on specific illustrative examples while also drawing on my wider experience of the children across the study to contextualise and reflect on the significance of these specific incidents.

Chapter 5

The Frozen © Spot Tray: Converging interest

5.1 Introduction

This chapter will illustrate a series of episodes of children's self-initiated activity that involved what I have defined in Chapter 4 as 'converging movement/interest'.

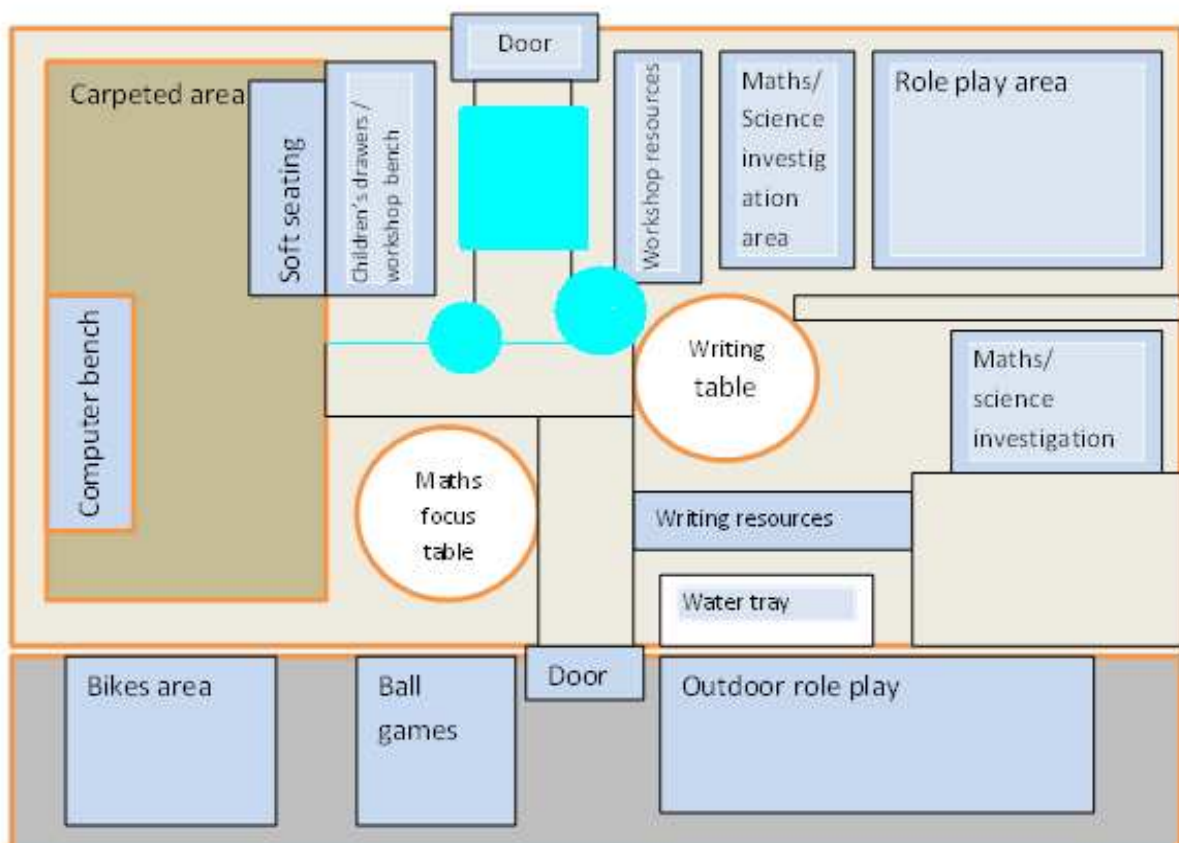
Converging movement/interest is where children collectively bring materials and ideas together to one particular area of the classroom. This results in children making a shared space, usually populated with collected or produced materials.

In this chapter I will examine a selection of observations that I made on 22nd September 2014 that converge around a spot tray. A spot tray is a hexagonal, usually black, raised- edged plastic tray of approximately 1 metre in diameter. Originally designed for use by builders for the manual mixing of powder/ liquid self-hardening materials such as concrete or plaster, the spot tray is now marketed as a container for small world and other 'messy' play resources. This one had been decorated with items that were intended to represent the popular Disney movie 'Frozen'. The constellations of activity that took place around the spot tray provide a vivid illustration of the way that children's meaning making is influenced both by the classroom resources and materials and their collaborative interest in such resources and materials. The children, as they made meanings as they interacted with the resources, changed the areas in interesting ways. This occurred as their interest converged first around the spot tray, then around the floor area between the spot tray and the workshop area, and finally, under the teacher's direction, around the newly introduced second spot-tray. Composite data from the visit on which these activities happened consisted of my observational field notes of classroom activity,

photographs and film clips. Observations are presented as Narrative account 1 and Narrative account 2 as there was a time interval between the two. As is detailed in Chapter 5, I draw on these in order to conduct an analysis utilising multimodal transcription and movement mapping. I provide a narrative commentary of what took place to contextualise the data and analysis.

All of the illustrative examples shared in this chapter circulated around the same area. The map below illustrates the area where the convergent interest took place during the episodes in this chapter. The blue circle on the right shows the position of the teacher's spot tray. The square shows the floor space where the interest developed into the Seaweeds Sea activity, and the circle on the left, where the resources finally converged into the newly introduced spot tray.

Figure 5.1 Map of converging interest



5.2 Introducing the episode

As was my usual approach to field visits, it began with sitting with the class at the end of the carpet input session, and then as they left the carpet, I would follow the flow activity as this indicated their interests. As children left the carpet area on this particular morning they drifted off in twos or threes, depending on how they were given permission to leave the carpet area. Some children, once told they could leave the carpet session, would stand on the periphery of the seated group and wait for a friend or two. This drifting was more or less that, slow and tentative and involved a steady looking around the classroom, to see what there was 'to do'. On this particular morning, I noticed how the activity clustered and dispersed then reassembled around the Frozen Spot Tray.

5.3 The spot tray

The episodes in this chapter initially took place around the Frozen Spot Tray a small world area in the classroom. Small world play is a common feature in Early Years settings. A small world arrangement is usually planned, resourced and placed in an area of the classroom by the practitioner. It may be designed to follow-up children's interests, current themes or topics under discussion and planned to broaden, deepen or extend children's range of experiences. A small world offers children a range of objects, usually linked by a theme or topic, and these objects or artefacts are often selected and organised in ways so as to capture children's curiosity. An example might be to position familiar characters or figures in ways to stimulate narrative play, or to encourage the re-enactment of a particular scenario. Small worlds are designed to promote talk, inspire interest and imagination, and to engage children in collaborative play activity. The rationale for a small world seems to epitomise what is

viewed as good early years practice. It is designed to offer possibilities for children to explore simultaneously many Areas of Learning as defined by the Early Years Foundation Stage (Early Education, 2014). Paper, pens and other mark making materials, along with labels and captions for children to read and write 'in context', would include the Specific Area of Literacy (Early Education, 2014) into the lines of possibility for the child to take up.

I begin my description of what took place with an extract from my field notes/ reflections as this sets the scene for the action that followed and describes what drew me to generate data when in the field. (See also Daniels (2016) where I drew on these examples of data to consider the ways in which children used classroom materials in order to construct shared meanings. Here I consider the role of movement in my analysis)

5.4 Narrative account 1

Today the practitioner has provided the children with a tray of resources, linked with the Disney film 'Frozen'. There are cut-out character pictures taped to wooden blocks. I am interested to see what the children make of this. Lena is the first to come to this area. She looks at the characters, stands them up, side-by-side and then tells me who they are. Another child comes over to see ...

Figure 5.2 The provided spot tray



Some time later now, Lena has moved from the area, then back again a couple of times. She now moves to the counter of resources, and begins selecting large pieces of green tissue paper, plastic pots and scissors/ glue etc. I have noticed Lena's activity before, and she does seem to enjoy exploring what she can do in the classroom areas, organizing such spaces and defining them by her play.

After some time, Lena's activity is noticed by other children, who are starting to gather resources from the shelf, and they chat and talk about what they are making. Soon the whole floor area is covered by pieces of paper, large and small, from the counter on the right, to the counter on the left. I ask Lena what she is making... and film her response.

My observations above illustrate how I observed children's tentative interest in the resources. Lena's interest did not appear intense at this point, but instead was

marked by her returning to the area a couple of times, as she seemed to be looking for something to do. At this point, the focal point of Lena's attention moved from the spot tray, to the workshop resources (adjacent to the spot tray). At this point she began to cut up and arrange bits of paper from the workshop bench. Other children had been drawn to this activity, and were likewise beginning to cut up paper and assemble it on the floor. As explained in Chapter 4, at times I spoke to children about their activity, as I wanted to know what meanings they were ascribing to their play. At this point, I judged that I could talk to Lena without stopping the flow of activity that was taking place. I filmed as I spoke to Lena (see Figure 5.3).

Figure 5.3 Lena talks about the Seaweed Sea



The conversation I held with Lena was brief, and cut off by her walking away – she was indeed too busy to stand and talk. Below is a multimodal transcription of my conversation with her. Initially Lena is kneeling on the floor, holding small bits of paper in both hands, between thumb and forefinger.

Table 5.1 Multimodal transcription- Lena talks about the Seaweeds Sea.

Time code	Direction of gaze	Action	Gesture/ Facial Expression	Speech
00:05	Looking to hands		Blank expression	K: What are you making?
00:17	Turns head to K Looks back to hands. Looks back to K			L: I'm making fishes so we need (inaudible)
00:21	Looks to floor Looks to K		K: Points to floor L: Points to floor then pulls hand back quickly	K: Oh okay! And what is this for?
00:26	Still looking to K as she walks away, turning head Looking into space To paper on counter	Stands and begins to walk towards counter on left Reaches counter, picks up scissors and begins cutting	Expression intent, looking for K's response	Err..That;s all the sea. That's the sea. K: uh-hum L: We're making seaweeds sea Child: Eh! I'm making a fish... L: Way da go cap'n!

In Table 5.1 we can see how Lena has called her arrangement of resources the 'Seaweeds Sea'. Other children around her are contributing by adding bits of paper to the arrangements on the floor. Notice how Lena says 'We're making seaweeds sea' (00:26). This is clearly a joint project. Lena and her classmates seem to be drawing on past experiences and assigning the available floor space with meaning and artefacts significant to her own experiences and interests. The way Lena says,

'way da go cap'n', appears to be drawn from character accent and dialect from her media experiences. I wonder if this is the sea that swallowed up Elsa and Anna's parents in the Disney film Frozen. Has Lena taken-up the suggestion of the Frozen spot tray and found the materials to extend it across the floor of the workshop area? Has the green of the tissue paper prompted the 'seaweed' interest, and then of making fish?

The transcript above (Table 5.1) draws attention to a number of points to draw out of the episode. As I ask at 0:22 I ask, 'Oh okay! And what is this for?', and I gesture to the floor space that is covered with bits of paper. Lena looks down and supplies me with the words to describe the imaginary play that she is taking part in as she replies: '*That's all the sea*'. The child at the side of Lena, listening in to the conversation, joins in by telling me that that he is making a fish.

The verbal exchanges, and the gestures that pattern the multimodal transcript above (looking to hands (0:9) looking to the 'Seaweeds Sea' (0:19)) are interspersed with continual moving of other children moving as they move towards and back from the counter, and to the floor space that is now the Seaweeds Sea. The movement appears not to be merely a way of getting materials to the counter to the sea, but is part of the orchestration of communication of children's shared interest in the materials and the Seaweeds Sea they are creating. In fact, Lena seems a little impatient with my asking, and at 00:26 is already moving back from the counter, at the same time, maintaining her gaze with me as I have asked her a question. Her gaze is drawn to the bits of paper in her hands and on the floor; her attention is firmly focused on creating the sea. Her movement continually shifts her back toward this focus.

At this point, I am intrigued by the amount of bits of paper that have appeared across the floor as more children join in, and I begin to wonder if this kind of messy activity is permitted or not.

5.5 Narrative account 2

I leave the area for some time, then return to find that the teacher has provided the children with a second empty spot tray, and has asked them to put their materials into the tray. The group of five or six children that have gathered in the area are now tipping their resources into the tray, then picking up other bits and pieces and 'dropping' them into the tray. Emma takes a pencil, and begins to write her name in a space on the tray that is surrounded by a series of stuck-on shiny stars. She then makes random letter shapes around her name. As she finishes, she points the pencil to the letter shapes and reads: 'E.M.M.A. This is for everyones to play with'.

Figure 5.4 The scene when I returned to the area



Figure 5.5 The children's spot tray

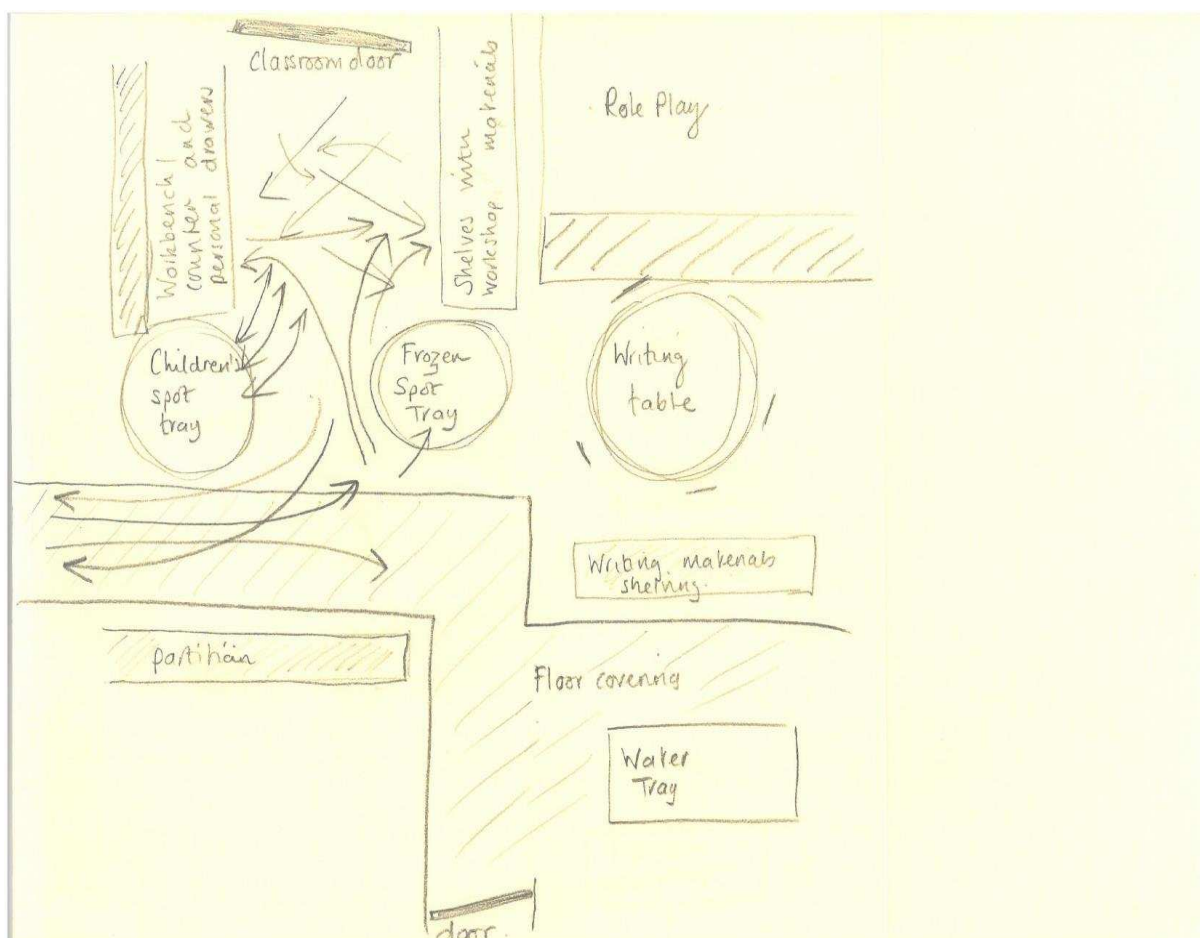


Figure 5.6 Emma writing in the spot tray



In order to represent children's movement as they transferred materials around the classroom, I sketched a representation of the flows of movement that took place (see figure 5.7). Mapping in this way is useful as it allowed me to look for patterns across larger movements across classroom areas. Of course, this is only representative of the movements I noticed at that time, and it is impossible to note all movement. What the movement map does do in this case, is show the patterns of movement and the ways these converge into particular areas as children follow their interest. It marks pathways repeatedly made as children move.

Figure 5.7 Representation of movement in the classroom



5.6 Converging movement/ interest

In the recounting of what took place above, I am careful to note children's action and movement, that is, the ways that they manipulate classroom objects and resources as they follow their interests. The activity I have described in this chapter appears to suggest that a fluid and shared meaning making process is taking place as children assign meanings to the materials and areas of the classroom. The collective and shared nature of this endeavour is significant. Less noticeable are how the materials in the setting have shaped the meanings made by the children. Emma and Lena's activity appeared to be focused on re-shaping materials and giving meaning to the floor space. Children involved in these episodes appeared to cut paper for the sensation of cutting paper, or perhaps because they enjoyed the act of cutting. Or perhaps they cut paper because scissors, cellophane and paper were there in front of them. Children were never still, never completely inanimate, there was always action taking place, and they were in constant movement and interaction with each other and the environment. The movement in itself seemed to communicate a business or intention that attracted the attention of other children. Movement appeared to attract activity into particular areas of the classroom where it converged around the Frozen spot tray, then onto the classroom carpet, then by direction to some degree, around the second spot tray. This convergence involved children in shaping, moving and transporting materials, ascribing these with imagined meanings, and placing them together in an imaginary space; a Seaweeds Sea, or a resource for everyone to play with.

These episodes showed clusters of children playing and appropriating materials sometimes individually (for example the boy who is making a fish) but the interrelated nature and the fluidity of children's ideas and imaginings was apparent.

Furthermore, there did not seem to be a clear intention or direction to the play that led to any defined event taking place. Instead children appeared to follow ideas as they arose in the moment. As the materials converged in one area, almost simultaneously, so the meanings that children are ascribing to materials converged.

What was also interesting was the way in which the delineation of the areas that children ascribed meanings to seemed to shift as children played. This delineation occurred as an ongoing, negotiated and complex interweaving of semiotic resources, materials and movement. An imaginary place, the sea, which was not given any particular boundaries, spread quite freely across the floor as the bits of paper (fish and seaweed) scattered and spread. The placing of resources then, accidental or intentional, was significant to the kinds of meanings that played out.

5.7 Converging movement/ interest and dynamics of activity

During these episodes I recall being acutely aware that the floor, covered with bits of paper and children's constructions, was the main thoroughfare between the classroom and the school corridor. The classroom door was behind the children and it opened and closed regularly as adults and children moved in and out of the classroom. It was also the place where children's personal drawers were placed, their personal storage space. Children often visited their personal drawers to take out and replace their reading records when asked to do so, to take out and share the stickers they often sneaked into the classroom, or to put the bits of paper and card that they wanted to keep. The floor area was a frequently traversed place that contained official and predictable pathways. But during the first part these episodes, the movement and pathways children took were meandering, tentative, full of pauses and slow but intensely tentative action. It was also the site where the space

appeared to be jointly imagined by the children as they played and moved together. Maybe the malleable card and paper the children always enjoyed so much attracted the children to this area and this kind of activity. Perhaps, because this space was perceived as more flexible, to be claimed more easily by the children, rather than that of the writing table, or maths area, where children were expected to do more officially sanctioned school learning, something that they were not yet well-versed in.

The introduction of the tray by the practitioner in these episodes makes it an intriguing event in itself. It could be said that the teacher at this point provided a boundary to the space that had been interpreted by the children as more flexible. Perhaps to some degrees the teacher was halting the way in which the Seaweeds Sea was spreading across the floor. Were things getting 'out of hand'? The children's re-shaped and re-purposed materials were spread over the area.

The introduction of the second spot tray and the instruction to put the materials into the spot tray brought them into a differently defined space. In the process of being moved from one space to another, the activity, or the tentative cutting, talking, and making, placing of bits of stuff which appeared mostly unplanned and unpredictable, seemed to change in some way. The children's movements were more direct, to-ing and fro-ing with bits and pieces from the floor to the newly introduced spot tray in repeated movements until the floor was clear. As classroom areas became re-claimed, this time by the teacher's intervention, it affected the actions and movements of the children; placing became tipping, and the unpredictable but careful placing, cutting, and handling of materials, careless and somehow lacking in a kind of attentive and gentle flow that had been taking place before. The quality of the children's movements appeared to change with the shifting ownership of classroom space.

When the tray was almost full, and the floor almost clear, Emma wrote her name on the materials in the tray, just as she might write her name on a piece of work and announced that this was 'for everyone to play with'. Here Emma announces something that looks like a classroom resource, similar to those educational spaces that are constructed by the teacher, another spot tray. I reflected on the cultural norms of schooling and how classroom areas are defined and the ways in which these might shape the ways in which children move in such spaces. I wondered how far Emma's actions were beginning to follow the recognisably schooled ways of being

5.8 The significance of movement in the episodes

I have drawn on my data in this chapter to consider children's movements as they move individually, in pairs or small groups, across the areas of the classroom. I have considered those movements on a much smaller scale, for example, cutting cellophane, moving objects and shaping materials. I have illustrated how children's interest often led to activity converging around a particular classroom area. These larger and smaller movements occur simultaneously as children move within and across the classroom space. The movement map illustrates the main flows of movement of the children as the shared interest in the area. Their shared interest in the Seaweeds Sea, the Frozen spot tray and the second spot tray, made by the children, appeared to shape the pathways of the children's movements as they traversed the classroom and brought about different ways of crossing the classroom spaces. These movements were soon noticed and drew the attention of other children and in some ways, appeared to communicate and perpetuate the interest across children. The movement lines on the map flow to the right of the Frozen Spot Tray, up towards the classroom door and across and between the workbench and

shelving with resources were traversed as the activity caught on across children. The lines sweeping down to and from the Children's Spot Tray show their interest in filling the spot tray with their re-purposed materials. As described in the commentary above, the character of such movements was subject to changes in dynamics as the activity unfolded.

In observing the events related above, I was intent on focusing on that which appeared to be capturing children's attention, what they appeared to be compelled to do, and observed how this transpired and emerged through their movements across the classroom. Movement involved transporting and changing materials around then, and giving a material presence to their imaginings such as seas, and fish. These imaginings were seemingly fuelled by their shared interests and experiences from their personal histories, and possibly by the affordances of the material resources in to hand. The materialisation of such imaginings seemed to give such things an affirming, tangible presence.

Across these sequences of activity, children moved and expressed their ideas through a range of semiotic modes, including talk, gesture, and these things emerged and existed in relation to the environment, the space, materials and resources that surrounded the children. The children and the spatial and material environment appeared as mutually implicated in the meaning making endeavour.

While the above activity was taking place as the children were giving meaning to space, meanings that were of significance to the children are generated and came into being in the children's social worlds. Where particular instances of movement or activity emerged, and these were mirrored or 'taken up' by other children, such mirroring appeared to propel further activity. An example resided in the theme of the

fish in the Seaweeds Sea which appeared to spontaneously arise from the activity. The children's understanding of how they could represent their own thoughts and ideas through the available resources and materials appeared to arise quite spontaneously, while at the same time, offering them new ways of making meaning. So, the activity became visible to me as the children began cutting up bits of paper, and these bits of paper, as I was told by Lena, eventually became representations of fish. It is not clear whether the children were intending to make fish, or the pieces of paper reminded them of fish so they were ascribed with this meaning. The activity offered a shared site of interest, where they generated their own meanings, passions, cares and concerns.

5.9 Walking and negotiating classroom spaces

The activity presented in this chapter illustrates how children's walking movements played a significant part in the kinds of meanings that were made. On my visits, children were often initially sitting on the carpet in a class group. At about 9.30 each morning the teacher would invite the children to explore the continuous provision and the children would leave the carpet one-by-one, or in pairs. Small groups would cluster and wander off together. For this group of children, access to continuous provision always involved walking to find something of interest. At the same time their walking communicated interest to other children.

Walking often led to assigning imagined meanings to the areas in the classroom as children played. The implication of this is that the meanings that children gave to areas of the classroom as they played and imagined, were not always a deliberate or conscious act, but something that spontaneously took place through their ongoing movement, and which was often spurred by their interest in the available resources

and each other. In this way, children's walking was significant to the meanings they made and the ways in which they changed and re-changed places as they moved around the classroom.

Throughout the course of the fieldwork, I had noted those areas more 'open' to negotiation, or more open-ended were always popular haunts. Pathways to and from classroom areas that were perceived as more open-ended were traversed many times. Some of these pathways were official, delineated and marked by furniture, or strips of washable flooring cutting across the softer carpeted areas. Children however, created novel and improvised routes, as they found quicker, better or more interesting routes to and from the places they liked best.

The pathways joined places that were open-ended to the places where popular resources, often those that could easily be transformed, were stored. Both the official and ready delineated pathways and children's preferred pathways, became enmeshed within and therefore part of their evolving and changing practices or patterns of movement. As a researcher, observing and tracing children's pathways across classrooms, it was interesting to see how a novel pathway might come into being, but how some became repeated and well-embedded into the patterns of children's movements around the classroom. The Seaweeds Sea, a pretend place, imagined by the children and populated with artefacts and materials, spread out across the floor (See Figure 5.4). Children 'padded' around, between and across it tentatively. At the introduction of the second spot tray, the pathway from the sea to the spot tray was direct and traversed repeatedly and quickly.

In Chapter 2, I described how Hackett (2014) examined the pathways that children aged two and three made in a museum. Hackett (2014) presented walking and

running as communicative practices, seeing this as 'place-making' and a 'powerful, intentional and communicative practice' and thus as agentic (Hackett, 2014, p5).

Through observing and mapping children's movements, I also consider movement by walking as a mode that serves a communicative function. As children moved around the classroom, sometimes alone, sometimes together, and sometimes following or mirroring the walked pathways of others, walking appeared to become a shared communicative practice as it attracted attention. The dynamics of the movement communicated interest, thoughtfulness, tentativeness or direct intention across children.

As explored in Chapter 2, classrooms are highly regulated places, and spaces are often organised with pedagogical goals and certain practices firmly in place. The children's class teacher did acknowledge her view that flexible use of space was important to children, as was the supply of flexible materials. The children in this particular setting were encouraged to 'be creative and play'. Pedagogical time and classroom space is seen as a valuable resource and can be rationalised in different ways. Children in these episodes may have been implicitly learning which areas of the classroom are more flexible than others, and during the period of the study, children did gravitate to those spaces that offered them the opportunity to create and recreate those spaces. I am left pondering why Emily's name writing occurred when the teacher re-claimed the space to some degree, or at the very least, provided a boundary for the spatial arrangements of children and materials that were, before that point, much more fluid, spilling out across the floor. There appeared to be an association between what was permitted in different areas of the classroom and children's movements. The children's meaning making was very often as fluid as the classroom areas and resources permitted. The children were not precious,

particularly at this stage of the year, about what they produced. The teacher's intervention via the introduction of the spot tray appeared to prompt a schooled response by Emma. This may signify how Emma implicitly recognised the norms or schooling and the use of areas directed by the teacher. As children explore the possible meaning making potential of the classroom areas they may be developing understandings of the flexibility (or otherwise) of classroom spaces. The ways in which their activity changed significantly on the introduction of the second spot tray suggests that this may be the case.

The complex meaning making that occurs during the play recounted in this chapter was contingent on the ways that the classroom areas were used and the resources and materials that were provided. Ways of describing literate activity in dominant accounts of early literacy would differ significantly from the one I have provided above. If I was instead noting literate behaviours I might draw attention to Emma's ability to hold a pencil, and write her name. I might comment on Lena's propensity to project elements of familiar narratives or story setting into her play. What might be missed however, are the ways in which Lena and her friends gravitated towards the more flexible areas in the classroom, and the way that movement across such spaces was significant to their explorations and meaning making practices. Their early literacy practices are recognisable, but embedded within the broader terrain of their playful explorations and movements of what they can do in the classroom.

5.10 Chapter summary

In this chapter I have explored children's activity as they follow their interest. This has involved what I have termed a converging movement/interest to describe episodes of children's activity when it comes together, or constellates, in a particular

area of the classroom. This convergence of interest involves children playing in classroom areas where they can create and draw on their interests and experiences.

The activity that took place was unplanned by the children and therefore unpredictable as children assigned meaning to spaces they moved in and the material they had to hand. The physical layout of the room and the resources provided meant that children had a range of flexible space and resources to interact with and forge pathways through their movement.

The data in this chapter are illustrative of the ways in which the meanings made by the children are shaped by the material and spatial layout of the classroom, and children's flexible movement and use of such spaces.

Chapter 6

The Paper Strips and Superhero flight - Focal to radial point interest

6.1 Introduction

Having explored the ways that children's converging movement/interest involved the bringing of materials and ideas together to one particular classroom area in Chapter 5, I now provide illustrative examples of what I have termed focal to radial movement/ interest. Focal to radial interest is the patterning of activity in the process of meaning making that starts with an intense interest in a classroom resource and involves taking this resource from that area to produce multiple artefacts or populate different classroom areas with those artefacts. In this chapter I will describe how children seemingly spontaneously explore the material resources in the classroom and imbue them with meaning, and consider how this process of meaning making often involves children moving resources from one place to another. In order to illustrate this I draw on two sets of data. The first is a constellation of activity around paper strips. The second is children's interest in superhero puppets, focusing on one child's interest.

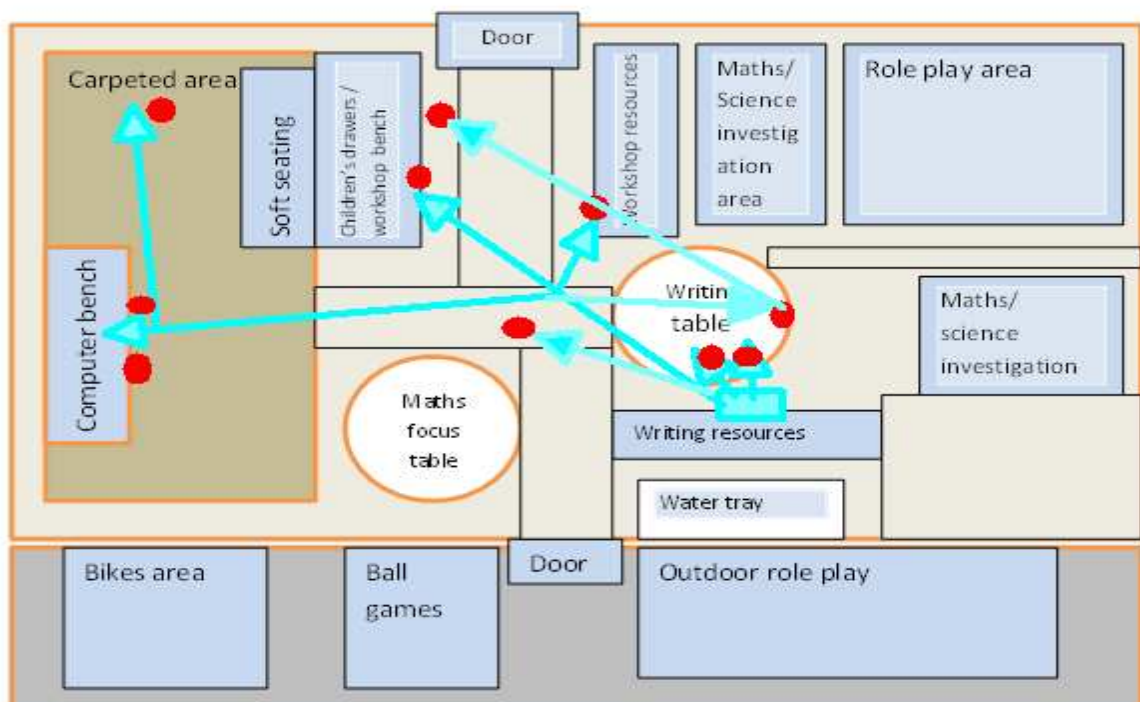
6.2 The paper strips

The constellation of episodes considered in this chapter took place through the course of one morning on 10th January 2015. It recounts my experience of observing children where they became intensely interested in a pile of paper strips. The paper strips were stored on the writing resources shelf. They were yellow, or green, and were about 150 mm long by 50 mm wide and had been placed in a neat pile. The provision of small pieces of card such as these, and other malleable materials that can be shaped and adapted, is usual practice in an early years setting.

The activity and movement around paper strips predominantly took place across and between the workshop area, the writing table and the computer bench. The writing resources shelves, the workshop area and bench, children’s personal drawers, and the ICT bench formed locations where clusters of children followed their interests. In these episodes then, I look distinctly at what children did with the material resources around them, as well as the pathways they forged as they walked around the classroom. I was interested in the flow of children's movements as they purposed and re-purposed the paper strips in interesting and surprising ways.

The map below (Figure 6.1) shows how the paper strips (stored on the writing resources shelf) were moved to different areas of the classroom. The red circles illustrate the dispersal of the paper strips. I have included blue arrows here to illustrate how this creates a radial impression, as the resources move outward from the place they were originally stored.

Figure 6.1. Mapping of focal to radial point movement/interest



As in Chapter 5, this chapter draws from the composite data including observations, photographs and field notes. It contains narrative accounts, movement mapping and multimodal analysis as analytical tools and draws on these as modes of representation. Together these create an ensemble of representational means that draw attention to the significance of the process of meaning making as it moves from a focal point of interest to multiple areas of the classroom.

6.2.1 Narrative account 1

Today the teacher has modelled sentence writing about the Three Little Pigs (See Figure 6.2). The writing table is set up with small bricks and puppets for retelling the story, and there are also booklets with images from the story, to invite writing (See Figure 6.3). I stand close by the writing table for some time and the teaching assistant invites a few children to come and write. I am a little surprised that the children are not that interested in the writing table resources. I move to observe in a different part of the classroom. When I return to the writing table, ten minutes later, I notice the children's intense interest in strips of card. I am intrigued. These are on the bookshelf near the writing table, neatly stacked. Two girls, Mazie (M) and Chanelle (C), are writing on the paper strip at the writing table and it appears that they are playing at being the teacher and a pupil. I film their activity. (See Table 6.1 below). This activity, writing single letters onto the paper strips, seems to prompt a range of activity that spilled out across the classroom, and was centralized around the writing table and the workshop area.

Figure 6.2 The teacher's modelled sentence

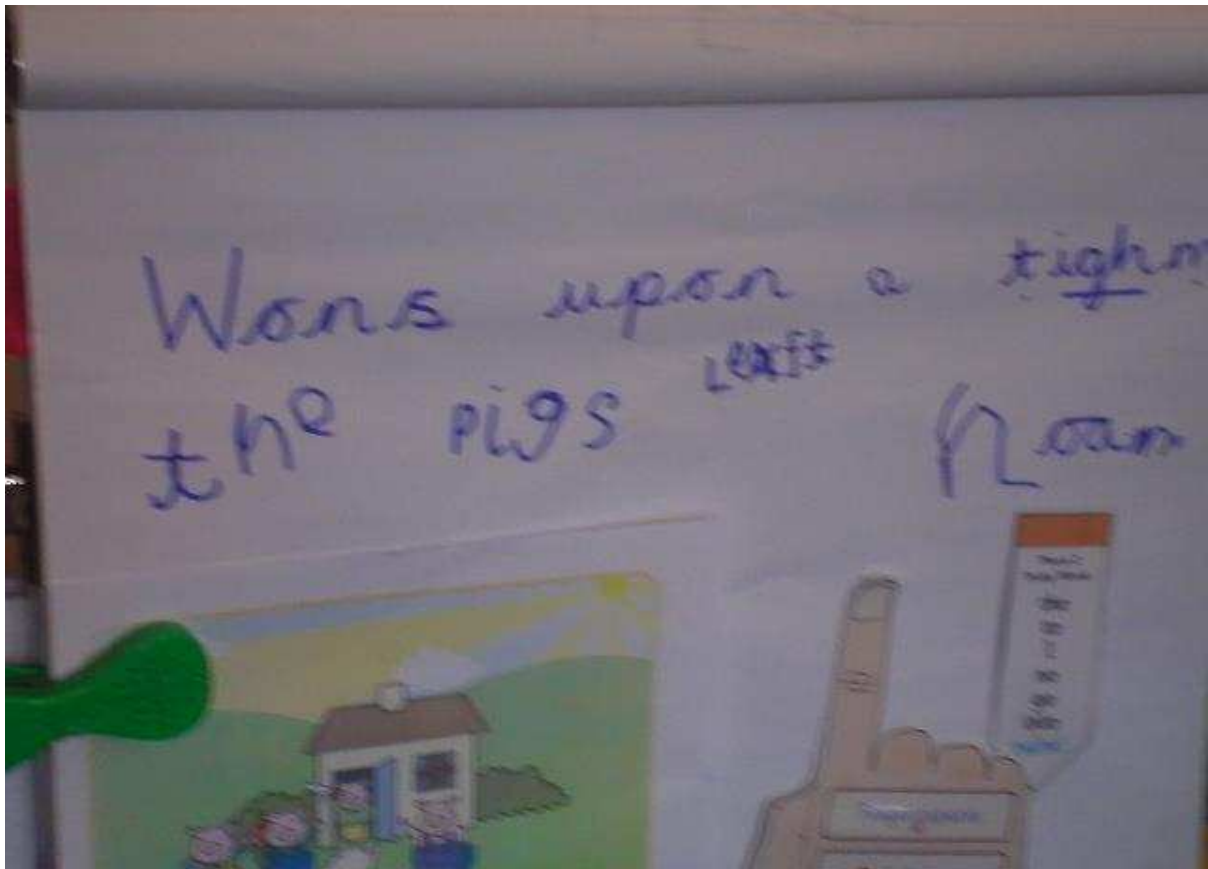


Figure 6.3 Resources placed on the writing table to promote children's play



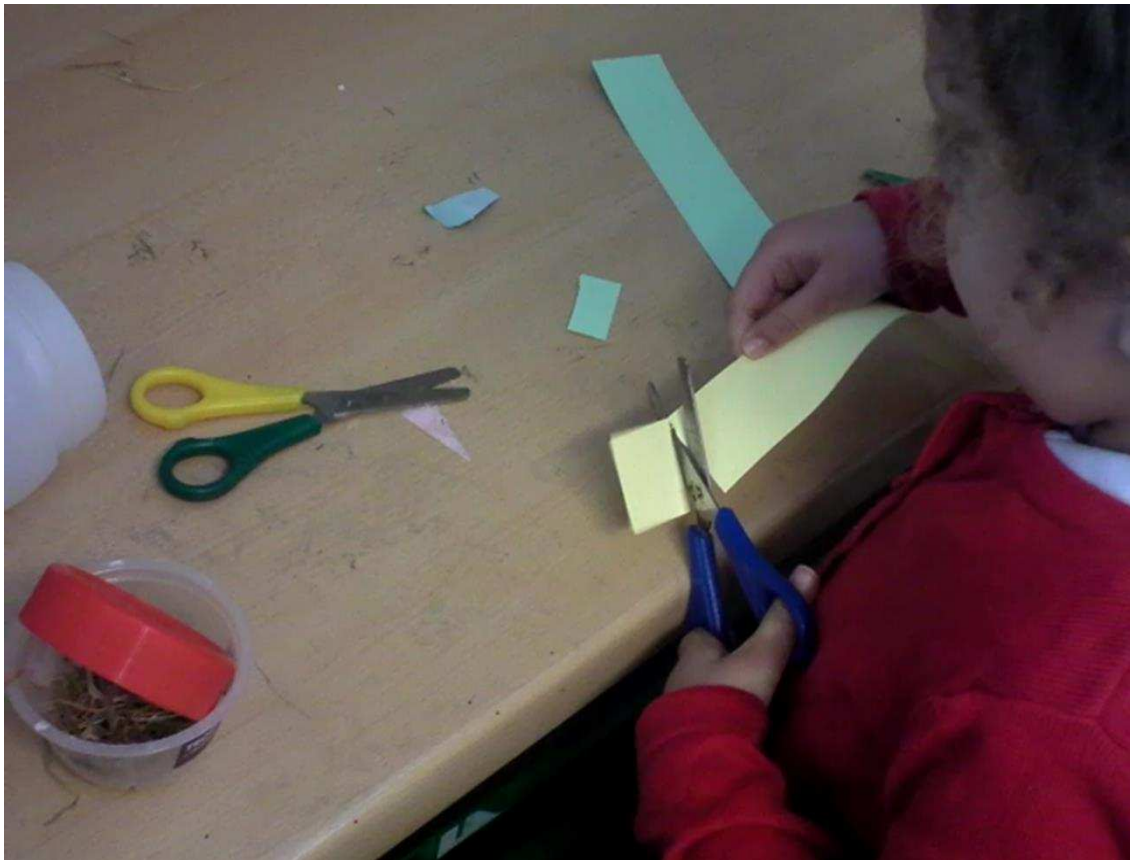
Table 6.1 Mazie and Chanelle Multimodal transcription

Time code	Gaze	Action	Gesture/ Facial Expression	Speech
0:52	C: Looking at paper strip M Looking at C	M: Hands a pen to C C: Picks up pen M: selects a strip with two letters already written on (t and i)	C: still facial expression – in concentration	
1: 02	C and M: looking at strip of card C: Looks towards M M: Looks back to strip on table C: Looks back to strips M: looks to J M: looks back to the strips that C is writing on	M: places cards with t i l in front of C C: Writes a cursive ‘t’ on the strip M: Moves away to bookcase and picks up more strips C: holding pen in right hand, poised to write C: puts left hand forefinger on pen ,then touches card with forefinger Touches paper with pen and writes i J: appears and stands behind M and C J Moves away C: writes l, l	M: Points to next letter on strip M: points to bookcase M: Pushes the strip towards C	M: Right! J: Where you got those from? M: Over there...
1: 13	C: Looks to C		C: raises head	C: Done

6.2.2 Multimodal analysis – Mazie and Chanelle

The interactions transcribed in table 6.1 show Mazie directing Chanelle as they are playing out roles of teacher and pupil. Interestingly, much of the direction given by Mazie is gestural, using pointing and the positioning of materials. Notice how at 0:60, Mazie pushes the paper strip towards Chanelle, indicating that she should focus her attention on this. At 1:11 once Chanelle has written a letter on the strip, Mazie points to the next letter, indicating that Chanelle should now write this onto her paper strip. What is of interest here is how Mazie points to the place where she wishes Chanelle to write the letter, using pointing to show which letter to write. The children here appear to be taking-up and rehearsing the gestural modes to communicate and direct activity, predominantly relying on gestural movement in order to play out the scenario. The movements appeared to be strikingly reminiscent of the pedagogical practice of teaching children directionality in reading/ writing written English. At 1:15 Mazie announces that she has 'done', and looks to Chanelle, continuing the pupil/ teacher play scenario. This activity attracts the attention of Joshua 1:13, who asks where he can find the paper strips. Mazie and Chanelle's activity seems to give rise to a range of activity which I describe in sections that follow.

Figure 6.4 Louise cutting the strips of paper at the workshop bench



6.2.3 Narrative account 2

At this point, I turn and notice Louise (see Figure 6.4) who has cut two of the strips into small squares. She has written 'r' onto one of the strips (Figure 6.5) and I stand nearby filming. She makes a pile of letters, writing on each one in turn then places these in the pot to her right. I observe her for a minute or so then talk to her. I was immediately drawn to this activity, being aware that Louise's activity has been taking place simultaneously alongside Mazie and Chanelle's play at the writing table. Louise's activity of cutting into squares, stacking the squares into one pile then writing a letter on each one in turn seems very methodical and ordered. I can hear the chanting of letters from the children at the writing table and reflect on how traces

of the practice of learning phonemes are emerging in and through children's self-initiated activity. Louise is intent and looks pleased with her activity as she notices me watching. She turns to me and smiles, then turns and focuses back on her activity.

Figure 6.5 Louise writing letters onto the paper squares



Table 6.2 Multimodal Transcription Louise

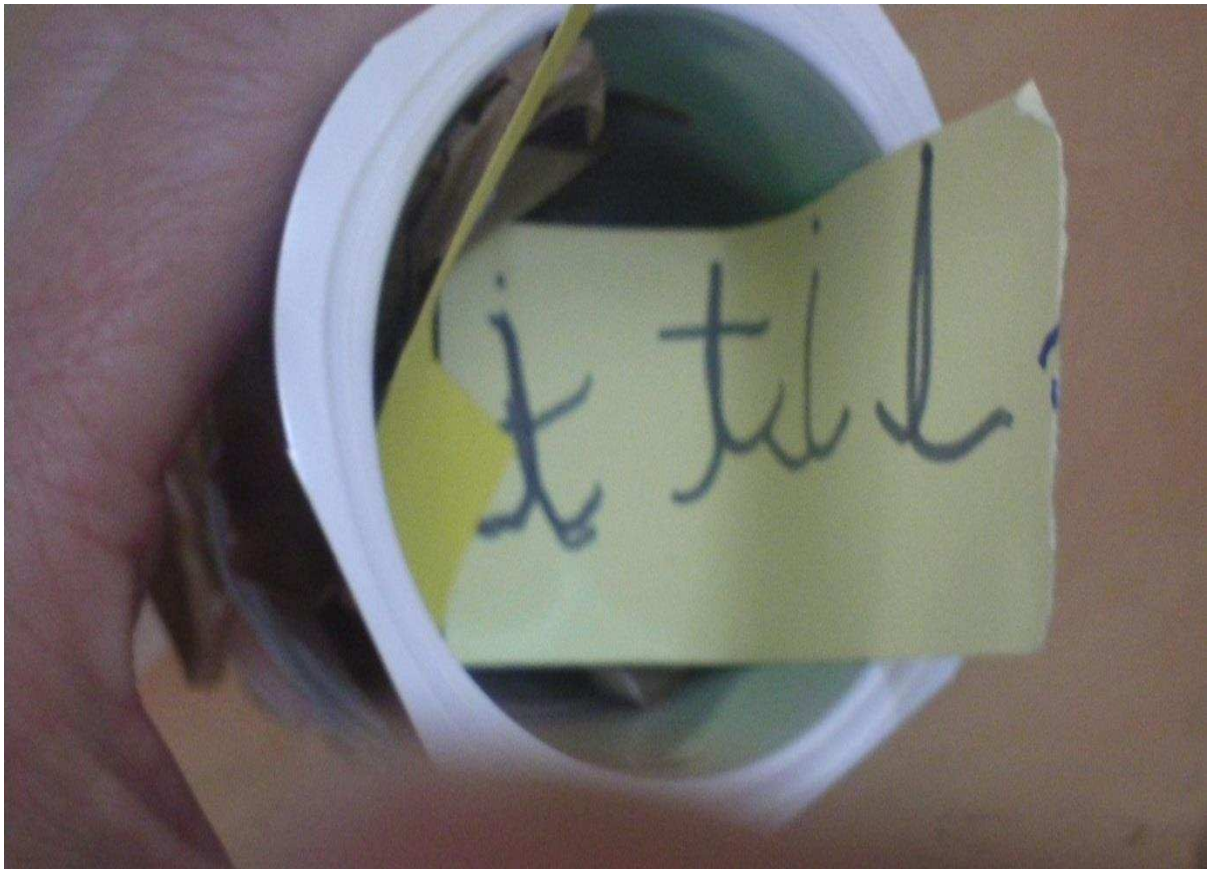
Time code	Gaze	Action	Gesture/ Facial Expression	Speech
0:18	Looking to pieces of card	Swaps pencil from right to left hand.	Half smiling, occasionally moving head slightly from side to side rhythmically	(Child nearby) 'i,i,i.....
0:20	Looks to K Looks back to hands Looks to card	Takes a piece of card in right hand. Puts card on counter Draws 'l' on card Places the card onto a piece of card she has written on earlier	Smiles- lips together	(Child nearby) Need sellotape!
0:22		Pulls hands away Turns back to counter and continues writing on card		
0: 26	Looks to K			K: I think it has all gone! (Child) It hasn't!

By looking closely at the orchestration of meaning making practices in the transcript above, I was drawn to reflect on how the methodical stacking of the card squares, and the writing of graphemes on the cards in turn, and how Louise expressed a sense of being content with the activity, enjoying its process, satisfied with what she was producing. I was also intrigued by the way I could hear a child reciting phonemes, and how this might be influencing her activity. Louise did not offer to talk to me, so I just observed. Her meaning making here was completely absorbed with the doing and making, as she moved and shaped the pieces of card.

6.2.4 Narrative account 3

Meanwhile, I notice, Kehinde has taken a paper strip and written letters onto these. She places tissue paper into the bottom of a yoghurt carton, seemingly creating a nest, and then places the paper strip into the top. (See figure 6.6 below).

Figure 6.6 Kehinde's pot of letters

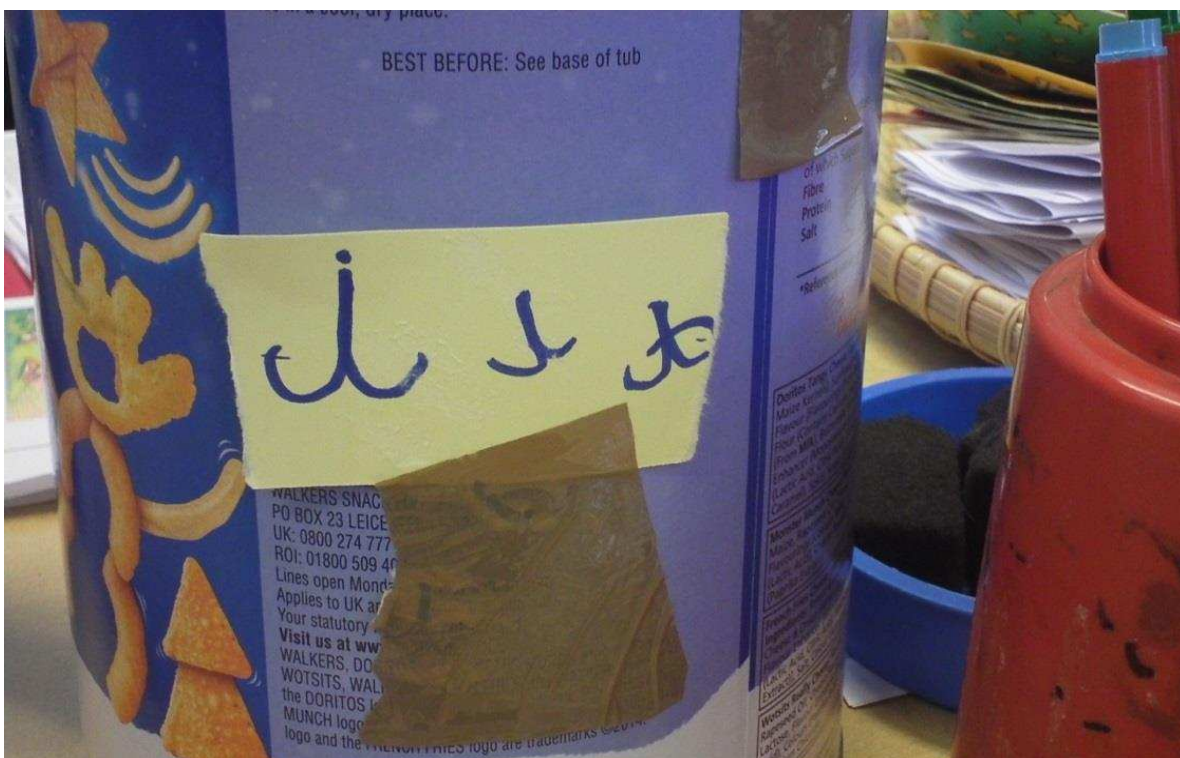


Lucy, playing across the workshop bench and the store of workshop materials, has spent time attaching carton lids to a large container (Figure 6.7). She shows me how you can lift the lids to reveal the letters below. She is excited to share her artefact. Similarly, so is Grace (Figure 6.8). She is showing her carton to other children, and comes over to show me.

Figure 6.7 Lucy's lift the flap construction revealing letters



Figure 6.8 Grace's carton with taped-on paper strip



6.2.5 Narrative account 4

Carl and Joshua have collected paper strips and taken these to the computer bench. They each have a felt pen and sit down together at the computer bench. They have been writing together on strips for some time now and seem to be enjoying the time doing something together. They are chuckling now and again, drawing attention to each other's' marks on the strips, made by felt pens. They started by copying the teacher's modelled sentence, which they can see from the computer bench. Once or twice they move back and forth from the teacher's board- taking a closer look, then return to the bench to make more marks on the card. They soon begin to write number sentences, in a seemingly spontaneous change of plan. After a while, Joshua takes his paper strips over and puts them on the writing table. He hovers for a while, as if waiting for the teaching assistant (who is working with another child at the writing table) to comment. This goes unnoticed by the teaching assistant and Joshua picks up the strips and puts them into his personal drawer.

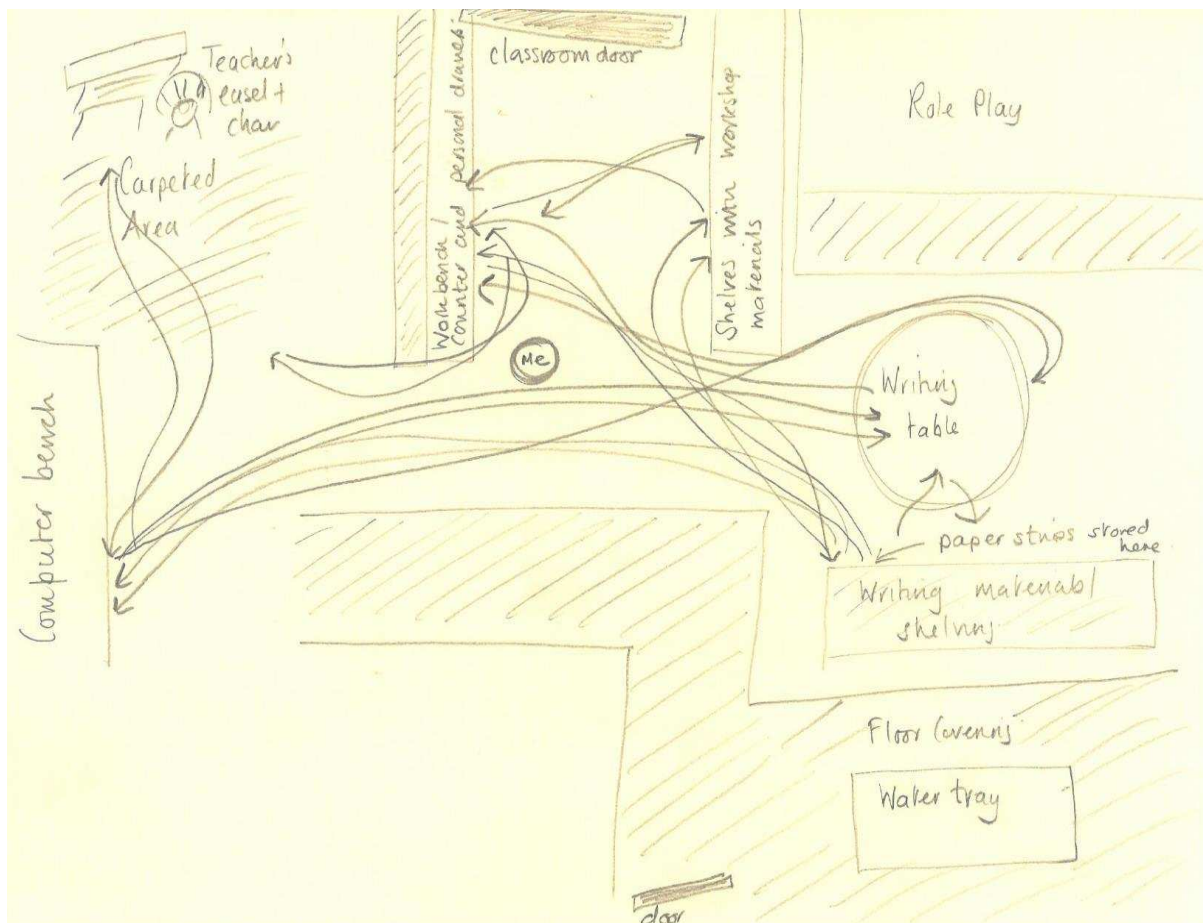
Figure 6.9 Joshua's paper strips laid out in front of the teaching assistant



6.3 The repurposing of materials

In Figure 6.10 (below) I have sketched the main flows of movement that took place as the children walked across the classroom. I have also indicated where I was standing mostly, although I did wander in and across from the spot indicated to the writing table and the computer bench a number of times. As is reflected in my researcher observations, I quickly became fascinated by the children's engagement with the paper strips and the way that children's interest in the strips seemed to 'catch on' so quickly. Chanelle and Mazie's play at the writing table quickly caught the attention of Joshua and from that point the various materials that children were making emerged rapidly.

Figure 6.10 Movement map- paper strips



I was also intrigued by the way in which the practices of cutting and joining, which I had seen the children enjoying many times, appeared to be merged with schooled literacies. I commented on this to the teaching assistant, Michelle, asking if the strips had been purposefully put there because the children liked them. She informed me that the strips of card were left over from Christmas, where the children had been using them to make paper chains, but that they were just the right size on which to write letters. Michelle explained how she had been using these with children for additional letter formation practice. I recalled the teacher talking about the concern over handwriting at Year 6, and how she was required to teach the children continuous cursive script, and how supporting pupil's fine motor skill development was high on the agenda. I reflected on the ways in which pedagogical practices are shaped by arising priorities or perceived concerns over standards in literacy, in this case the standard of handwriting, and that these dominant messages often filtered down to Early Year classrooms. Children aged 5 were seen as imagined eleven-year olds. They were perceived in relation to what they needed to be and do the end of their trajectory of primary education. In response to the pressure to raise standards in handwriting, the teaching assistant had re-purposed the paper chain pieces of cards into a material for supporting pedagogical goals. The paper strips then had become a tool of literacy instruction (Bomer, 2003). The tool's use then, where children used this to write and draw letters, would be carrying the pedagogical intentions of the teaching assistant. But I was also intrigued by the ways in which the children re-purposed the materials in what seemed like quite original and unpredictable ways. I was drawn to noticing the traces of different practices that seemed to be emerging through children's activity, and the way that this was shared by the group who quickly took up ideas and explored their potential.

I had noted previously that the children spent quite a bit of time re-shaping materials in the workshop area, and this was sometimes fueled by the kinds of materials on offer there, and of course the time and space to see what such materials could offer. The children appeared to be drawn to the flexibility that the paper strips offered them but this could also be seen as shaped by the intentions of the person who had placed them there in the first instance.

6.3.1 Liam and the Superhero

A common theme used in Early Years settings, in order to draw on children's cultural and media interests, is that of superheroes. During my field visits, this theme was evident on two occasions and the children responded very enthusiastically to invitations to engage in superhero play. Superhero play was often played out through whole body movement/ re-enactment. In this section, I describe how children were guided to make puppets, and then followed this up with puppet play. This example provides a further illustration of focal to radial movement/ interest. I draw on data from one child in this instance, as he moves from the table where he has made a puppet, and takes it to other areas of the classroom.

6.3.2 Narrative account 1

On my visit dated 17th January a student from the local college was working with the children, helping them to make puppets by cutting and joining bit of paper and card and putting these onto a stick. I had noticed that the facial expressions of the superhero characters drawn by the children were serious: a straight line for a mouth, rather than the upcurving smile so usual in young children's representations of the human face. I sat a while at the table, and by now, most children had made their puppets and were flying these around the classroom, noting that they were using the

official classroom pathways. Would a superhero do this, I wondered? I started to ask the children about the superpowers of their puppets.

Liam had made his superhero puppet and it had now begun its flight from the table, around the classroom with the other superheroes. I decided to talk to him. I also knew that Liam was interested in special powers, as in October, he had repeatedly turned me into an apple with a magic wand by way of a wooden spoon. I bent down and pointed the camera at Liam and his puppet.

Figure 6.11 Liam's hand illustrating the laser power movement from the puppet's eyes



Figure 6.12 Liam's gaze mirroring the direction of the gaze of the superhero



Figure 6.13 Liam illustrating the super power of the superhero moving from his eyes and outwards in front of him



Table 6.3 Multimodal transcript – Liam

Time code	Gaze	Action	Gesture/ Facial Expression	Speech
0:04	looking to researcher	Curls thumb and forefinger around eye and moves outwards away from face. Holds hand still.	Wide eyes	L: Superman have eeeyes
0:07	Looks to puppet	Moves thumb and forefinger back to frame eyes	Shakes head from side to side and blinks	Him got laser eyes
	Back to researcher	Moves hands to his mouth, framing it – then quickly to puppet’s mouth		He got eyes in
	Turns away, looks back ,	Presses thumb and finger together and draws away from puppets mouth, back to own.	Mouth open – moves head from side to side smiles Finger still pointing to face	his mouth R: Arch!
0:10		Moves hands away	Lips pressed together – looking serious!	R: Wow! What can he do?
		Raises puppet		L; Inaudible
	Looks down to hands	Moves puppet towards self, then away, then back		L: Lazer them!
	Looking towards puppet	Lowers hand quickly-		L: And then make something (inaudible word) with his (inaudible word) pow
0:19		Raises both arms, outstretched		L: Neeeeooowww! Pscch!
	Looking intently towards puppet and bridge	Moves arms down		
00:21	Looks back to R	Picks up wooden toy, shaped like a bridge, with left hand- hovering over floor.		L: Pscchwww
0:24	Looks to spot tray	Holds puppet upright with right hand so it is in standing position looking at wooden bridge.		
	Looks to puppet			

0:27	Looks to spot tray and bridge Looks ahead Eyes following I front of him	Bridge falls to ground Begins to stand – moves right arm – raises puppet and it flies backwards Stands Moving puppet forward, holding with both hands. Takes puppet in one hand. Arm outstretched Walks with puppet across classroom		
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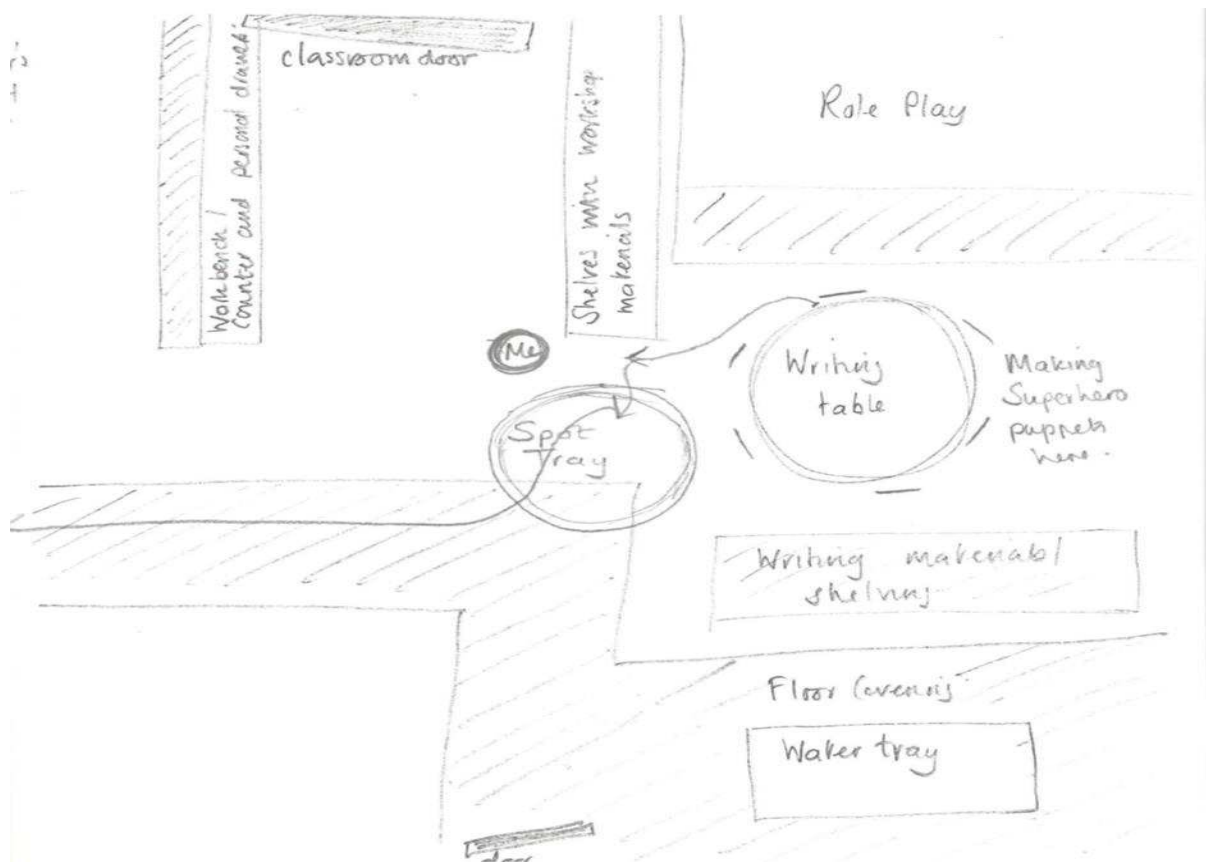
6.3.3 Semiotic resources, materials and movement in expressing meaning

In this episode, there are similarities between those extracts described earlier in this chapter in that the movements were predominantly made by the child holding a puppet. This time, rather than just watching, I talked to Liam as he played and therefore speech gave a different kind of insight about Liam’s thoughts as he played with the superhero. Here, Liam appears to move from a response to my question about the super power of his superhero, ‘*him got lazer eyes*’, to an illustrative demonstration. The materials in the spot tray quickly become repurposed as a resource for this impromptu demonstration. Liam used gesture and action to illustrate the motion of the superhero, and the material resources to hand, as the superhero demolished the bridge in the spot tray. What was of particular interest in this episode was how, through his animated enactment of the powers of the superhero (0:04-0:10, Figure 6.4 above), the body of the superhero puppet becomes entangled with Liam’s body in his imagining. At 0:09, Liam drew his fingers from his own mouth to the mouth of the puppet, and the imagined power of the laser eyes from his own eyes outwards into the air in front of him. Liam is expressing this using a multiplicity

of orchestrated semiotic resources that seem to communicate his great enthusiasm for the activity. The imagined superhero power is depicted as almost flowing out of his body, and out of the puppet's simultaneously. As in earlier episodes described in Chapters 6, the space surrounding children is used as a way of exploring and communicating ideas and imaginings. As such it is used as a mode of representation of the superhero's power. Figure 6.14 illustrates the imagined flight path of the superhero once it had left the spot tray. Liam held it in the air and guided it, meandering across into another bay in the classroom. Liam's semiotic orchestrations here included a range of modes, such as gesture, gaze, speech, movement and this is fully focused on the puppet, how it can move, and what it can do. Liam's movements, which directed the movement of the superhero puppet, were central to this representation and he showed how he fluidly drew upon the material and spatial resources of the setting to imagine his superhero, its powers and its actions.

Figure 6.14 below shows the pathway Liam walked through this sequence. He had been sitting at the writing table making a puppet then he moved to the spot tray. You can see where I was sitting on the floor while I spoke to Liam. Liam then walked away and across through the classroom to the carpeted area. At this point, a number of children were playing around the classroom with their puppets. As my attention was focused on Liam at this point, I did not note where the other puppets moved to but did see that some were secreted into children's personal drawers.

Figure 6.14 Movement mapping – Liam



6.4 The rapid production of materials

The focus and intent with which children worked as they shaped and re-imagined materials in the ways described in this chapter were notable. This illustrates how the children, in constant movement and in perpetual interaction with the environment, were drawn to the available classroom materials, here with an intense interest on paper strips and superhero puppets. The children often seemed to rapidly and flexibly explore the possibilities that these offered. Materials and what they become as children assigned them with imagined meanings, cut, adapted, and changed them, helped the children to create materials with significance to them.

As activity took place, it was characterised by its unpredictable and haphazard nature. At times it appeared to be the malleability of materials that attracted children, the sensory feel, or the enjoyment of changing materials through bending or cutting. The accounts provided in Chapters 5 and 6 illustrate how children's activity led to the production of many things (See Appendix III) as children's activity with the material possibilities of the setting led to its re-imagining, re-purposing and re-shaping by which it was assigned significance. The moving, changing and combining of materials often manifested as a hybridisation of those practices and activities that children took part in previously. These often merged with schooled literacies in unique and unpredictable ways. As one child was teaching another child how to write letters, her voice could be heard as she wrote each letter. Other children drew letters on cards, or just stuck strips of letters to reclaimed materials. What was also notable was the ways in which children's activities travelled quickly across the classroom and between children, as suggested by Dyson (2009). Furthermore, activities emerged in unique and interesting ways *through* the materials created by the children. As children re-purposed, re-shaped and assigned meaning to materials, they populated the classroom with these things and the produced materials in turn, appeared to shape further meanings that were made. These often became collective resources and shared projects.

The materials children produced, both the ones produced from paper strips and the superhero puppets, were contingent on the resources that were available, and it appeared in the case of the paper strips, not necessarily a product of any conscious design. These emerged from what seemed to be an exploration or investigation into the possibilities of the materials and by virtue of this, were in turn shaped by the

affordances of the provided materials. As materials were produced, they were given significance by the children who shared them with each other and with me.

In a similar way to the spot tray episodes described in Chapter 5, children's enthusiasm for these activities was notable in the ways in which they moved in and around the area. Walking was important to the meaning making in these episodes. Movement mapping diagrams illustrate the flows of movement, some of which turned into novel pathways. For example, the pathway from the where the paper strips were stored, to the personal drawers, and the workshop area where the tools and other materials were stored, quickly formed. The pathways taken by children across the classroom during these episodes were also of interest, forming from a meshwork of to and fro, from writing table, to workshop, to counter. The movement appeared to forge a link between the children's usual practices and those new practices that were more associated with school. The children often took part in activity which involved cutting and sticking. At times they would produce something with a clear purpose, for example a bracelet, or some other recognizable object. This practice would then quickly catch on, almost stumbled upon by accident it seemed, but then emerging as something of some use or recognisable value. At other times it was just a random joining of bits and pieces that became nothing in particular, and was discarded, or picked up by another child later, dis-assembled and changed.

There was, however, something compelling and significant about these particular episodes that stood out to me as an observer. It was the eruption of the activity and the speed at which this travelled between and across the children and was taken up by them, seemingly not by conscious decision, but more by a desire to follow the flow of activity and movement and the way that this spread out radially, from the pile of paper strips, or the table where the student was helping the children make

puppets. The similarities and differences of the materials produced are both of interest and made me question where these thoughts and ideas had come from. For example, Louise's and Kehinde's pots were lined like nests, one with tissue paper and one with straw and the letters were placed into the 'nests'. Lucy concealed and revealed her letters via the lift the flap lid. I considered how their individual and shared interests emerged and quickly spread across the classroom. There appeared to be a particular origin to the activity or starting point, which led to chains of activity which appeared to have connections through the material production that was taking place.

6.5 Hybridisation of practices or flows of movement?

As explored in Chapter 2, Dyson (2008) discussed the ways in which children hybridise practices across home and school, and in turn take-up schooled literacies. While I cannot know what drove children to make particular objects, or use them in particular ways, I could see how children's activity here could be seen as hybridisation. I could imagine, as I watched, how children were taking what they liked to do, such as cutting and sticking with the materials in the workshop area, and how they had integrated the graphemes from the schooled literacy practices, drawing strands together, in some ways embracing both sets of practices. Cutting and sticking could be seen as a school (or home) sanctioned practice, and therefore this activity could signify a hybridisation that is influenced by pedagogical goals. My interest in this phenomenon was fueled by the ways traces of schooled literacy practices were integrated into children's activity. Louise wrote letters onto the pieces of card, and in the background a child was saying phonemes as they were writing with the teaching assistant at the writing table. Joshua, Kehinde, Louise and Grace were were excited and pleased with their re-purposed materials. But it did seem to

be more than just a 'taking up' of schooled practices or a process of hybridisation. Through their creative exploration and production, shared interests appeared to be emerging, and this emergence involved claiming the materials and the spaces around them. The children appeared more drawn to the potential of the materials, to their possibilities, and their interest generated flows of material (the paper strips) and the re-purposing of materials.

The data in this chapter are representative of what I term focal to radial movement/ interest, and in this instance children started with the same material resources from one area of the classroom, and transformed these to produce objects that moved out across different classroom areas.

6.6 Chapter summary

In this chapter, I have explored further episodes in which children spontaneously and playfully explored materials in the classroom. In doing so I have illustrated what I term as focal to radial point movement/ interest, where children's activity appears to have a starting point of interest, for example, a pile of paper strips, which moves outwards and spread across the classroom spaces in interesting ways. I have explored the quality of the movement, describing the flows of movement as children walked around the classroom while they were in a process of rapid production of materials as they re-purposed, re-shaped and re-imagined them. A flurry of movement, that had a contagious quality across children, accompanied the rapid production of meanings and materials in these episodes.

Chapter 7

Focal interest: Moving puppets, play figures and iPads

7.1 Introduction

In Chapters 5 and 6, I have examined children's interactions in the classroom environment in two ways, identifying formations or patterns of movements as children crossed and moved between classroom areas. I have provided illustrations of children's converging movement/interest, where children collectively bring ideas and materials into one classroom area and also of focal to radial movement/interest, as children's interest in resources in one classroom area was followed by activity which took that interest (and materials) to different classroom areas. Such movement often also led to the production of multiple artefacts. These framings of children's activity should not be seen as start and end points, as the classroom areas and its resources are in a state of constant change. Chapters 5 and 6, indicate interactions that are very much collaborative. Collaboration was notable in that as children moved around the classroom, they produced collective meanings.

In Chapter 7, I draw on my data in order to illustrate a third movement/ interest formation which I have termed 'focal interest'. This includes activity where children gather and play around a focal point, where the resource/s and materials they draw upon are contained within the area in which they are playing. I use illustrative examples of two kinds of activity that draw on common resources across Early Years classrooms; puppet play and iPad apps. Here I reflect on child/ object intimate movements. These movements refer to children's activity that is very often carried out in a smaller, more confined or smaller scale. In these instances, children moved hands and arms and manipulated objects. It is important to note here that puppet

play and iPad apps were very popular resources drawn on in continuous provision throughout this study. The episodes presented in this chapter differ from those in Chapters 5 and 6. In Chapters 5 and 6 I illustrated the interconnectedness of children's activity as it played out across a morning or series of events. In contrast, the episodes presented in this chapter are taken from across a number of visits and I share instances of activity as it took place around one focal point. The examples explored in this chapter often involved episodes where children played alone, in pairs, or in a small group. Activity described in this chapter takes place in a smaller classroom space therefore I do not use movement mapping of larger areas of the classroom. I use multimodal analysis and a series of still shots of sequences of hand movements. As in Chapters 5 and 6, I note how the quality and affordances of the classroom and resources with which children interacted, shaped their activity and their meaning making in interesting and unexpected ways. I consider the data in this chapter into two sections, puppet play, and iPad play.

Chapter 7 Part 1: Puppet play

7.1.1 Puppets in the early years

Puppets and small figures, such as play people or animals, are a familiar resource in Early Years classrooms and encourage children to engage in imaginative play and to re-enact stories. Puppets and small figures can be 'lifelike' animals, or be anthropomorphised, such as the familiar and often stereotypical animals in children's stories. Puppets can range in size, and in these episodes, I focus on those that can be held in the hand and moved by children as they play.

The episodes in this section focus on children's activity that involved in puppet/ small figure play. The data was gathered on 22nd September 2014 and 6th October 2014.

The first three sections of this chapter (7.1.2, 7.1.3 and 7.1.4) examine activity where children were often alone, and moving objects with their hands. During these episodes the children are sitting or kneeling in one place throughout the episodes and the movement in the episodes is predominantly that of the children's hands.

7.1.2.1 Puppet movement- Sylvia

I begin this section with a narrative observation of Sylvia, who is playing with two puppets around a book browsing box. The puppets are stored behind the book browsing box in a basket. I assume that the teacher has placed the puppets here, directly near the book box, to encourage children to tell and re-tell stories or make links between the books and puppets. Sylvia is playing alone at this point, but there are children playing nearby on the carpeted area.

7.1.2.2 Narrative account 1

Figure 7.1 Sylvia and the Puppets 1



Sylvia is playing on the carpet area of the classroom, at the side of the book-browsing box. The book browser box is painted red, brightly coloured to attract children's attention. I stop to film this episode as this kind of activity is very common and I am intrigued why this might be the case. What is it that compels children to take small objects and toys one in each hand, and re-enact what look like social interactions between the two? This kind of activity is exactly what children do... it is just play... but it has become so common across the classroom recently that I want to know more. I notice that it very often occurs without much noticeable direct interaction with another child, apart from a glance or a shift in body position.

Figure 7.2 Sylvia and the Puppets 2



I notice common movements, such as the momentary touching of the noses or faces of the character, the sudden moves away or apart, or when one character goes out of view, then reappears (See Figure 7.2). Are fundamental human experiences of being present and together, or apart in space, being re-enacted here? Facial

expressions often play a part in these what appear to be re-enactments, mirroring the possible emotions of the characters as they come together and move apart. I want to examine this further.

The above observation was of interest as I had noticed that this kind of activity seemed to be suddenly manifesting across children, but in separate areas of the classroom. The following multimodal transcription allows a closer examination.

7.1.2.3 Multimodal analysis - Sylvia

In the multimodal analysis below (Table 7.1), the movement of the puppet as propelled by Sylvia’s hands and arms appears to be the most significant action taking place. As we begin, the child is holding her left hand down under the book browser, while holding the fox puppet out of sight. She is looking towards her right hand where she holds the tiger puppet, which she has just wedged between the books. It is partially hidden by the books.

Table 7.1 Multimodal transcription- Sylvia

Time code	Direction of gaze	Action	Gesture/ Facial Expression	Speech
00:02	Turning and looking at left hand	Releases the tiger and holds onto edge of book browser Hands are now together, pushing lion down into left-hand compartment of book browser	Intent and relaxed facial expression	
00:08	Turns to right and looks to tiger			
	Looks to fox	Raises body Moves fox into right hand compartment with right hand.		
00:13	Looks to fox and tiger	Slides fox towards tiger		

0:17	Eyes follow tiger Looks to fox Follows movement to tiger	Holding tiger with right hand, child puts left hand on tiger and moves it further back across the book box, hiding it behind the tall books. Brings fox and tiger together so faces are touching.	Sticks out tongue as if in concentration	
00:20	Looks to fox and tiger Follows movement across book browser Follows tiger Looks to right hand/ fox – Follows movement of fox Eyes on fox and tiger	Lifts puppets so they are side-by-side facing forward in air. 'Hops' puppets back to well in book box moving up and down Left hand takes tiger puppet and puts on books Right hand moves fox so it is parallel following pathway of tiger Turns fox and tiger to face each other	Opens mouth and closes it again	
00:22				

The activity detailed above in the multimodal transcription grid continued for some time in similar patterns of movement, moving up onto the book browsing box, and then down to the floor and back to the book browser again. The multimodal transcription brings the intense focus of the child attention to the movement of the characters to the fore. The repeated coming together and separating of the characters, as Sylvia moves these with her hands, is followed by her gaze. Notice how the characters come together at 0:13, 0:17, 0:19 and 0.22. Her facial expression

is one of concentration, mostly still but tentative and she occasionally opens and closes her mouth as she plays. The multimodal transcription grid draws attention to the salience of the movement and positions of the puppets in this episode. In the hand movement mapping below (Figure 7.2), the sequences and direction of movement are shown by arrows. The sequence moves from left to right, top to bottom. There are ten still shots in the sequences of movement carried out by Sylvia.

Below, I have used still frames to present the movement of Sylvia's hands during the sequence to further examine the patterned movements she is making.

Figure 7.3 Sylvia and the puppets – sequences of movements





7.1.2.4 Sylvia's hand movements

In figure 7.2 the sequence of Sylvia's hand movements are shown by the lines I have hand drawn onto the still shots. The still shots are taken from the filmed episodes used in this chapter. The lines I have sketched onto the still shot represent the movement and direction of Sylvia's hand as it has just occurred moments prior to when the still shot is made. The arrow points in the direction of the movement. In the sequence, note how the puppets are repeatedly brought together, then moved apart. Each movement of either one or both puppets varies in speed but is quite fluid. When the puppets are brought together or positioned apart, they are held still for a few moments. The above images show the points of momentary stillness. The puppets were also positioned either facing each other, or facing in opposite direction. Sylvia seemed to take a few moments to get these positions right, often wedging the

puppets between the books. Hiding the puppets seemed important to this activity. See the first and third image where the tiger is placed horizontally behind the book as if obscured from sight. The movement of the fox between the first and second image goes directly beyond the tiger, and then takes a U-turn, changing direction to what looks like, sneaking-up on the fox. The puppets are held in this position for a few moments and then the fox is moved back into the bottom right hand corner of the book browser, partially hidden from sight again. In the eighth image, the fox is completely hidden from sight in the right-hand corner of the book browser. This coming together and moving apart of the puppets occurred repeatedly throughout Sylvia's play. In the final three images, I noticed how the fox again was sneaking up on the tiger from the right, and from behind, but then the tiger has moved to a position behind the fox, but Sylvia has positioned the fox so he can see the tiger approaching.

7.1.3.1 Small figure movement– Sam

I now provide a second example that took place on 22nd September 2015. This episode is very similar to the episodes of Sylvia above, but the child's facial expression suggests that the child is responding emotionally to the activity he is undertaking. Sam is seen here (Figure 7.3) playing with a small world spot tray which has been set up as a forest, e.g. a grass floor, pine cones and sawdust, pieces of wood and three bear figures of different sizes. Again here the child uses similar movements to those that were evident in Sylvia's activity, such as the coming together, separating, being present/not present, and the movements of the puppets. Sam, in Figure 7.3 (below) is holding the bears in front of him- he has just brought them together so their noses are touching.

Figure 7.4 Sam and the bears 1



Again, I was intrigued by the patterned nature of these movements, and how similar they were to Sylvia's activity. I transcribed these as follows.

Table 7.2 Multimodal transcription. Sam and the Bears

Time code	Gaze	Action	Gesture/ Facial Expression	Speech
0:13	Gaze intent on bears faces	Stands bears facing each other- touching noses Removes hands carefully so bears remain in that position	Eyes widen Head lowers clenches jaw	
00:20	Looks down Looks back up at Bears	Places hands under spot tray Bears fall		
00:24	Looks to Researcher Turns back to bears	Lifts hands and takes hold of a bear in each hand Stands bears	Clenching teeth, eyes down towards bears	

00:32	Focused intently on bears	<p>Raises hands – a small bear is in right hand</p> <p>Takes left hand and positions bear on spot tray Puts small bear down at side of large bear. Bears stood facing again</p> <p>Bear wobbles but stands</p> <p>Flicks bear on his left with forefinger</p>	<p>Mouth opens and closes as if talking. Presses lips back together.</p> <p>Mouth opens wide – eyebrows raise</p>	Makes high pitched sound
00:38	Looking down to bears	<p>Flicks bear on his right with forefinger (Both bears now laying down)</p>	<p>Mouth moving as if talking – smiling</p> <p>frowning</p>	
00:43		<p>Places hands back on bear and repositions it upright Bangs small bear into large ones and knocks them over</p> <p>Positions small bear on top of large bear's head</p>		
00:49		<p>Moves large bear with left hand</p> <p>Positions small bear with right hand against large bear</p> <p>Moves small bear to top of the large</p>		

0: 52		bear's head. Moves both, held together, behind spot tray.		
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In the multimodal transcription above, there was a sequence of the bears coming together and moving apart. I notice how Sam positions them together in different ways for example, standing them side-by-side at 0: 32, 0:49, and 0:52, and moves them apart in 0: 25. The bears touched noses (see also Figure 7.4 above) but were also positioned together in different ways, such as the small bear on the back of the large bear at 0:49. The movements were punctuated with moments of slowed movement or stillness when the bears touched. This episode differs from Sylvia's in that the movement was accompanied by changes in the child's facial expression, which seemed to convey an emotional response by the child, prompted by the movement and positions of the characters. Below (Figure 7.5), I have provided still shots of the positions of Sam's hands.

Figure 7.5 (below) Sam and the bears – sequences of movements





In figure 7.5 I illustrate the patterns of hand movements carried out by Sam. Similarly, the movements are punctuated by moments where the puppets are held still. In the first two images, Sam brings the bears together until they eventually touch noses. He holds them there for a few seconds. Sam then lifts them up into the air and apart then brings their faces back together in the third image. In the fifth image, one bear is moved under the tray and the second is remains on the grass. In the next image in the sequence, the bear re-appears. The final two images show how Sam has balanced the bears together, front feet and noses touching, and then the small bear touching noses with an adult bear. These patterns are very similar to the kinds of movements made by Sylvia, and again, it appears that the positions of the figures and the momentary stillness that took place at these points were significant.

7.1.3.2 Enriq and the hessian

This third episode I will relate in this chapter took place as Enriq moved materials within a spot tray. Earlier, I described how spot trays are a common feature of Early Years classrooms. In this example, the teacher had provides a range of materials in the spot tray. This included a range of natural materials including fabrics with

contrasting colours and textures. There was a selection of blue fabric. One had a sheen, another was patterned with shades of blue (see 7.5 below). A third was white and stippled with tiny reflective metal discs. Two pieces of hessian were provided, one a tightly-woven variety, and the second a bundle of very loosely woven hessian. Hessian is a durable material of a distinctive texture, again often used in the construction industry to stall the hardening-off of cement or to provide purchase for plaster on smooth walls. Here, materials of different textures and patterns had been placed together to stimulate children's sensory experiences. The conifer cone's hard leaf-like projections and the almost flat concentric circles of the wood slice provided contrasting patterns, colours, textures and qualities for the children to explore. To this arrangement, the teacher had added two wooden play people, one young, one old, both female (see Figure 7.5)

Figure 7.6 Enriq and the Hessian



7.1.3.3 Narrative account 2

Enriq has been moving the old woman puppet around with his left hand, positioning it on a piece of wood to the left. He then moves it to the right hand of the spot tray and drops it. His left hand is hovering in the spot tray and he brings the old lady, now back in his right hand, to his left. Meanwhile the strands from the hessian have been touching the back of his left hand in its new position. Throughout this activity, Enriq's gaze stays on the puppets and the hessian. His facial expression is mostly one of concentration, and of a slight smile, but there is not much variation. I notice how Enriq often seems to focus on one hand at a time as he conducts movements, rather than orchestrating these together. His left hand accidentally brushes against the hessian, and this results in him moving the girl puppet towards it.

Figure 7.7 Enriq wraps the old lady in the hessian strand



Table 7.3 Multimodal transcription - Enriq

Time code	Gaze	Action	Gesture/ Facial Expression	Speech
0:17 0:19	Looks to hand	Brings play figure with left hand over lip and into spot tray. Strand of hessian rests on play figure and on child's fingers.	Half smiling throughout episode	
00:23	Looks to hessian on back of hand Looks to play figure	Left hand fingers splay back into hessian strands Brings second play figure to spot tray with left hand and moves it against the strands of hessian Hessian becomes caught between child's fingers Left hand takes a strand of hessian		
00:25	Looks to hand Looks to play figure	Pulls hessian strand against play figure seemingly trying to wrap it around Takes play figure and moves it away from hessian slowly Brings play figure back down towards strands Turns hand and play figure wrapping hessian strand around it.		
00:41	Looks to right hand Looks to play figure	Pulls hessian strand with right hand to secure it around play figure. Takes arms of play figure in left and right hand thumb and forefinger stabilizing play figure and pulls away from hessian. Lays play figure on hessian.		
00:57	Looks to girl play figure	Takes left hand and picks up girl figure Brings it towards a second hessian strand and wraps it around girl play figure with right hand Releases girl puppet		

	Looks to right hand	Picks up old lady figure and draws it upwards until it is released from hessian threads		
	Looks to girl puppet			
	Looks to old lady figure			

As I observed Enriq, I was intrigued by the way the hessian strands had become part of his activity. As they brushed the back of his hand (0:30), the tactile quality of the material drew his attention. He splayed his hands back against the strands, as if attracted to the sensory feel of them. As he did this, the puppet and his fingers became entangled and it led to a few minutes of intense concentration and activity (0:24) as Enriq then becomes interested in wrapping the puppets in the hessian strands.

In the section that follows, I will summarise my reflections of the episodes involving Sylvia, Sam and Enriq.

7.1.4 Sylvia, Sam and Enriq: Focal point interest, puppets and figures

In the episodes I have described so far in this chapter, I have been drawn to children's movements of the hands, as they move and manipulate objects. Such movements often seemed to follow patterns, the coming together of characters, the touching of faces or noses, and the moving away again- one puppet going 'out of sight' to the other puppet. This coming together and moving apart can be seen as a common feature of the episodes explored so far in this chapter.

We can see here how Sylvia is re-appropriating the area around the book browser in order to re-create or enact movements between the objects/puppets she is playing with. The pedagogical intention of such a box may be to show children the front covers of books, to entice them to select a book to peruse. An assumption here is that this will draw children's interest in books, and this will be an important step in their development, as they see that print carries meaning (Early Education, 2012). Sylvia's movements, however, suggest she is imagining the classroom area quite differently. She has different ideas of what the book browsing box might become. The ridges of the different sized books are hiding places, and then pathways to move across. The sides of the book box are out of sight. Sylvia does not look for long directly at the puppets when they are in their hiding places, only to check they are positioned correctly in her activity. Her eyes are on the faces of the puppets. What seems important to her is not whether the puppet is hidden or not, but the imagined experience of the puppet that is present at any particular time. Here, Sylvia appears to have used the material resources to hand in combination with movement of puppets to perform symbolic representations, imbuing the classroom space and its environment with meanings that are significant to her.

What stands out in these episodes is the patterned nature of Sylvia, Sam's and Enriq's movements. It could be interpreted that Sylvia and Sam are retelling familiar narratives, or a sequence of events from narratives. The activity however, seems contingent to some degree on the material affordance of the book browser and the spot tray itself. Another aspect of this is that children's gaze and facial expression suggest their intense absorption in this kind of activity. This is apparent as Sam and Sylvia appear to create and re-create the separating and moving apart of the

puppets. Both children turn the puppets' faces to see each other, as though imagining their meeting. This is clearly a significant experience for Sylvia, where she seems to be 'trying out' ideas about the human world, about being present and apart, but again it seems to arise spontaneously, rather than being a planned activity. Sylvia quickly repurposes the book browsing box, and invents novel pathways for the puppets as she orchestrates their movements. Enriq appropriates the sensory and tactile quality of the hessian into his activity.

Sam's episode again has many parallels with that carried out by Sylvia and Enriq. The deep absorption of all children was evident in all accounts in this chapter. However Sam's activity seemed deeply steeped in the emotions of the characters he was manipulating and imagining, as seen by his facial expressions (See Figures 7.3 and 7.4). The emotions of the characters at certain points appear to be mirrored through Sam's body, from the way he holds the puppets and the intensity and focus of his gaze. When we see this, example, we can think of how Sam focuses on the being together/ parting/ touching noses and conflict of the bears as he plays this out through the material arrangement of the resources around him. To some degree this does appear to be mediated by what does or does not happen as he manipulates the materials. The first falling down of the bears seemed accidental and due to a lack of stability of the bears. Sam then followed this up with a more deliberate and charged knocking over of the characters. This unpredictability of the materials in the environment, or the unexpected affordances of the objects, often shaped the direction of what subsequently took place. Similarly, the apparently accidental moving of the material resources around him, the tangling of the puppet and hessian strands, appeared to guide the direction of Enriq's action.

Sam, Enriq and Sylvia appeared to be using available resources and classroom areas flexibly to explore emotions and experiences associated with human bonds and togetherness, or of being separate, and coming together again. In addition, they appeared to be exploring the sensory and tactile elements of the materials they were encountering. At times, the sensory and tactile elements seemed to stimulate and steer the direction of children's activity as they engaged in this imaginary play.

Furthermore, movement in these episodes, particularly the movement or trajectory of puppets as they moved along lines, had dynamic qualities in similar ways to the movement of walking described in Chapters 5 and 6. Sam bumps the bears together with force; the movement of the tiger propelled by Sylvia's hand is slow and careful; the movements of the tiger and the fox speed up and slow down, bringing a communicative quality to their actions that was significant to the meanings made.

Chapter 7 Part 2-. iPad play

7.2 Focal interest – movement and iPads

Another popular activity for the children was the use of iPads. Although not essentially having the same malleability as the card, the materiality of the iPad and its multimodal affordances, was similarly re-purposed by children in creative and interesting ways. In previous work (Daniels, 2016; 2017) I have drawn on the data presented in this chapter to examine children's repertoires for meaning making, and evaluate a range of apps and their use in the classroom. Here, I draw on the data with an emphasis on children's movements as they play together with digital technologies. In the constellations of data presented below I use multimodal transcription in order to examine the range of communicative modes used by the children. The modes employed by the children and the meanings that are made are

prescribed in some ways by the materiality of the iPad and its touchscreen affordances, and also by the content of apps used. The multimodality of the iPads and the on-screen moving images in particular, shaped the kinds of movements that children carried out as they interacted around them. These movements in turn appeared, as in other chapters, significant to children's meaning making. The multimodal transcriptions and subsequent analysis of these episodes enabled me to look closely at the interrelationships of the materiality of the iPad and the multimodality of the app and consider these in relation to children's movements.

7.2.1 Introduction to the episodes

Throughout the year, the class teacher had selected from a range of available apps and downloaded these onto the three iPads provided in the classroom. A range of apps have been developed for young children in the classrooms, and these are often seen as supporting pedagogical goals, for example, Hairy Letters © or Pocket Phonics ©, are designed to support early literacy learning. The apps examined in this section as illustrative examples include Toca Robot Lab by Toca Boca © and Story Maker by Lego Friends ©. Toca Robot Lab enables the player to build a robot and guide the robot through a maze, collecting stars as the player does so. The game player guides the robot through the maze towards the destination of a shipping unit. Lego Story Maker © allows children to design a multimodal narrative, selecting from a range of character images, accessories and story settings. In what follows, I have selected two illustrative episodes drawn from the data-set. These are examples of what I have termed focal movement /interest. The episodes took place on 22nd September and 8th October 2014. The first shows Harry and Blaise where Blaise subverts the app to some degree in order to entertain his friend. The second episode

shows a group of girls, who find it difficult to operate the app, and instead, re-purpose the activity. Blaise and Harry's activity is due to their confidence and familiarity with the sequence of the app. In contrast, Louise and friends make sense of an app that is difficult to operate. In these examples, it is important to capture the movement on the screen, as these stimulated and shaped children's movements around the focal point of the iPad app. I therefore use a multimodal transcription in order to examine this data. Of particular interest in this section is the ways in which children's activity around the apps, as they interacted with the materiality and the movement and sounds on screen, gave rise to patterned sequences of movement. I was also interested in the ways in which the children often did not follow the sequence of the app as the app designers may have intended. Often, throughout my data, I noticed how children turned the apps into something of relevance and significance to their own lives and interests and this sometimes arose from their inability to operate the app successfully.

7.2.2 Narrative account 3

Blaise and Harry are playing Toca Robot Lab. The aim of the game now is to guide the robot through the maze, taking him to the shipping unit, following the white arrows, and gathering stars as you do so. The pair has been playing this game for some time now, sitting in the carpet area side-by-side. Blaise is stabilising the iPad using his knees and at times his left/and or right hands placed either side of the iPad. In order to keep the robot moving, and to prevent it from falling down deeper into the maze, he is continually swiping it across and up the iPad 'page'.

Figure 7.8 Blaise and Harry play Robot Lab



The above figure shows Blaise demonstrating the game to Harry. I transcribed the activity in order to closely examine the movements taking place.

Table 7.3 Multimodal transcription- Blaise and Harry

Time code	Gaze	Action	Gesture/ Facial Expression	Speech
0:15	B and H looking to screen	B: guides the robot from left to right across the screen, swiping with forefinger	H: Claspings hands together	B: Watch it! Watch ... this!
0:18	H: Leans in closer to screen.	B: drags the robot to the right of the screen , disregarding the white arrows . Begins to swipe		

0:23	B: Looks to H and then back to screen.	upwards using left and right forefingers alternately	B Smiling	H: And then he'll be trapped!!
	H: Looks to B- then back to screen	B: Positions the robot over a long vertical drop in the maze	B: Opens mouth in mock surprise	B :AARRGH!
0:31	H: Looks to B then back to screen	B: Quickly pulls both hands away from screen, dramatically raising them up above his head.	H: Raises eyebrows- hand to moth	H: Oh! H: Ah!
	H: Leans closer to the screen	B: Guides robot back up the maze using left and right had swiping movements		B: I like that bit! H: Can I have a go now? B: Watch it! Watch it! After I have completed this mission.

7.2.3 Movement and multimodal affordances of apps

In this episode Blaise confidently used the haptic skills needed to operate the app. He explored the app in a playful way and seemed to enjoy ‘failing’ the mission, causing the robot to fall back down into the maze, almost subverting the object of the app. He confidently used both hands to speed up this part of the game, moving quickly towards the part of the game he is enjoyed - the robot’s tumble down the maze. He repeatedly drew Harry in to watch this sequence, and appeared to link tis activity to his experience of computer games as he is on a ‘mission’. Although Blaise carried out most of the control movements (see Merchant, 2014), we can see how he continually drew Harry into the activity. He made exaggerated haptic movements in order to sweep the robot up the screen, to the gesture of throwing his hands up

towards his head (0:23). This merging of movements that both controlled the app and gestured to Harry was watched intently by Harry. In this way, Blaise kept Harry involved in his activity. In this episode, gestures became incorporated with the touch screen control movements (Merchant, 2014): Blaise flaunted this as he pulled his hands away from the screen and allowed the robot to tumble down the maze. The iPad screen, with its sound, moving images and touch-screen control, appeared to have stimulated the dramatic gestures of Blaise, as he mirrored, but mimicked, the image of the falling robot (0:30). The story of the robot, with its journey and then its fall in the shipping unit, offered a linear narrative. Familiar with this story line and the sequence of possible events, Blaise made it more exciting by adding a twist as he doomed the robot to continual failure in its mission. The operation of the app, via touch, was combined with his repertoire for representing the robot's falling... with calls of 'argh' and exaggerated movements of his hands from up in the air in front of him, and onto the screen. In this episode, I observed the ways in which children's communicative modes become combined with the multimodal affordances of the iPad, and how the moving images and sounds, appeared to stimulate children's movements. Its material presence in the classroom appeared to prompt a range of communicative repertoires as children interacted together around the device.

7.2.4.1 Movement and apps- Josie and Jane

In the next section I present a second episode of activity around an iPad app. This time a group of girls are exploring an app called Lego Friends Story Maker ©. In Figure 7.9 below, Josie is using touch to select a Lego Friends Character.

Figure 7.9 Josie and Jane play Lego Friends



7.2.4.2 Narrative account 4

Josie and Jane are sitting in the book area of the classroom on a small bench - an informal place where children frequently share books or just chat. Josie is balancing the iPad on her knee with a classmate sitting either side of her. I recognise Lego Friends Story Maker ©. Josie turns the screen to me and uses the arrow icon in the corner of the screen, revealing a page called 'My Book Title'. Jane reaches across, extends her finger and presses the 'person' icon on the screen. A menu array of possible story characters appears at the bottom of the screen. Josie turns the iPad back towards her and settles it onto her knees (stabilizing movement). Jane and Josie are negotiating which characters to choose from the slide bar menu. Jane accidentally selects the story setting selection menu.

In watching this activity, I was intrigued how the children, seeming to struggle a little in operating the app, but were fairly confident in selecting from the array of choices.

This meant that even though this was a popular app, they stayed at the initial stages of selecting, and did not progress beyond this in the apps sequence. I transcribed this to examine the hand movements of children in closer detail. See table 6.4 below.

Table 7.5 Multimodal Transcription Josie and Jane

Time code	Gaze	Action	Gesture/ Facial Expression	Speech
0: 15	Jo, Ja looking at screen	Jo: selects row of people. Characters re-appear at bottom of page	Determined expression-frown	<i>Jo: No!.... Persons!</i>
0:20	Ja: Looks to Jo, then back to screen	Jo: Selects and aligns another character Jo: Slides row of possible characters from side-to-side with right index finger	Ja: points to array	<i>Ja: Boy,...boy....boy</i> <i>Ja: My big sister has got that other person... There!</i>
0:26	Ja: Jo-watching screen intently	Jo: Selects and drags a person to array. Uses thumb and forefinger to realign and resize character		<i>Jo: Err ...Need her! She's nice, look!</i>
0:30		Jo: selects, drags and drops a guitar onto middle person in array		<i>Ja: Get her a doggie!</i> <i>Jo: Yes- she's the singer...</i>
0: 31				<i>Ja: She can be a kid!</i>
0: 36				<i>Ja: Get a microphone for her...</i>
0: 42				<i>Jo: What about a handbag? No!</i> <i>Ja: Get her a doggie!</i>

7.2.5 Focus/interest movements and the materiality of iPads and apps

This episode is intriguing as the girls in this sequence appeared to have difficulty operating the app. Initially, the group focused on selecting characters and accessories and did not progress beyond this. What appeared significant were the ways in which the children drew upon the haptic skills they had already mastered,

and attributed their own understandings and experiences in order to generate a meaningful shared experience with the app. As the girls interacted with and around the app, both the app and the iPad shaped the girls' movements. The intense interest in this episode appeared to be the Lego Figure Characters. Josie, seemed to have come across these characters in her prior experience, and appeared to be drawing of her understandings of pop groups and the objects and accessories they may have. Josie makes direct reference to particular characters in the app. The comment 'My sister has got that one' seems to refer to familiar characters in other Lego Friends apps In contrast, Jane appears to want to create a family scene, with a 'boy' and a 'doggie' (0:20, 0:30). Josie resists Jane's suggestion to add a 'doggie' to the line-up, or to select a 'boy' member of the band (0:26). Josie was clearly the most demonstrative member of the group, and she used her repertoire of communicative resources in order to steer the direction of the play. She appeared to exaggerate the movements needed to hold the iPad as a way of expressing this and then threw her hands into the air, in a similar action performed by Blaise, but with a different kind of intent. What appeared to be significant in the activity around the iPads was the ways in which the multimodal features of the app seemed to prompt the intense interest of Blaise, Harry, Jo and Josie across these episodes. In a similar way to the paper strips in Chapter 5, the workshop materials in Chapter 5, the apps were repurposed by the children in order that they became something of significance to the children. The onscreen movement of the robot, or the potential movability of the images on the screen, however, seemed to provide a different kind of malleability to the card and tissue paper.

7.3 Focal movement/ interest – activity with puppets and iPads

In this chapter, I have shared episodes of data that involved children engaged in what I have termed focal point movement/ interest. Children's movements around the touchscreen devices and with the puppets were more localised in their use of classroom space and so the activity also appeared different to those described in Chapters 5 and 6. The children did not seem to move the puppets and iPads around the classroom as with other resources, such as strips of card. Similarly, although children worked in small groups around the apps and puppets, rarely were other material resources or objects combined with the interactions. This may be due to classroom rules and procedures and the protection of expensive equipment. It is not clear. What is apparent is that as children huddled around the iPads, the multimodality of the app and the movements needed to operate it produced different sequences of movements. These in turn shaped children's communicative repertoires. This appeared to be due to the haptic skills required to operate the apps and the ways in which these became orchestrated or intertwined with other modes of communication (Merchant, 2014, Walsh and Simpson, 2014). The multimodality of the app stimulated memories and experiences in ways that are indistinct to those meanings that took place alongside children's movement and activity with pieces of card or small pieces of green cellophane; those of stories, everyday life experiences, media figures and characters. When children brought their own interpretations, games and embellishments into their play around the apps and puppets, they seemed to make sense of them in often unexpected ways.

Again I was left with the sense of taking-up of practices as being something that was contingent on a collective construction and shared meanings. By being drawn to

children's movements and paying close attention to their movements, I noted how their movements were a salient feature of the ways that meanings arose, were shared and became collective across children. The shared understandings and constructed meanings were prompted and shaped in an intermeshed interplay of the material and spatial configuration of the setting in relation to the children's histories and experiences.

7.4 Focal movement/ interest

In this chapter, I have presented a selection of illustrative episodes that displayed very particular types of movement which involved children moving puppets/ objects as they held them in their hands or operating iPads, predominantly using their hands. These episodes took place in one area of the classroom as children sat, or kneeled alone or with other children. Sylvia and Sam's movements of the puppets appeared to be using the classroom space and its resources in order to play out sequences of movement with puppets and play figures. The facial contact of the puppets seemed to be a salient point in the sequences of movements that took place and which appeared to signify the changing relationship of the puppets. The episodes could be read as children's re-enactments of events from their prior experiences, such as what they know of bears, or awareness of stereotypical characters such as foxes in stories. This kind of movement can also be seen to be influenced by the spaces, materials and resources available to the children. Indeed, the material resources to hand here appeared to prompt children's activity. Enriq's plot to tie up the old lady seemed to arise from the hessian strand that touched his hand and inadvertently became tangled up with the puppet. Children appeared to appropriate the material affordances of the classroom to play out their own interests and concerns, but

equally, the material affordances of the classroom interacted with the child's intentions and sparked their imagination, memories and ideas.

This kind of intense activity, where children's engagement in what they are doing seems to be high, appeared to stimulate the orchestration of a range of modes to communicate meaning. Josie and Blaise's movements flowed from the operation of the iPad to gestures. The moving images of the Toca Robot lab stimulated Blaise's rapid swiping movements, which were at the same time exaggerated as he entertained Blaise. In focal point interactions then, children's intense interest appears to be linked to the movements of their hands and how hand movements can change the resources and space where their activity takes place. In Chapters 5 and 6 I noted how the dynamics or quality of children's movements changed as they undertook activity. In this chapter, the dynamics of movement is a salient feature; Blaise's frantic swiping movements to entertain Harry and Josie's demonstrative gesturing, conveyed children's deep interest. The movements of puppets such as the clashing together of the bears, the sneaky following of the tiger or the tangling up of the puppet, were done with a distinctive quality as the children moved the puppets with a dynamic that seemed to deliberately invoke meanings.

7.5 Chapter summary

In Chapter 7 I have explored children's movements during episodes of what I have called focal point movement/interest. I selected two sets of resources that children regularly chose during self-initiated learning time; puppets or play figures, and iPads. These two sets of resources prompted deep engagement as children interacted with them, but the resources, due to their material properties and affordances, were associated with different kinds of movements. I have illustrated the ways in which

children responded to the moving images and how the 'objectness' (Bomer, 2003) of the iPad prompted different kinds of orchestrations and patterns of movement to puppet play. Interactions with iPad apps appeared to prompt richly dense orchestrations of semiotic repertoires that arose from the interactions of children that became intertwined with the operation of the iPad. The movement and positions of the puppets/ objects meanwhile were characterised by children's deep interest, concentration, absorption and engagement and their movements were patterned across episodes. I noted how salient moments in the activity seemed to be when the puppets were still. The ways in which the children held in the puppets in position suggested that it was these positions that were central the meanings being made. This endeavour was influenced by the material arrangement and affordances of the environment.

Chapter 8

Discussion: Meaning making and the dimensions of classrooms, movement and materials

8.1 Introduction.

In this chapter, I draw together and explicate the key themes arising from the data analysis presented in Chapters 5, 6 and 7, summarising what I noticed about children's meaning making. As children's meanings were made in the classroom they re-imagined, re-purposed and re-shaped materials available to them and this was inextricably bound with their movements. Children's movements were characterised by what I have identified as three prevalent movement/ interest formations: converging; focal point to radial; and focal. I have also considered the ways in which bodily movement worked across three broadly defined and simultaneously occurring scales: whole body movements/ walking; movements of hands as children moved and manipulated materials; and smaller movements such as gaze, facial expression, gesture. In this chapter, I draw these themes together by presenting a conceptual framework that illustrates how the meanings that children made were created in direct and ongoing interrelationship between three dimensions: movement, the classroom and the available materials.

In Chapter 3, I explored how sociocultural accounts have generated expanded views of literacy. Here I add to such accounts in that I have described the ways in which movement plays out in children's activity. In providing an account of literacy that focuses further attention to children's movement, I draw on the poststructural perspectives and concepts of *emergence*, *movement* and *affect* (Deleuze and

Guattari, 1987; Massumi, 2002, 2015). These concepts foreground movement in human activity and complement sociocultural explanations of children's early literacy activity. In addition, a poststructural perspective has implications for how we might think about agency and notions of linear trajectories of literacy development.

Towards the end of the chapter, I draw-up a second conceptual framework that presents a poststructural reading of the meaning making activity I have described in Chapters 5, 6 and 7 that explores the interrelationship between movement, materials, meaning and affect.

8.2 Reflecting on Chapters 5 to 7; the significance of movement, materials and the classroom

The examples of data presented in Chapters 5 to 7 trace children's movements, moment-by-moment. By observing their movements closely, I have shown how children are in a state of continual movement within a continually changing classroom environment. Consistent with a sociocultural account, my study explores how children, their histories, experiences, memories and ways of being and doing things, were in direct and ongoing relation to the physical aspects of the classroom, its organisation and materials. The meanings that were made were co-constructed by children across moments and influenced by, and generative of, communicative practices.

From the early days of my fieldwork, children's movement and the materials that captured their interest stood out as critical to meanings that were being made. Notable in the data were the ongoing patterns of children's movement across time. Children's memories and experiences, those that related to their real lives, or their imaginary experiences, appeared to be brought to the ongoing present world of the

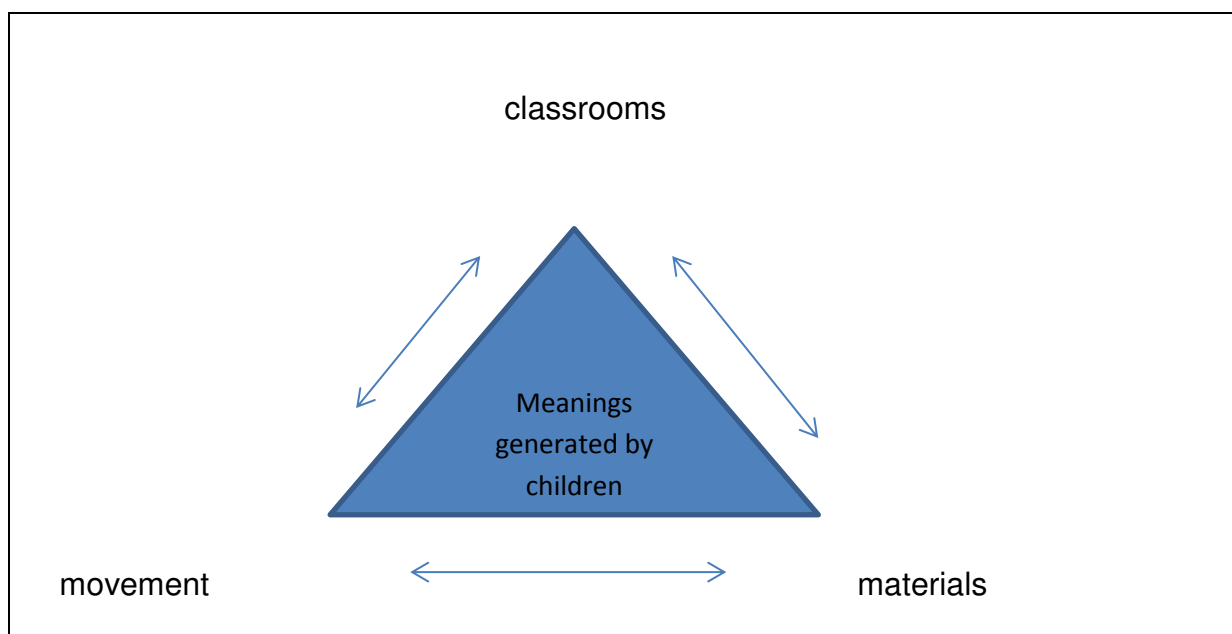
classroom through their movement, and their movement and interest shaped and affected the meanings they made. As children traversed the classroom, moved, explored and shaped the materials around them, they gave meaning to the surrounding classroom areas and materials. This propelled the further generation of meanings. As moments passed, this created continual, cumulative and ongoing change on the layout of the classroom, and the materials within it, and the meanings that children ascribed to these things. This continual process of change was brought to the fore as children moved and followed their interest in the continually changing environment. As I observed this, it often appeared as a haphazard but interconnected flow of events across time.

This thesis is an examination of what movement can do. Furthermore, it is an examination of the significance of the materials provided in the classroom as these attracted children's interest. The ways in which materials and movement might inflect children's meaning making, has therefore become a central theme of this thesis. In Chapter 5, I illustrated how movement played out during children's repurposing, re-imagining or reshaping of materials that were moved and placed by children in one classroom area. I have called this converging movement/ interest. Chapter 6 illustrates how movement played out during the re-purposing, reimagining and reshaping of materials that involved moving material outward from a central point. I have termed this 'focal point to radial movement/interest' as children took materials and ideas outwards from one classroom space to other classroom spaces, and produced a multiplicity of materials or areas. Chapter 7 describes what I have termed 'focal point movement/ interest', as children's activity manifested around a single focal area or collection of materials. This constant moving and shifting of materials in

classrooms is deeply implicated with the re-imagining, reshaping and repurposing of such materials and spaces.

Drawing from my analysis in Chapters 5 to 7, I propose that the activity that took place in this particular setting was highly contingent on three non-hierarchical and interrelated dimensions of young children's moment-by-moment experience. The first dimension includes the arrangement and organisation of the classroom, its walls, and furniture. The second dimension involves the materials that children interacted with, moved, changed and adapted during their ongoing activity. The third dimension includes the continual movement of children. Figure 8.1 summarises these relationships. In summary, the symbolic meanings that children made were shaped by, whilst simultaneously shaping, classrooms, materials and movement. In the sections that follow, I draw on the data from Chapters 5, 6 and 7 in order to further draw out these dimensions. In this way, I will provide an illustration of the ways that the movement played out in relation to materials and the classroom, and the ways in which this interrelationship was generative of children's meaning making practices.

Figure 8.1 Dimensions of symbolic meaning making



8.3 Movement, materials, classrooms and meanings

As I have explored in Chapters 5, 6 and 7, early literacy practices are embedded within the broader terrain of children's playful explorations of what they can do in classrooms. I propose that child-produced meanings arise from such playful explorations and that these meanings are contingent on the three inextricably linked dimensions of movement, materials and classrooms. What I term the 'classroom' can be seen as the four walls, and the physical layout of objects and furniture that is organised in relation to pedagogical practices, norms and routines of the Early Years classroom. We might see classroom norms and routines as shaped by the espoused goals and aspirations of England's current education system, as detailed in section 1.6.1. In addition, these goals may play out in direct relation with schools' and teachers' professional and personal goals and aspirations for the children. The 'classroom' organisation will inevitably influence children's activity and their practices

(Comber, 2010). While children's movement in the classroom during free-flow time is relatively open, or free, my data illustrated clearly how movement will also in some degrees be prescribed by norms, routines, physical layout and the materials provided.

Classroom materials included those that were intentionally placed for children's spontaneous exploration. Often, children readily and flexibly explored the potential of these materials, adapting, re-imagining and repurposing them. Children appeared drawn to the textural and sensory qualities of materials, or their malleability.

Materials appeared to both stimulate and give rise to and offer a material presence for children's imaginings. As children explored classroom materials, I noted the patterned nature of their movement/ interest formations, of their hand movements, and the semiotic orchestrations that took place.

Children's meanings often appeared to arise spontaneously through their shared and collective movements. As children walked, as their hands manipulated materials, re-shaping, re-purposing and re-imagining them, children's meanings were attributed to the classroom areas they inhabited, moved within and across. Not all movement appeared to be that which was intentionally used for communication. However, movement had a communicative quality in the way it signalled interest and attention. The dynamics of children's movement often quickly drew the attention of other children; Movement/ interest formations emerged as patterns of movement and these shifted and changed continually. These formations signalled shared interests. Walking played an important part here as novel pathways often became shared pathways. Children's movement/interest formations continually changed the spaces and materials of the classroom. In turn, the meanings that were made shaped the movement, spaces and materials of the classroom as children's interest generated

movement, and generated flows of material production. This analysis suggests therefore that the material and spatial environment is deeply implicated with meaning making and children appear to be following ideas as these arose. As materials and movement converged, so did children's meanings.

Classroom areas as set up by teachers have clearly defined edges, such as those marked by counters, tables, cupboards. Tools and materials have sanctioned uses and affordances. As children walked and moved around the classroom areas, the boundaries of classroom areas seemed to expand outwards and across floors and workbenches, and spill over from counters and onto floors. Boundaries also sometimes receded. An example of a rapidly receding boundary might be where the teacher introduced the spot tray, and the Seaweeds Sea was dismantled. In this process the introduction of the second spot tray led to a re-definition of a classroom area (the edges of the spot tray) and the re-purposing or re-imagining of the materials themselves, lifted from the Seaweeds Sea and put into the spot tray, changed too. In this example, the moving of materials to the spot tray changed the meanings that children attributed to the materials. In the case of the superhero puppet, as Liam took it on a flight across the classroom, the superhero flight path for a moment became designated airspace: the multimodal orchestration of communication made by Liam showed the movement of the imagined superpower through his eyes and out in front of him. These flights, pathways borne or suggested through Liam's movements, appeared to be significant to the ways that Liam playfully imagined the classroom. When looked at in this way and across Chapters 5-7, I gained a sense of the ways in which children's meaning making involved the constant imagining and re-imagining the classroom as they re-purposed, re-imagined and re-shaped the spaces and materials available.

In the sections above I have drawn up a relationship between the classroom, its materials, and children's movements and the ways in which this is implicated with the meanings that are made. In the sections that follow, I draw on a poststructural account of human experience, in order to provoke a deeper exploration of the significance of movement in young children's meaning making activity.

8.4. The limitations of a structuralist account

In section 7.3 I noted how young children's literacy practices are embedded within the broader terrain of their playful explorations of what they can do in classrooms. As an observer, I can look at and interpret children's activity in different ways. When reflecting on the data generated across my fieldwork, I *might* see children's re-purposing or re-shaping of materials, for example the strips of paper in the pot, as a unique text produced by the child. I *could* read this activity as demonstrating what looked like hybridisation of practices as the child merged their interest in sticking and joining with the schooled pedagogical practices of letter formation. Equally, I could view Sylvia's activity with the puppets and see this as an early representation, or a narrative under construction, noting that Sylvia's actions appeared to be recounting elements of familiar stories such as Little Red Riding Hood. Such readings would make links between children's activity and accounts of literacy development conceived within current policy and curriculum frameworks. However, taking this perspective would 'overwrite' or skim over the details of the series of happenings that I observed taking place, missing out what else might be significant in children's venture as they pursued their interests. In Chapter 2, I discussed the highly influential work of Dyson (2009) who saw children as 'taking-up' practices. Much of what I observed in this study appeared to indicate that 'taking up' does not fully represent what took place. Children's activity did not always constitute that which

could be referred to as a conscious or deliberate act or decision held within the hands of the child. Meanings made did not necessarily appear to reside in any pre-existing culture to be hybridised, innovated or taken-up. Instead, children's constant movement, as I followed them as they followed their interests in people and things, resulted in the ongoing proliferation of a multiplicity of meanings, collectively generated in direct interrelation with the classrooms and its materials. Returning to my research aim, I was interested in children's meaning making as it took place moment-to-moment during self-initiated play activity. I needed to be careful not to under-interpret the intricate moments of activity in relation to those already written in dominant accounts of early literacy education. In Chapters 5, 6 and 7, I have attempted to pay great attention to detail and write in those intricate moments, across micro-moments and longer instances of time. Such detail may have been overlooked had I not been watching intently and spending time on close analysis of micro-moments and flows of movement.

In sections 8.2 and 8.3, I have drawn on my data to propose that movement is highly significant to children's meaning making endeavour. The kinds of ongoing and continual movement and the way in which it is both shaped by and shapes the classroom and its materials and meanings, is currently, I suggest, underplayed in sociocultural accounts of early literacy development. It is present in descriptions of children's semiotic repertoires, in their gestures and actions, and how these communicate shared meanings, but the ongoing movement in which children seemingly engage, and which often gives rise to communicative practices, needs further investigation. In the next section, I will outline the significance of poststructural perspectives in order to gain further insights into the inter-relationship

between classrooms, movement and materials that I presented at in Figure 8.1 at the beginning of this chapter.

8.4.1 A poststructuralist perspective

Earlier in this thesis, I presented a number of perspectives on human learning and meaning making that have been highly influential in the field of early education. These included the sociocultural perspectives of Bruner (1996). In Chapter 2 I highlighted a semiotic account of meaning making, drawing attention to the significance of the multiplicity of modes and media that children use in order to construct and share meanings. Such theories of human meaning making are considered as *structuralist* in that they implicate any act of meaning making into the larger system or patterns of human meaning. Carter (2013) describes how the structuralist movement, prevalent throughout the 20th Century, emerged from Saussurean linguistics and therefore focuses on discrete structures for example, social structure, narrative structure, linguistic structure. Saussure's work on structural linguistics related to the sign, signifier and signified has influenced modern understandings of language and culture. According to Murdoch(2006), Saussure's underlying structures of 'langue' and the everyday use of language 'parole' were used by Levi Strauss (1949) in order to examine cultural diversity. In this way, culture was looked at as containing patterns or structures that could be examined and identified. In structuralist accounts then, knowledge is founded on the 'structures' that are generative of shared meanings via, for example, language or semiosis.

Structuralist perspectives such as linguistics and social semiotics (Giddens, 1984; Heath, 1983; Dyson, 2009; Kress, 2010) have facilitated powerful understandings of the patterns and relationships that exist in human sociocultural phenomena such as

the nature of meaning, knowledge and culture. However, structuralist accounts have been critiqued in that they may construct understandings about the world that in turn limit broader or diverse understandings of human experience. Carter (2013), for example, problematises the ethnocentricity of structural accounts, in that the focus on language is rooted in Western philosophic tradition, which in turn may generate and perpetuate inequalities inherent in social systems. Murdoch (2006) draws on the work of Barthes (1964) who posed a challenge to structuralism, arguing that the social and cultural world is open to a diverse range of interpretations.

There is no longer a single deterministic explanation being generated by underlying mechanisms. Now meaning can proliferate in perhaps contradictory ways... systems are open, dynamic and fluid.

(Murdoch, 2006, p8).

8.4.2 The dominance of representation in structuralist accounts and the construction of binaries

Deleuze and Guattari (1987), writing from a poststructural perspective, problematise what they deem to be the dominant mode of representation of human activity, that is, text or language. The authors argue that the privileging of language may detract from other aspects of human existence that may be of significance. Deleuze and Guattari (1987) use root systems as metaphors for thought. Proposing the tap root as the fundamental metaphor for disciplines, the authors argue that understanding the world through disciplines militates against multiplicity and results in the construction of binary distinctions such as animal/human, human/non-human or mind/body.

Murdoch (2006, p4) challenges the binary distinction between the human and non-human world and is clear to point out the concept of 'relationalism' in that 'any

interaction between a people and a thing must also be seen as a relation between the people and the thing'. Writing from the perspective of poststructural geography, Murdoch (2006) suggests that this perspective has the intent of investigating the related processes between what might be seen as binary opposites as he states the following:

Post-structuralist theory brings significant opportunities for the future development of relational approaches. In particular, it will be shown that post-structuralism's interest in heterogeneous relations- that is, in mixes of the natural and social and the human and non-human, can help human geographers to reach across the human-physical divide. (Murdoch, 2006, p2)

In this way a poststructural perspective avoids seeing aspects of experience such as human/ non-human as separate, instead looking at the interaction of the many elements inherent in any experience. This is helpful in explaining the data in my thesis, as I noticed how movement, the classroom and its materials were in direct relation to the meanings that children made (See Figure 8.1).

The limitations of representation of experience through language, as suggested by Deleuze and Guattari (1987) highlight the problem of *describing* how we understand the world through the medium of language. This problematisation of representation has implications for how researchers might investigate, come to know and represent that world if they are not merely to reproduce what was 'known' before. Turning this critique to considerations of literacy, Leander and Boldt (2012) suggested existing understandings of literacy brought to bear through the New Literacy Studies (see for example, Street, 2003) were predominantly guided by text-centric views of children's literacy practices, claiming that such text-centric views foregrounded the rational and

purposeful design of texts. Leander and Boldt (2012) argued that descriptions of literacy activity indeed failed to recognise 'movement, indeterminacy and emergent potential' (Leander and Boldt, 2023, p22). The authors suggested observing literacy in the 'ongoing present' with a view to gaining insights into how literacy activity involves the formation of 'relations and connections across signs, objects, and bodies in often unexpected ways' (Leander and Boldt, 2012, p22). In illustration of this point, in section 8.4.1, I overwrote the activity of Lena, Liam and Enriq with a text-centric interpretation of their activity, based on those ways of being and doing literacy that are written into accounts of early literacy. In doing so, I privileged some actions over others. As a result, the significance of the classroom, and the movement of the children within it, receded into the background.

I now move on to explore concepts that can support the interpretation of my data, which will avoid imposing a text-centric view of their activity.

8.4.3 Concepts of emergence and assemblings and why these are significant to this thesis

A central ontological tenet of a poststructural position is that it challenges distinctions made between the subjective human and the 'objective' physical world. This tenet is supportive of my observations of children in this thesis in that it was impossible to separate the ways in which children's activity was implicated within the classroom and available resources and materials. Indeed, there has been an increasingly complex examination of the relationship between meaning that is socially constructed and the ways in which materials surrounding people and people

themselves are both shaped by, and shape, such meanings (Leander and Boldt, 2012; Burnett, 2011; Kuby and Rowsell, 2017; Hackett and Somerville, 2017).

For Deleuze and Guattari (1987) the embodied human experience of *moving, being* and *feeling* are given significance as they see the body as moving within space and time, and always in relation to an ever-changing environment. From this perspective, change is seen as the constant, normal state of things, as bodies, objects, events, institutional discourse/ discursive practices move in and out of ever-changing assemblages. The notions of *assemblage* and *emergence* are key concepts that have enabled me to further understand and explore the significance of movement that I observed during my field work and have analysed in this thesis. According to Deleuze and Guattari (1987) human activity is part of an assemblage or network of time, place, people and material objects and an assemblage acts on semiotic, material and social flows simultaneously. There is no longer then a 'tripartite division between a field of reality (the world) and a field of representation (the book) and a field of subjectivity (the author)' (Deleuze and Guattari, 1987, p25). Burnett and Merchant (2017, p222) draw on Deleuze and Guattari (1987, p9) to describe how assemblage is used to define 'convergence and divergence of semiotic, materials and social flows' (p25). Indeed, Burnett and Merchant (2017, p223) use the 'verb assembling which seems to capture ... the ongoing and ever re-constituting dimension of phenomena , of everyday live, and of the lives in classrooms'. 'Assembling' then provides a way of explaining the emergent possibilities and activity that took place as the children moved to follow their interests in this study. It enables meaning making activity to be seen a series of continually moving and changing connections and practices and draws attention to the interrelationship between

movement, classroom and materials and meaning that my data analysis suggested. Rather than seeing children's activity as changing the classroom and constructing meaning then, I can instead see all elements assembling or coming together, changing moment-by-moment and deeply implicated in the meanings that are made.

A poststructural perspective is applied in the work of Hackett and Somerville (2017, p374). The authors present the notion of the 'more-than-human' in describing young children's play and movement, and suggest that this offers a way of examining the relationship between language and the world. The authors considered the relationships between sound and movement as children investigated a museum and played with mud and water, suggesting that such an account foregrounds the material realities of children's worlds, rather than foregrounding representation of interpretation. The authors suggest:

Meaning and world emerge simultaneously, offering new forms of literacy and representation and suggesting possibilities for defining or conceptualising literacy in ways that resist anthropocentric or logocentric framings.

Hackett and Somerville, 2017, p 374-5

Hackett and Somerville (2017, p375) suggest that seeing the world as 'more-than-human offers a way of reconceptualising early literacy in a way that pays attention to children's 'being in the world'.

Ingold suggests that as people make things they 'bind their own pathways or lines of becoming into the texture of the world' (Ingold, 2011, p178) and that this is constitutive of the world under continual construction. When observing children in the classroom, I was struck by the ongoing movement and production generated through

children's activity. Mapping and reflecting on children's movements illustrated how the repeated enactment of particular movements marked the becoming of predictable communicative practices and pathways and objects. In a similar way to Hackett and Somerville (2017), Kuby and Crawford (2017) draw on the work of Barad (2007) to propose the entanglement of meaning and matter. By observing 8-year-old children in a writing studio, Kuby and Crawford (2017) apply Barad's concept of intra-activity to the ways in which the human and non-human elements of the assemblage are interrelated. Kuby and Crawford (2017) suggest that researchers should account for the process of literacies coming into being and consider what is produced. The implication of this work appears to be that literacy comes into existence through human activity as children interact with the material possibilities of the here and now and does not exist in any pre-determined state. In my study, I have also described children's meaning making as emerging in ongoing relation to the constantly changing material reality of the classroom, and foregrounded attention to the continual movement moment-by-moment. The perspectives of Kuby and Crawford (2017) and Hackett and Somerville (2017) resonate with what I observed in my study and imply that rather than there being a pre-determined pathway to literacy that is already in existence, literacies come into being through interaction with the material environment. Such a perspective challenges the notion of a linear-trajectory of literacy development and raises questions about how we might conceive agency in early literacy learning.

8.4.4. The moving body and affect

Deleuze and Guattari (1987) and Massumi (2002) suggest that representational accounts of human activity have neglected the body, its movements and

furthermore, *its sensations*. The final poststructural concept informing this thesis draws attention to the interrelationship of *movement* and *affect*, and that by writing movement into accounts of human activity we are simultaneously exploring its affects. To clarify this point it is important to explain what is meant by affect. Deleuze and Guattari (1987) see affect as non-conscious visceral bodily experiences. Massumi (2002) proposes that affects are related to the movement of bodies and the continual passing through experiential states of being that are experienced prior to our conscious awareness of them. Affect then, is related to sensations of the body, and not those manifested, generated or initially registered *consciously* in the human brain. Instead, affect is observed through the process of bodies' movements through lived experience, as the body moves, feels and interacts with the flows of energy across people, institutions and nations (Massumi, 2002). Deleuze and Guattari state the following:

We know nothing about the body until we know what it can do, in other words, what its affects are, how they can or cannot enter into a composition with other affects, with the affects of another body, either to destroy that body or be destroyed by it either to exchange actions and passions with it or to join with it in composing a more powerful body.

Deleuze and Guattari, 1987, p257

From this perspective, affect does not relate to a personal feeling, but rather to the body's capacity for affecting or being affected (Massumi, 2015). Noting children's continual movement and interaction with the classroom and its materials draws attention to their capacity to affect change and be affected by the same, moment-by-moment. However, Deleuze and Guattari propose that our perception of constant movement of assemblings is limited.

Perception can grasp movement only as the displacement of a moving body or the development of a form. Movements, becomings in other words, pure relations of speed and slowness, pure affects, are below and above the threshold of perception.

Deleuze and Guattari, 1987, p309

It is not surprising then, that our attention to movement and its omnipresence, what it is and what it can do, goes largely unrecognised or unacknowledged. Massumi (2002) describes the body as in constant movement in response to the ever-changing environment. Taking this stance, movement can be unintentional and arises as a consequence merely of being a living body in the here and now. Drawing this distinction is important as it implies that not all movement is deliberately or consciously employed as a communicative mode. This concept is key to my thesis as what I observed as I watched children was that movement appeared to be the constant state of things, and such movement appeared to *give rise to* meaning making and semiosis, for example, children's pathways when repeated by numerous children captured the attention of further children, who might choose to show interest and join in. But to say that the intention of movement is always to make meaning is limiting as it places movement in a cultural frame where it does not fully belong. At times, children meandered and just looked around, presumably looking for something of interest. However, movement on any scale is at the same time deeply implicated within any form of meaning making, for example, through the intimate child/puppet movements, the patterns of pathways children weave, to the orchestrations of gesture and touch around iPads. Although not always an intentional act of meaning, it carried a salience that influenced the meanings made. This was notable in particular across my descriptions of movement/ interest formations.

8.5 The moving body, affect, and literacy

In Chapters 5, 6 and 7, I noted the how the quality and dynamics of children's movement appeared to hold a salience that can be described as affective. Further exploring the concept of affect, Massumi (2002) describes how transitions across moments may be accompanied by a feeling of change in capacity and thus drawing a relationship between affect and opportunity for manoeuvrability. Children's emerging activity in classroom contexts then, may be accompanied by sensations of being able to act, or move, or conversely, being limited or unable to act. Likewise, Thrift (2007) proposed that the flow of affect is linked to the body's capacity to act or conversely, its diminution. This notion provides a possible explanation for the changes in the dynamic quality of children's movements and the movement/interest patterns that emerged. In my commentaries across Chapters 5 to 7, I described how movement across the classroom often held what felt like a 'contagious' quality that appeared to spread across children's actions and between children. This appeared to arise in connection with movement/interest formations. I noted this though my observations of the quality of dynamics of children's movements, such as the speed, purposefulness, directness, or the meandering, stop-start. Movement then, appeared to generate a symbolic salience and communicate conscious and unconscious meanings that played a part in the assembling, influencing the practices that emerged, in a kind of orchestrated ensemble of patterns of movements.

The affective atmospheres associated with activity have been investigated by Ehret and Hollett (2014). Turning their attention to the moving body when working with older children, and in particular what they term 'feeling histories', affective atmospheres', and the 'felt experience of time' (Ehret and Hollett, 2014, p428), the

authors illustrate how the moving, feeling body creates *affective atmospheres* that influence meanings that are made in unpredictable ways. They recommend that literacy learning activities and environments should be designed with more attention to the body's role in meaning-making.

Lenters (2016) suggest that affective atmospheres can be generated by manoeuvrability and that this can open up new possibilities of being and doing. Focusing on the ways in which an 11 year old boy embellished school practices of writing by including figures from a *Stickpage* website, thus 'overwriting' official school texts (Lenters, 2016, p305), Lenters (2016) suggested that such overwriting opened-up new trajectories in the pupil's writing life and of opportunities for 'becoming other' (Lenters, 2016, p30). In addition, Lenters suggests that the affective atmosphere and feeling histories generated by such activity in turn led other pupils in the class to new writing trajectories.

Indeed, as I observed children during my fieldwork as they moved around the classroom, assigned meanings to the places they inhabited and the materials they produced as they interacted, I noted how the dynamics of their movements conveyed affective atmospheres to me as an observer. The dynamics of movements were equally conveyed alongside the rapid production of materials, spaces and meanings. In attempting to account for affective atmospheres, Ehret and Hollett (2014) state:

We have struggled to describe these becoming sensitivities- how affects sometimes intensify, attenuate, or even cohere in atmospheres that make projects and places feel like something.

Ehret and Hollett, 2014, p256

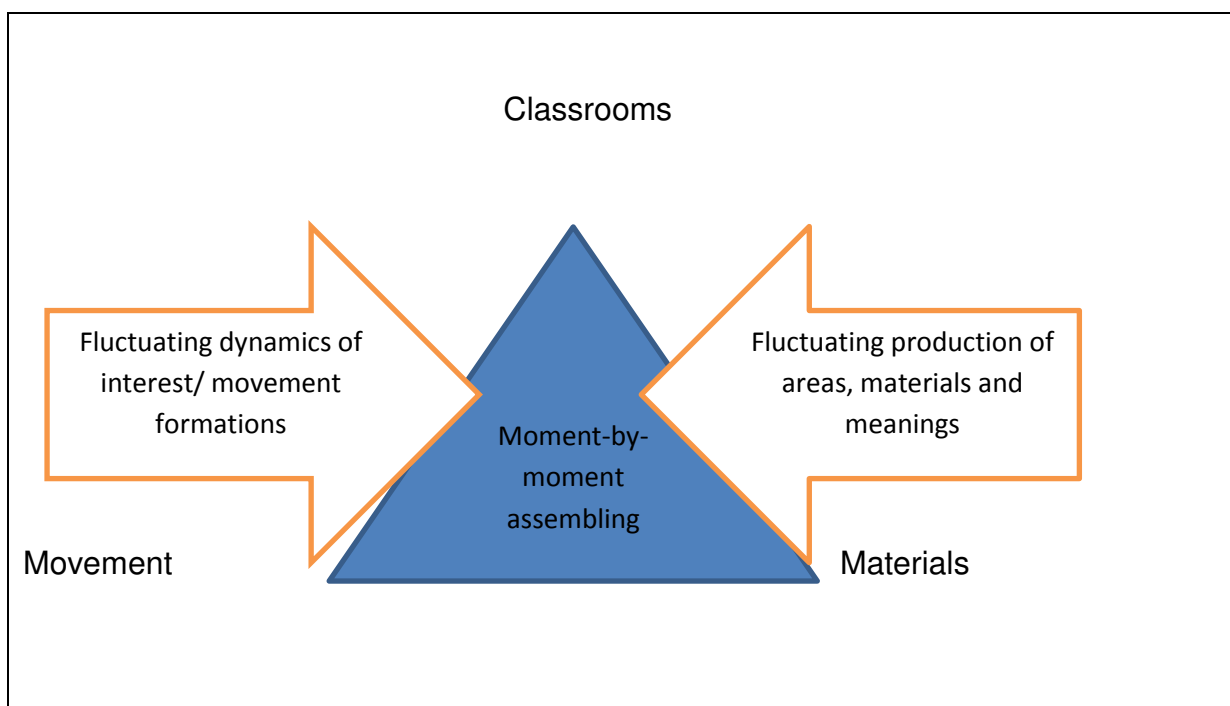
Through my data I propose that the dynamics and quality of young children's movement and the production of meanings it yields is relational to affective atmospheres. I suggest that children's interest/ movement formations arise from and in turn, further perpetuate such formations, and that this creates what Ehret and Hollett (2014) term affective atmospheres. Ehret and Hollet (2016) discuss the notion of cultivating belonging. As children made meanings through their movement in this study, they appeared to cultivate collective places where they could participate and belong.

8.6.1 A poststructural perspective on meaning, movement and affect in an Early Years classroom

At this point I embellish Figure 8.1 to create Figure 8.2 which I have called, '*Conceptual framework of movement, affective atmospheres and the production of meaning*'. Applying poststructural concepts to the data presented in this chapter, the framework proposes that affect for the group of children in this study was generated through the flux, or constant change, of classrooms, movement and materials. Furthermore it summarises my discussion in sections 8.2 to 8.6. Here, I see the generation of meanings as implicated within the moment-by-moment assemblings in the classroom. Affective atmospheres (Ehret and Hollet, 2014) are characterised by the fluctuating dynamics of children's movement and the fluctuating movement /interest formations that I have identified. Such dynamics and formations of movement arise in relation to the fluctuating production of areas, materials and meanings. Figure 8.1 had implications for challenging text-centric views of literacy development in that it implicates multiple elements of the assembling, and the children's movements, within meaning making. Such a conceptualisation challenges

the notion of linear trajectories of literacy development, draws attention to the significance of spontaneous movement, has implications for how we might value the collective production of meaning, and challenges notions of child agency. I discuss these further in sections 8.6.2 to 8.6.7.

Figure 8.2 Conceptual model of movement, affective atmospheres and the production of meaning



8.6.2 The significance of spontaneity of movement; foregrounding movement in accounts of meaning making from a poststructural perspective

The observations I undertook in this study were focused on children’s intense interest. Such intense interest drew my attention to different kinds of movement. In this thesis, I consider movement *at once and often simultaneously* an ongoing as part of existence, a way of communicating meanings and a tool for evoking thoughts, memories and experiences. Of course, movement in the study included that which

was associated with children's semiotic repertoires, such as gesture, gaze/ eye-contact, facial expression, pointing, talking, touching objects, and so on. I have illustrated the significance of children's multimodal interactions, and how these come into play in direct relation with orchestrations involving materials, movement and the classroom,

However, it is important to draw attention to the way that, at times, children 'stumbled' upon their own generation of meanings and practices as they moved and interacted with the possibilities of the environment, rather than seeming to consciously adopt or seek these. Often, children's activity appeared to spontaneously emerge in response to shifting assemblings, rather than being deliberately 'taken up', as is the dominant view in sociocultural accounts. The three broad scales of movement and three interest/movement formations presented in this thesis were mutually implicated and often seemed to *give rise to* the collective meanings that emerged in the classroom throughout the study. As explored above, children's experimental and exploratory movement is significant to their collective meaning making. Kell (2009) describes how social actors also need to recognise the aptness of tools, modes and artefacts used to produce meaning. Social actors need the capacity to realise or materialise the meanings they wish to express, contingent on the affordances of the resources available (Kell, 2009). Through my data, I observed how children's experimental and exploratory movement led to the production of meanings and meaningful places across the spatial/ temporal and material environment of the classroom. Movement within the spatial/ temporal environment appeared to be generative of a broad range of communicative practices, of which language was a part. However, by placing the emphasis on movement in my account, the significance of language receded and the contingency

of the spatial/material configuration of the assemblings that children encounter moment-by-moment came to the fore.

8.6.3 The quality of movement and collective production

Poststructural perspectives on emergence view movement as the constant state of things. Aspects of embodied life then are attended to as the body is in action, and as such, intentions and decisions may be made before the conscious self is aware of this (Thrift, 2007). Indeed, children's often unplanned and continual movement as they interacted with each other and the material environment was characterised by surges and lulls in activity. What was notable when observing the young children across episodes was the way in which the quality of movements changed moment-by-moment. I noted how movement appeared to take on a different quality when it became a collective endeavour, and as children took on the ideas and activities of other children. This resulted in a 'speeding up' of production. Movement became more direct, giving it a kind of assertive quality. Some activities seemed to be contagious as they were mirrored by other children, and often drew more children into the particular activity or place. This often led to the play taking place across larger areas of the classroom, or it branched out to multiple areas (for example, the flight of superheroes or the writing on paper strips at the computer bench). Flows and lines of movements seemed to intensify, speed up and slow down alongside the rapid production of materials, meanings and areas. These surges of activity are notable across the data and are illustrated in Chapters 5 to 7, particularly in the rapid re-shaping and re-imagining involved around the paper strips, or the differences in movement when the children were making the Seaweeds Sea, or filling the spot tray with materials.

Here I return to Massumi's (2002) proposition, that affect is related to sensations of the body and is observed through the process of bodies' movements through lived experience, as the body moves, feels and interacts with the material environment. The rapidity of the production of materials during the paper strips constellations, and the rapid imagining of spaces during the Seaweeds Sea activity, for example, brought with it shifts in the quality of children's movements. Affect then, can be seen as manifest in relation to the dynamics of children's movements - direct and swift, slow and meandering pathways, repeated criss-crossing of significant spaces, or intricate and richly dense semiotic orchestrations. The flows of children's movements as they followed their interests and these gathered impetus, appeared to intensify in their purposefulness. My observations suggest that affect may be related to feelings or a sense of experienced agency of movement or an ability to *do*, *be* or *make* in the ongoing present. Re-purposing, re-imagining and re-shaping of materials and spaces are inextricable from the continual construction and re-construction of meaning moment-by-moment.

8.6.4 Poststructural dimensions of agency

The foregrounding of the moving, emergent dimensions of young children's activity has implications for understandings of agency and indeed these vary across accounts. In Chapter 2, I explored sociocultural notions of agency, taking a lead from Corsaro (2005). Sociocultural accounts of agency however, have been critiqued as being culturally bound and the notion of the *agentic child* is problematic as it positions a particular kind of child with particular ways of being that may be related to and privilege social class or a particular ethnic group (Davis, 1990).

Sellers (2015) suggests:

Theorizing any image of children or childhood risks homogenization, and if teachers and adults fail to generate opportunities for divergent ways of children seeing and making sense of the world, we risk reverting to universal conceptions despite diverse lived experiences.

Sellers, 2015, p73

There is a problem then in positioning any individual child or group of children as agentic as such a notion brings with it social and cultural assumptions. Barad (2007, p.55) describes agency as being more about 'possibilities of mutual response' and in particular a poststructural account draws closer attention to all aspects of the assemblings in orchestration. My observations in this thesis suggested that agency, rather than existing in the hands of the individual child, may be more usefully conceived as dispersed across people and things. By taking a poststructural lens to look at children's self-initiated activity in the classroom, I have become more acutely aware of the way that the symbolic meanings that are made are intricately shaped by the continual flux of movement, materials and the classroom. Agency then becomes dispersed across all elements of the ever-changing assemblings. From an emergent perspective, activity is only ever in the here and now and meanings are always unique and constantly re-created as they are fleetingly brought into existence. Giddens' (1984) portrayal of agency and constraint as being constituted and re-constituted fleetingly is consistent with a post-structural account on this point. The implications of a poststructural position on agency for the children in this study was that agency was not something they did or did not have, but that which was constantly emerging anew in the ongoing present. Similarly, children's literacy practices can be seen as assembling and re-assembling in the ongoing present,

patterned but unique, and realised through sensory and tactile experience as children interact with each other and available materials moment-by-moment.

8.6.5 The significance of materials in the ongoing present

In my data and its analysis, I observed how children followed the flow of ideas as they moved around the classroom, and affected changes on materials and space as they did so. The children appeared to be both exploring and happening upon the meaning making potential inherent in the ongoing present. I observed how in Chapter 5, the Seaweeds Sea became taken up by others as the group of children crossed pathways and played together. Similarly, the emergence of the many different material configurations that involved paper strips appeared to be propelled by the spread of ideas of what could be produced in the here and now. Children's activity did not appear to follow a set intention or plan, but nevertheless was at times guided by an *idea* or *set of possibilities* for doing and making that flowed across and between children. Activity that culminated in the Seaweeds Sea and the re-shaping of paper strips was certainly influenced by the ever-changing assemblings in the ongoing present, and facilitated by the affordances of the material present, such as the green cellophane, the tools, scissors and tape of the early years classroom, or the left-over from Christmas and re-appropriated paper-chain strips. The physical layout of the classroom, which provided space to move relatively freely, afforded children with a partly flexible space where they could invoke real and imagined experiences and create these anew and share such experiences, ideas and thoughts with other children.

8.6.6 Following the flow of ideas rather than a linear trajectory

In Chapter 1, I discussed how dominant accounts of early literacy development present a linear trajectory of competencies and skills to be noted or tracked. Aleancer and Entwistle (1996) noted how a linear trajectory can be seen to both provide a guide, but also a constraint, on a child's progress. Compton-Lilly (2013) illustrated how one child, experienced continual difficulty in 'catching-up' with his peers once identified as underachieving. Linear trajectories link specific points in time to a child's educational journey. Viewing children's activity through a poststructural lens problematises the practice of seeing children as moving through a sequence of steps in a developmental trajectory. Taking account of the diverse range of activity that gives rise to meaning making as literacy comes into being, stands in contrast to the notion of a linear trajectory of literacy development. A poststructuralist position offers a different way of seeing children's activities and understanding what is taking place. Deleuze and Guattari (1987) suggest the notion of *becoming* which contrasts significantly to the notion of a pre-planned developmental trajectory. Sellers (2015), argues that becoming is:

Not about serial progression or regression towards any anticipated state of being or future condition. Instead, it is more about recognising the continual flow of changes in the ongoing present, the present moment being *the* productive moment of becoming.

Sellers, 2015, p14.

Immanence and emergent potential as defined by Deleuze and Guattari (1987) are important concepts that can counteract the notion of a simple linear trajectory.

Writing about Deleuze and Guattari's concept of *a people-yet-to-come*, Hroch (2014) states:

For Deleuze and Guattari we are always already the people-yet-to-come... thus the concept of a 'people-yet-to-come' expresses the perpetual potentiality of becoming-other inherent in the present.

Hroch, 2014, p50

Deleuze and Guattari suggest that we should see the potential in what is immanent, in the here and now, rather than 'locating potentiality in far-off futures (Hroch, 2014, p50). Deleuze and Guittari present the notion of people as being in a state of *becoming other* and in a state of *on-going yet-to-come-ness*.

The episodes presented in this thesis draw attention to the ways in which many aspects of ongoing assembling played an inextricable part in what took place and the meanings that emerged. By focusing on the interrelationship of children being together in the ongoing present in the classroom we are better placed to see learning not in terms of pre-determined, developmental stages but as a process of becoming where possibilities for being and participating are collectively, materially and spatio-temporarily contingent. Furthermore, we are able to value what children bring to classrooms, rather than focusing on what they need to become, and argue for a consideration of how an ethics of shared responsibility can be enhanced through the ways in which we work with children in order to understand why they do the things they do. My suggestion based on this thesis is that rather than seeing children merely as future literate adults following a pre-defined linear trajectory, we need to acknowledge diverse pathways to literacy. Furthermore, we need to see literacy development as an inherent and inseparable part of human meaning making activity

that is implicated deeply in the spaces and material assemblings in the present moment. I will further expand on these recommendations in Chapter 9.

8.7 Summary

In this chapter I have summarised and further examined the main findings presented in Chapters 5, 6 and 7. I have drawn up a conceptual model (Figure 8.1) which accounts for the interrelationship between movement, the classroom and materials, further amplifying the significance of the movements on three broad scales and interest/ movement formations that I observed.

Next I drew on the poststructural concepts of *emergence*, *movement* and *affect* in order to further investigate what took place and draw out its significance. I have argued that this was an important move in this thesis in order to generate deeper insights into young children's meaning making that goes beyond a linguistic/ semiotic frame and places particular emphasis on the role of movement in the meaning making endeavour. I proposed an embellished conceptual framework (Figure 8.2) that illustrated the interrelationship between classroom, movement and materials as the ways in which these things interplayed with movement/interest formations. I suggested that the ongoing flux of these things constitutes affect. I extended concepts of affective atmospheres (Ehret and Hollet, 2017) by suggesting that these were related to the dynamics of movement and the production and proliferation of meaning.

In sections 8.1 to 8.6, I suggested that a post-structural perspective involved seeing children in a process of becoming as they followed the flow of ideas, and questioned linear trajectories of literacy development. In addition, I considered agency as

distributed across assemblings and drew attention to the significance of collective production of meaning and spontaneous movement. The implications of my observations in this chapter will be discussed in Chapter 9.

Chapter 9 Contributions to knowledge, implications and conclusions

9.1 Introduction

In this final chapter, I summarise how this thesis has led to further understandings of the ways that young children's movement plays out in early literacy activity. I revisit my research aim and questions and then summarise my contributions to knowledge. Following this, I propose implications for practice and reflect critically on my research process, leading on to suggestions for further research.

For me personally as a researcher, the study has provoked deep reflections. These have arisen in relation to looking very closely at young children's activity, foregrounding their movements and then considering movement from a poststructural perspective. Taking this position requires acknowledging the limitations of *representations* of human activity and as a consequence, of representations of early literacy learning. Simple linear accounts of literacy development and the ways that these are measured and reported in England creates winners and losers, or the achievers and the underachievers of the education system. This thesis therefore contributes to discussions which aim to provide a more expansive view of early literacy learning. As presented in Chapter 2.3, approaches such as Te Whariki and Reggio Emilia have suggested open-ended, play-based approaches to learning. Indeed, children's entitlement to a play-based curriculum is firmly established and promoted in the statutory documentation (DfE, 2017).

However, as I argued earlier, where the specific area of literacy is concerned, policy shifts have meant that literacy is increasingly seen as a discrete set of print literacy skills and often as distinct from children's broader experiences.

The contributions of this thesis have implications for considering the role of movement in meaning making and for the kinds of materials and classroom environments that we offer children. I argue that it is important to see young literacy learners' meaning making practices expansively and suggest that the role of ongoing movement in early literacy learning is significant, but not fully recognised. I argue that exploratory movement may give rise to the expression of a diverse range of meaning making practices that children bring with them from their multifaceted histories and experiences. I suggest that by paying more attention to significance of movement in young children's literacy learning through observation, we can become more attuned to the ways that meanings are made in the here and now.

9.2 Revisiting my research aim

As a starting point in Chapter 1, I problematised widely accepted and dominant educational discourses around early literacy development where literacy is often conceptualised as a set of discrete skills to acquire. I summarised more open-ended approaches to early literacy, such as sociocultural and semiotic perspectives (Chapter 2) which suggest that children actively take up literacy practices, hybridising literacies from a range of environments in order to engage with schooled literacies. Chapters 1 and 2 provoked me to ask what else might be of significance and led to the following aim of my research:

To investigate 4 and 5 year old children's meaning making moment-to-moment during self-initiated play activity in a classroom

This overarching aim was guided by sub questions raised as significant in Chapters 1 and 2 as follows:

- What kinds of material resources were available to children and how was the learning environment arranged?
- What did children show interest in?
- How did the children transform resources and materials?
- What meanings did children produce as they interacted with resources and materials?
- What was the relationship between available resources and meanings made?
- In what ways could the children's activity be seen as agentic?

Through my data analysis I was drawn to the significance of children's continual movement, the interest/movement formations that emerged, and the way that these were paramount to what took place. I provided an in-depth discussion of this movement and reflected on its significance in Chapter 8. Ultimately, my attention was drawn to children's movements and the ways in which their movement re-purposed, re-imagined and re-shaped materials in the classroom in surprising and interesting ways.

Movement is multi-scalar and I have examined children's movement across three broad scales. This movement was seen as significant to the process of meaning making. This thesis provides illustrative examples of activity that took place, focusing on how children, across the three broad scales produced or reconfigured the classroom. As discussed in Chapter 1, classroom spaces are highly organised in relation to the cultural norms inherent in the discourses of education and learning in the early years. Classrooms can be seen as institutional spaces where children from a diverse range of backgrounds, with unique histories, cultures and ways of being

come together. What happens in each moment will be unique as children are in a constant state being both shaped by and shaping classroom assemblings. Ultimately, the discussion provided in this thesis has considered the ways in which children's seemingly random or unplanned explorations of the classroom are intricately linked to their moving bodies. It has suggested that children move and follow what captures their interest, they respond to the tactile and sensory qualities of the materials in the environment. This exploration gives rise to a multitude of imagined meanings and a production of imaginary places and materials moment-by-moment. The production of meanings hence provides children with ways of participating in the semiotic and material 'world' of the classroom.

9.3 Contributions of the thesis

In this thesis I have made four contributions to knowledge through presenting new insights into movement during the process of meaning making in one Early Years setting. These are as follows:

- 1 I have shown the way children's interest played out in their movement on three broadly defined scales and identified three prevalent interest/ movement formations
- 2 I have underlined the importance of movement by illustrating the ways in which movement is deeply implicated within material and spatial arrangements of the classroom. Here I suggest that children's meanings arise in direct and ongoing interrelation with materials, movement and classrooms.
- 3 I have conceptualised the ways in which the quality or dynamics of movement may relate to affective atmospheres and the production of collective meanings.

- 4 Through juxtaposing movement, materials and classrooms, I have generated a conceptual framework for analysing the way in which agency is distributed across children's moving bodies, the classroom, and its materials.

In my first contribution, I have shown the way children's interest played out in their movement. I have provided a detailed description of movement on three broad scales including walking, movement of hands, and smaller movements such as gaze, gesture and facial expression. I have identified three interest/movement formations that describe three patterns of movement/ interest that commonly occurred during episodes of intense interest; converging, focal to radial, and focal.

In my second contribution I have drawn together an in-depth description of the ways in which children's meanings emerge in direct relation to their movements, the materials they repurpose, re-imagine and re-shape, and the classroom. Together, these things and the scales and formations of movements in my first contribution, are seen as generative of children's productive endeavour of meaning making as children follow the flow of ideas.

In my third contribution, I have underlined the importance of movement by illustrating the ways in which movement during the production of meaning conveyed affective atmospheres. I draw an interrelationship between the dynamic characteristics of children's movements on three scales and in constant shifting interest/ movement formations and affect, thereby contributing to understandings of affective atmospheres (Ehret and Hollet, 2014). I suggest that the three interest/movement formations and scales of movement I define above are always collective in that they

demonstrate how movement is orchestrated across moments between children in direct relation with the classroom and its materials. The dynamics of ongoing movement and what it produces, I argue, are interrelated to affective atmospheres as children create classrooms where they can participate and do things together.

In my fourth contribution, I have positioned agency as distributed across the classroom, its resources and children's moving bodies. I have contributed to accounts of agency in the way that I have applied poststructuralist understandings of agency to self-initiated learning in an Early Years classroom. My contribution foregrounds the role of movement in accounts of distributed agency in classrooms, drawing attention to the ways in which the classroom and its materials both *shape* and are *shaped by* children's movements. I argue that notions of agency need to acknowledge the interplay between all aspects assembling in classrooms and the role of movement. I describe how children's movement may be linked to affect, or children's propensity to at once act on the world and be affected by the world, moment-by-moment.

Specifically, the above four contributions culminate in the way that movement emerged from the data, leading to an account of children's activity in this setting that conceptualises early literacy in classrooms as:

- an embodied experience where movement is highly significant
- a non-linear collective endeavour of becoming
- an ongoing, active process that involves shaping and being shaped by the social and material environment

- generative of meanings that are contingent on children's experiences and where children construct their own places for participation

My account of children's activity has implications for the way that we might value children's spontaneous and exploratory movement with respect to the ways in which teachers might work to:

- see literacy as a collective endeavour
- be open to diverse pathways into literacy learning
- acknowledge literacy development as a non-linear trajectory of becoming
- take account of and be sensitive to the flows of children's spontaneous exploratory movement in classrooms
- take account of and be sensitive to children's flow of activity and the way that movement contributes to the affective atmospheres in classrooms
- offer children opportunity for spontaneous exploration of meanings, real and imagined, so allowing diverse child-generated sites for participation
- forge broader understanding of the relationship between literacy and play

I expand on the implications and suggestions highlighted above in section 9.5.

9.4 Limitations of the study

This research study offers a detailed view of children's often spontaneous practices. I have combined an ethnographic approach with multimodal analysis and movement mapping which in turn produces contextualised, in-depth insights into what happens in an Early Years classroom. Through the use of field-notes and reflective logs written during the study, I have attempted to relate the episodes to my original

impressions of the experiences as far as possible. But they are my selected episodes, and I have made decisions about what I have paid attention to and what I have not. Furthermore, it is impossible to see all activity that is taking place at once or represent the multiplicity of meanings that emerge. Movement is multi-scalar and I have only been able to record and account for that movement which I perceived or recorded through the lens of a camera. The second point that needs to be made is that this study describes the experiences and activity of a small group, in very particular circumstances, and while there may be other groups of children with similar demographic profiles, their practices will emerge uniquely within the assemblings in their classroom. Although I used an ethnographic approach, I had limited time in the setting. In my rationale for a poststructuralist approach, I outlined the limitations of representation. Here I have tried to represent my experience of what was taking place in the classroom, but by virtue of it being a representation it is in itself a construction, and limited to my perception and reporting of the experience.

In my analysis I have paid much attention to children's movement. It was clear that the spatial layout of the classroom interplayed with children's interest and this significantly shaped the movement and the meanings that were made in this early years classroom. What I did not pay as much attention to was stillness, or pauses in movement. In Chapter 7, I noted how movements of stillness seemed significant to Sam and Sylvia. A closer examination of moments of stillness, and the significance of these in meaning making would provide further insights into children's early meaning making. In addition, it may prove fruitful to examine the movements and pauses and interest/movement formations with older children through multi-scalar observations in a range of environments. The movements I recorded were my own perceptions of what was taking place, and it was impossible to pay attention to all

that was taking place. In some ways, this means that I will have privileged some movement over others.

I have undertaken as I have drawn and annotated images by hand, by my own movements, and my own eye and bodily movements have followed and traced the movements of children. This has further enhanced my understanding of the limitations of human perception of phenomenon, but at the same time, provided me with richer insights into how we experience and make judgements about phenomena we encounter. The multimodal transcription and analysis I have conducted has limitations. There are forms of this that can take greater account of movement and application of these may generate more detailed accounts of the movements that took place.

One final point is that the study did not set out to make judgements or suggestions about specific pedagogical strategies for early literacy education, but instead, looked at children's meaning making as it emerged moment-by-moment. Although the study does make recommendations, these are in the form of implications of the ways we might work with children and observe children's activity, give space for them to explore a diverse range of practices, and by doing so, provide them with freedom to explore, move and generate ways of being and becoming together.

Feeling affect, or recognising affective atmospheres are purely subjective experiences. Here I have linked movement/ interest patterns, formations and dynamics with the notion of affective atmospheres. However, I need to acknowledge that it is impossible to 'know' affect.

9.5.1 Overarching implications of the findings

Young children's practices emerge through their moment-by-moment movements, are driven by memories and imaginings in ongoing relation with each other and the classroom and its materials. Seeing children's meaning making as an entanglement of these things destabilises commonly accepted discourses of early literacy development. It also involves offering children from a diverse range of sociocultural and linguistic backgrounds and diverse range of experiences flexible spaces and resources so that they can construct ways of being together would seem of paramount importance. In a similar way to Olsson (2009), I argue that observing children's experimentation and movement has the potential to prompt practitioners to question established classroom practices, and to see children's learning more expansively. My overarching implication is that practitioners work to support early literacy in a way that is sensitive to children's emerging practices. This would involve carrying out open observational work that enhances practitioner understanding of the interrelationship between the classroom, its materials, children's movement and their meaning making. It would involve seeing early literacy as emerging from the potential inherent in the child's ongoing present and it would involve practitioners providing intervention in the moment that is supportive of the child. I expand on this in the sections that follow.

9.5.1.2 See literacy as a collective endeavour and looking beyond simple linear trajectories

The salient points in the paragraph above rests on *how we might see children* and *how we might see children's activity*. If children are seen as future literate adults, then we look to what they may or may not become in a distant, imagined future. If we see children's activity as a productive endeavour that creates shared sites for

participation in the here and how, and see that process of meanings coming into being as significant, then we can value the diverse range of ways that children produce meaning.

Children's meaning making practices are contingent on the moment-by-moment interactions with each other and the environment. The observations in this thesis suggest that meaning making is a collaborative and collective act that is intricately connected to and generative of children's cultural experiences and lives. Such meaning making is always mediated by the materials and spaces of Early Years classrooms. The success of the English education system is currently evaluated on how far it supports individual pupil attainment and achievement. Linear trajectories of literacy development are measured by individual competencies and are supported with specific and incremental learning outcomes. I suggest that teachers carry out observations that follow the activity of groups of children, and consider the relationship between children's interactions with each other and the environment and the ways in which their literacy practices emerge through their interactions. I also recommend that teachers need to see literacy expansively and intricately bound with the whole range of children's experiences.

The problem of the linear trajectory, linking aspects of literacy to specific points in time of a child's life, is one that initially drew my concern at the beginning of the study. In the introductory section of this thesis, I reflected on those children I had taught and who found print literacy learning challenging in the early stages of their school career. I noted how from that point, despite intervention, they sometimes continued on a trajectory of 'underachievement' in the education system. On

reflection of my data, I now explore this very much 'felt' concern that arose from my experience through the empirical lens provided by my thesis. The material, spatial and temporal flexibility provided for the children in the enabling environment, and the opportunity for them to repurpose and create places that meant something to them through their movement was critical to the meanings the children made. Linear trajectories of literacy development identify more sedentary activity, such as letter formation, or book reading, as significant steps. Moving too quickly to a narrow more sedentary conception of literacy may jeopardise the flexibility and time for children to explore the potentiality of the enabling environment. As I completed the writing up of this thesis, Ofsted produced their most recent report 'Bold Beginnings' (Ofsted, 2017). This document carries strong messages in favour of more formal and sedentary approaches to the teaching of early literacy that are counter to my own research findings and contributions. In schools, time is seen as a resource (Compton-Lilly, 2013, p87) and children are often monitored to ensure that the available time is used effectively in advancing children's learning. Children are expected to be busy and 'on task' and spend time on activities deemed as educationally beneficial. In the Early Years, child involvement or intense interest in an activity over an extended period of time is seen as important to learning (see for example, Laevers, 1994), but the kinds of activity we value can be locked-down if we adhere closely to pre-defined trajectories. An implication of my study is that we need to see beyond pre-defined trajectories of development.

9.5.1.3 Take account of and be sensitive to the flows of children's spontaneous or exploratory movement in classrooms

I have argued that by giving recognition to the way in which children take up spaces through their ongoing movement and production, we are in a better position of expanding current notions of literacy development as defined in current national policy. Children's emergent activity, through their movements in the classroom was generative of the meanings, imagined spaces and communicative repertoires that provided them with co-constructed and collective opportunities for participation. Movement then, appears to be of significance and should be foregrounded in accounts of early literacy learning. Children's participation in my study involved the constant construction and re-construction of imaginary places as the children engaged in imaginative play. In addition it involved repurposing, re-imagining and re-shaping materials. At one point in the study, while I was in the field, and across a sequence of moments, I became aware of many things that the classroom was to the children at any one point. It was momentarily the flightpath of a superhero for one child. Elsewhere it was an underwater chase between a shark and a starfish in the water tray. For two children sitting at the writing table, one chatting to the other while the other wrote 'chips' on a menu on a worksheet meant to be a story plan, it was somewhere to make marks that mattered. All these activities, diverse as they emerged within the ever shifting assembling, gave me insights into the possibilities of the classroom and its resources. This symbolic meaning making was made possible through children's exploratory movement as children continually imagined and then re-imagined the potential of the classroom and materials to hand. The implication of this is that children may need opportunities to interact and move flexibly in order that they can engage with the meaning making potential of the environment.

9.5.1.4 Offer opportunity for spontaneous exploration of meanings, real and imagined and child-generated sites for participation

In order to understand children's early literacy learning, I suggest that teachers observe the meanings that emerge as children spontaneously interact in the learning environment. It is important that these meanings are seen as generative of sites for participation. This study has highlighted how children's movement is never inconsequential although it may be contingent on the materials, time, and the classroom, in other words, on the resources to hand, including the children themselves, their individual and shared histories and interests. I have described such activity, and the dynamic movement that is integral to it, as an essential exploration of the possibilities for making meaning. Children's movement was spontaneous and unpredictable and brought to bear ensembles of communicative practices. Teachers or practitioners should carefully examine the material configuration of the immediate environment and consider the ways that this can radically shape children's meaning making in diverse and often unpredictable ways as they move within it. By observing moment-by-moment activity practitioners can examine how the sensory and tactile elements of the environment shape children's interactions.

9.5.1.5 Taking account of and being sensitive to children's flows of activity and affective atmospheres

In Chapter 8, I drew a relationship between affect and the interacting dimensions of movement, the classroom, and its resources. Commenting on affective flows in relation to the children in my study relied purely on my observations of children's movements and the ongoing production of materials and meanings that played out across such movement. I drew on the idea of 'affective atmospheres' (Ehret and

Hollett, 2014, p428) and related this to the dynamic flurries of activity and interest/movement formations that took place alongside rapid production of meanings and materials. I considered the ways in which the quality and dynamics of children's movements seemed to have a contagious communicative quality. As reported in Chapters 5, 6 and 7, I was intrigued by the quality of children's movement as the children milled around the classroom, and the kinds of pathways and routes they forged as they did so. Such movement and activity that I observed, brought with it impressions of busyness, intent, tentativeness, indecisiveness, and so on. The movement I described, I have suggested, plays a part in the ongoing unfolding of what the children did and went on to do. Although I present this as an area for future research in the sections that follow, an implication of this is that teachers observe and make provision in a way that is mindful of the dynamics of children's movements around classrooms. I know that Alice, the class teacher, often placed resources strategically in places that children liked to choose to play in, or changed areas of the classroom when children's interest in that area had waned. She was sensitive to the areas and materials that children were drawn to and ensured that these were provided for flexible use.

Classrooms have sanctioned uses. Children's pathways, borne from their practice of walking, of to-ing and fro-ing, following their interests and each other, can go against the grain of educators' goals or may align with such goals. On that basis, they may be ignored, sanctioned, or applauded. As Josh walked with his paper strips and placed them on the writing table, he went unnoticed. Kehinde and Emma's walking that involved tipping resources into the spot tray, was seen as following instructions, of meeting the teacher's request. But too much walking, without much deliberation, might be seen as 'off-task' behaviour, or a lack of engagement with the learning

opportunities presented in the setting, particularly where more sedentary activity is highly valued. In order to understand children's diverse practices, we need to pay more attention to and value children's movements and what these can do.

9.5.2 Implications for policy: Forging broader understandings of the relationship between movement, literacy and play

Whilst open-ended approaches to pedagogy are prevalent in Early Years provision (See Chapter 2.4) the ways in which play has been conceptualised in policy and valued in school contexts has often been problematised (see for example, Wood, 2014, Rogers and Lapping, 2012). The problem inherent in such conceptualisations is how play is often evaluated, in how far it is seen to promote or facilitate progress towards curricular or pedagogical goals. As a researcher, without the pressures of being a classroom teacher, I was in the privileged position of observing emerging activity without being directly accountable for children's progress. In Chapter 2, I noted how accounts of early literacy development have drawn attention to relationships between play and early literacy development. For example, Nicolopoulou (1996) proposed that children's narrative competence and narrative play supports abstract and symbolic thinking required in print literacies. Children's play texts, oral narratives, re-enactments, retellings and sociodramatic play, are commonly seen as a crucial step towards print literacy and written into curriculum documentation, for example, the Early Years Foundation Stage (Early Education, 2012). Earlier, I drew on Hutt's concepts of epistemic, ludic and game play (Hutt et al., 1989). Children's movement and meaning making as described in this thesis appeared to be related predominantly epistemic play - that is, children were exploring and gaining knowledge of the world around them through their explorations. Children also seemed to be undertaking what could be said to be ludic

aspects of their play in that the meanings they made appeared to relate to their past experiences, imaginings or fantasy play. Both the ludic and epistemic aspects of their play were constitutive of their meaning making endeavour, in that the places they moved around and the way they explored the material possibilities of the setting, simultaneously gave rise to their emerging practices. In this thesis, I noted and recounted children's play texts and narratives, but these seemed to emerge spontaneously from children's explorations.

In many ways current Early Years policy in England appears to be supportive of these kinds of play. The Characteristics of Effective Learning (Early Education, 2012, p5) involve 'Playing and exploring – engagement, Active learning-motivation, Creating and thinking critically – thinking'. The document argues that these characteristics will be supported where children have the flexibility to collectively explore the possibilities of the environment alongside supportive adults and within the statutory documentation, play is presented as highly important. However, the notion of play and early literacy and play as written in current policy needs closer examination.

Play is essential for children's development, building their confidence as they learn to explore to think about problems and relate to others. Children learn by leading their own play, and by taking part in play which is guided by adults. Practitioners must respond to each child's emerging needs and interests, guiding their development through warm, positive interaction. As children grow older, and as their development allows, it is expected that the balance will gradually shift towards more activities led by adults, to help children prepare for more formal learning, ready for Year 1.

Concerns about play vary across accounts for example it may be deemed less important than more formal educational goals. Anning (1994), and Cleave and Brown (1989), highlight the benefits of play associated with low intellectual challenge (Hall and Abbot, 1991). Siraj-Blatchford et al. (2002) suggested that practitioners and teachers need to hold in-depth conceptualisations of the value of play in order to understand it as a means of learning (Pollard, 2002). Here, I add my concern that as play is conceptualised, it inevitably becomes separated from the emergent and contingent nature of human activity. It is clear from this statement that policy requires children to be given access to a flexible and supportive environment, which values their contributions and play. Children's 'own play' here could reasonably be interpreted as their emergent movement and meaning making. Similarly, the enabling environment promoted in current policy could certainly provide the space and resources to allow the movement and flexibility for children to create spaces and materials that will facilitate their meaning making in order that they can participate in classrooms.

My thesis suggests that children should have flexible access to the learning environment. In classrooms, some areas are more open to negotiation than others, and the tools of the classroom, such as the book cases, the pens, the card and junk resources, certainly have sanctioned uses. In my study, children quickly seemed to realise which areas and resources could be used flexibly and throughout my fieldwork, they were drawn to such areas. These areas carried a *surplus of meaning* (Bomer, 2002) and children were able to use such spaces and materials flexibly in order to find and construct collective ways of being together. This led to a diverse range of practices, fuelled by children's interest and movement as children followed

the flow of ideas. The Areas of Learning and Development (Early Education, 2014, p2) are underpinned by the principle of 'Enabling Environments'. Flexibility that promotes curiosity, involvement and exploration, and open-ended resources are presented as critical to these environments.

The extract from the statutory guidance included above however, indicates that such freedom within an Enabling Environment should become increasingly limited, and that the focus move slowly toward more 'formal learning' in Year 1. This is concerning as classroom places, guided by pedagogical goals and intentions, can 'constrain or enable social practices in the interests of maintaining and reproducing established hierarchies' (Mills and Comber, 2013, p417). Educational goals, such as the one detailed above, may curtail children's exploratory movement and the meaning making practices in pursuit of more 'formal learning' (Early Education, 2014, p5). This signifies an intention to give children less opportunity to follow their own interests as their school journey progresses. If children rely on moving within flexible spaces in order to explore the possibilities of the environment and its resources in order to construct meanings, then the more formal may militate against such flexibility.

In summary, while the current policy documentation in England promotes what it terms principles for young children's education and care, again this has been challenged in favour of more formal and presumably sedentary activity. The separation of literacy from other modes of meaning making and mixed messages regarding play may not be helpful. The separating out of elements of symbolic meaning making, such as the discrete skills associated with early literacy, at too young an age may be counterproductive to children's understandings of what literacy

is and what it is for. Here I join commentators who argue that early education should be about participation, be meaningful, relevant and empowering (see for example, Bath, 2009; Moyles and Worthington, 2011). The specific area of literacy in Development Matters (Early Education, 2014) focuses on a set of skills to be acquired associated with print literacies. By giving recognition to the way in which children take up such spaces through their ongoing movement and production, we are in a better position of expanding current notions of literacy development as defined in current national policy. Razfar and Gutierrez (2003) suggest a blended approach with supportive adult scaffolding of literacy skills but, within that, I would argue that teachers and practitioners see literacy development as diverse, non-linear and contingent on all aspects of the assembling spatial and material classroom environment.

9.6.1 Areas for future research

In this thesis I have examined patterns, formations and dynamics of children's exploratory movement in relation to their meaning making. My recommendation for further research involves further study into the role of collective and spontaneous movement in meaning making. This area is currently understudied.

Furthermore, there is an inextricable cross-over in the way that affect and emotion have been seen as relational (see Lemke, 2013a) and this seems to manifest in the way that affective flows may influence semiosis and meaning making. Deleuze and Guattari (1987) define affect as a connection of mind, body and environment that is experienced in the push-pull of experience and the movements and textures of social life. As such it is related to being and moving through place. According to Lemke (2013) affect is related to prior histories and experiences as 'feeling-histories',

presumably generated by such a push-pull of experience. Deleuze and Guattari (1987) describe emotion (and any representation of experience for that matter) as a residue of experience, but not of experience in itself.

The ways in which affective atmospheres shape children's learning experiences in classrooms is a second area for future research. Becoming literate could be seen to be saturated with feelings of being, and in a classroom this involves the appropriation of the textual practices associated with schooled literacies.

Appropriation here involves an orchestration of embodied, linguistic, cultural, spatial/material practices and the *ways* that these are taken up by individuals and groups of children can have an immense impact on children. It may be that this impact is relational to individual and collective affective flows in classrooms. In this thesis I have suggested that children's movement around classrooms and their productive endeavour created affective atmospheres. Investigating affect is challenging. Ehret and Hollett (2016, p57) state, 'the affective textures of social life are qualities of experience that cannot be codified, ordered, or parsed into components for later analysis'. How these atmospheres shape children's experiences of literacy learning over time would require a more participatory approach, perhaps using pupil narratives, accounts, and comments of their ongoing literacy learning experiences.

9.6.2 Implications for research- ontological reflections on practice through a poststructural lens

The ontological positions taken in this study, as I moved from my pre-existing understandings of literacy development, through to examining children's activity through a poststructural lens, initially threw me into lines of thinking that appeared to

generate a series of contradictions. As stated in the introduction, at first I had difficulty in seeing the value of the data generated as when I examined children's activity it all looked so commonplace. When I observed children taking part in activities involving literacy, it looked so ordinary that I struggled to think what my study might possibly have to say. I had extensive practical and professional knowledge of early literacy and in the early stages of my fieldwork only 'saw what I already knew'. At this point I began to look more broadly at the full range of children's activity and very soon my attention was brought to the ongoing movement of children and the way in which children's meanings emerged through their movement. The ongoing movement was such a familiar feature that I had not even thought of examining its significance until this point. In my structuralist thinking about children and their literacy practices, and the logocentric conceptualisations of literacy development I held, I could not *see the wood for the trees*, although somehow, *I knew wood* was in there somewhere. Kelder (1996, p59) describes how the concept of literacy has always been elusive because of its complexity and how it often creates a 'house of mirrors of language to explain its use'. For a time I was lost in a house of mirrors.

Children's constant milling around is the central focus of this thesis, but initially it was so commonplace that I did not realise its significance. Like the children playing with puppets, it was the stopping points, or the pauses in movement, that stood out rather than the pathway of movement in getting there. Neither did I realise initially that my not noticing its significance was probably down to the point that movement is unwritten in dominant accounts of literacy development. I now understand that the division between what I thought I knew was important to children in a phenomenological sense that is what I felt I knew implicitly about children from

working with them, and what I knew about children from dominant accounts of literacy development, were two very different kinds of knowledge. Adopting a poststructural perspective gave me the opportunity to problematise the division in my thinking and explain why the division existed in the first place.

In Chapter 1, I discussed how the education system gauges its success on the measurement of literacy standards via individual success in print literacies. Street (1995) described how autonomous views of literacy can place the blame for any inequalities that may exist in society in the hands of the individual, regardless of socioeconomic factors. Approaches to teaching literacy are often presented as panacea to societal problems. Observing what is emergent in the ongoing present, it is clear that literacy is intricately connected to the whole of human experience, and any attempt to rationalise it into a set of progressive skills or a policy document reduces it. Similarly, the focus on the individual and literacy distorts the ways in which literacy is in fact, distributed across people and things. By defining what early literacy is (in such models) what literacy *is not* is implicit. Autonomous constructs such as those around early literacy development, can shape the ways in which we *view* such experiences- so commonplace that we forget to notice their significance and the way that these can impact on young children's experiences in the early years classroom. When observing children, all aspects of the assemblings including the children themselves, are implicated in the becoming of the classroom. This raises serious moral questions in relation to how we might help children to become with care and due respect to each other and their world, when there is an overwhelming focus on the individual and their attainment.

Through a process of empirical study I have been able to critically reflect on my own assumptions about knowledge and re-think troubling problems inherent in how we

conceptualise early literacy and the ways in which the learning environment can act on children in the here and now in local contexts. This has implications for further research into the ways in which children interact with digital and non-digital resources in classrooms and the ways in which these things influence the meanings that are made. When early literacy is seen as ‘meaning and world emerging simultaneously offering new forms of literacy and representation’ (Hackett, 2017, p375), new insights into the diverse ways that literacy is brought into being can be gained. In this thesis, I have focused on how the literacy and meaning making are brought into being partly at least through children’s movements in an Early Years setting.

9.7 Final reflections

The purpose of this thesis was not to examine the impact of pedagogy on children’s development, but instead to look at children’s activity in order to provide a more expansive view of early literacy development. As is any account of human activity, it is only a partial picture, as I have followed my own professional commitment in its construction, drawing on a poststructuralism to try and articulate what is missing from accounts of early literacy education. This process involved giving children’s emergent activity a physical space by writing it here onto the page.

While fieldwork was taking place, the children were taught and guided skilfully by the class teacher and teaching assistant who had a number of ongoing projects aimed at supporting children’s communication and a whole range of strategies to help them to get on with getting along together. Much of what we have seen here in terms of children’s development is inevitably down to the unstinting work and care of the teacher and teaching assistant. For me as a researcher the year was experienced as

a series of temporally disconnected albeit detailed episodes. Each time I went to the setting, I could see children growing and changing in different ways including their tolerance of each other, their willingness and ability to collaborate with each other and solve problems together, and in their growing repertoires for doing, making, communicating and being.

Throughout the data, what has come to the fore is children's unpredictable activity. Areas of the classroom set up with specific intended goals were often re-purposed in different ways by children when they were left to their own devices. What I have attempted to do in my commentaries and discussion is to see why such activity might be valuable and fill in the gaps of what may be taking place in the spaces in-between what we might see and value when we look through a lens of dominant early literacy discourse.

Law (2004) points out how research methods do not merely describe 'social realities' but help to enact them. This begs the question for Law (2004) of what kind of social realities do we want to create? On reflection, the kind of 'reality' I have drawn up here is one that sees children as deeply implicated with each other and their surroundings. I have presented literacy as embedded within broader human experiences in order to counter the reductionist and often deficit depictions of children and families that are prevalent in dominant discourses. Seeing deficit or seeing diversity are in the eye of the beholder.

Perhaps it is time to perceive the challenges and inequalities differently. These are hard questions and it could reasonably be argued that this thesis places too much store on what children do. I hope that in this thesis I have made a contribution to discussions that see such activity as valuing what children bring, what they do and

who they are, regardless of whether this maps on to those goals described in statutory curriculum documents or otherwise. The social reality created and maintained through dominant discourses of early literacy education (See Chapter 1) is one which constructs winners and losers as soon as children enter the classroom on their first day at school. Ultimately, the thesis is underpinned by a belief that what children *do* is important and finding ways of *taking account* of what children do not only tells us what is important to children, but will help us in developing the educational field in a way that does not serve to reduce what people are, what they can be, or what they think they can be.

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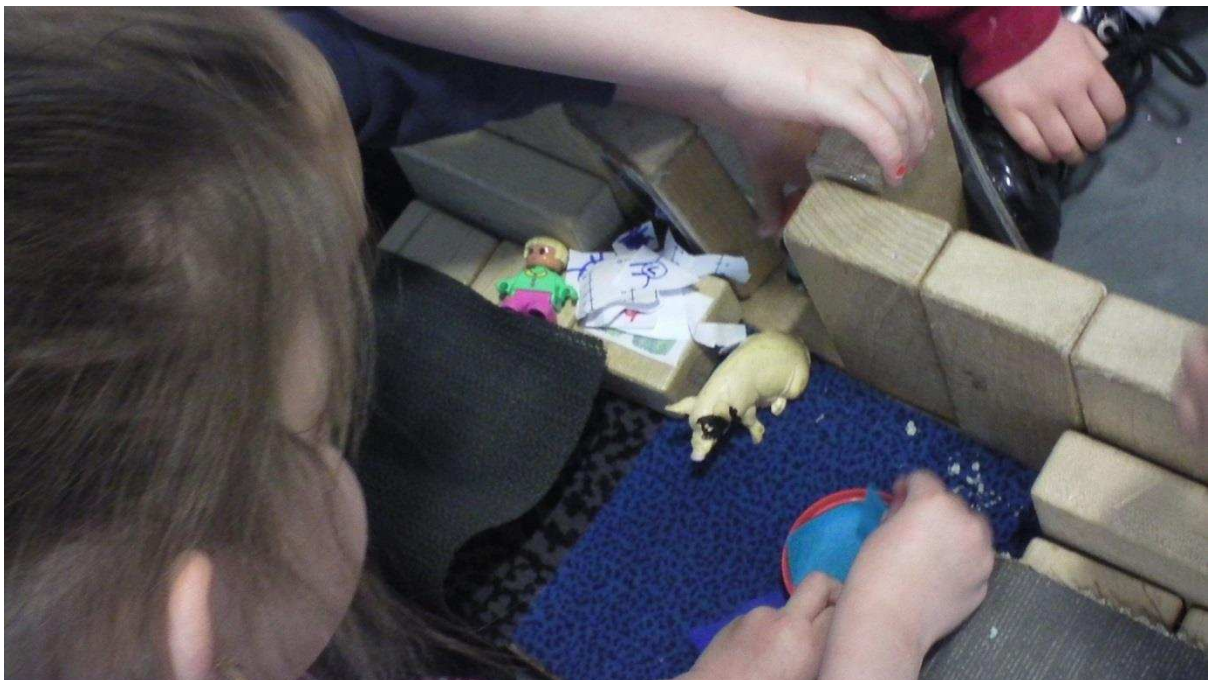
Appendix 1. Table 4.1. Examples of data to illustrate meaning making moment to moment

Number of visits/ hours -- 15 visits/ 2 hours per visit	
Observation activities during each visit	Data generated
Photographing learning environment and activity	65 still images of classroom and children's activity
Talking to children Making field notes Ad hoc discussions with teacher/ teaching assistant Observing teacher led input session Observing children's free flow activity	10,500 words of notes Maps and plans of learning environment/ movement maps
Filming episodes of children's activity	159 filmed episodes*. 254 minutes of footage <i>* An episode here is defined by when I started to film, and when I stopped filming. I filmed between 6 and 17 episodes on each visit lasting from 0:11 seconds to 7:39 minutes.</i>

Appendix 1a Photographs of children's material/ spatial productions



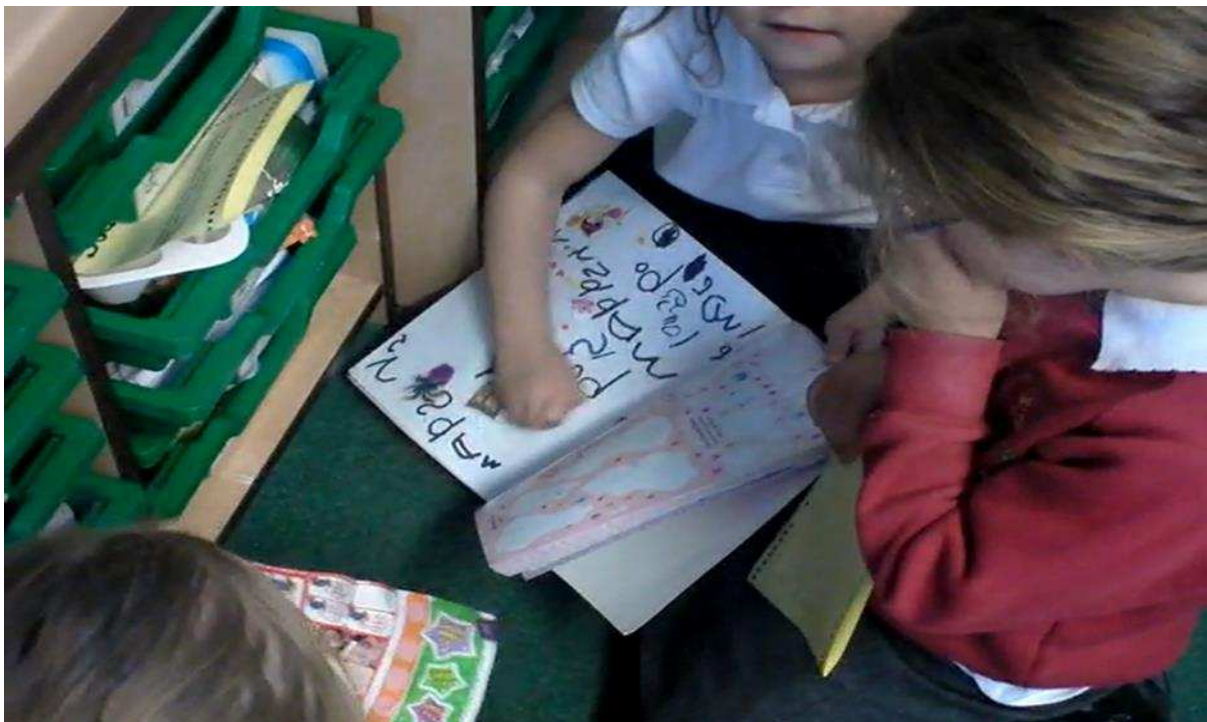
Example 1: Converging /movement/ interest around block play. (February)
Materials gathered from different classroom areas to create scene. Small doll from child's personal drawer.



Example 2. Converging movement interest (June) 'Reading material' by play figure's bed made with resources from writing bench. Pig often taken to block play and incorporated in stories. Children designating spaces to the play objects.



Example 3. Pink playdough and re-claimed chocolate box from workshop materials. Children making playdough chocolates for doll. Doll brought from role play area.



Example 4. Sticker books were regularly placed in children's drawers and here children are giving each other stickers in response to teacher giving stickers in reading diary (also in picture)



Example 5. Girls re-enacting a wedding as I filmed with camera (October)

Example 6. (Below) Superhero peg puppet play - image shows converging movement/ interest formation



Appendix 1b Observations/ notes relating to children's material/ spatial productions

Example 1: Converging /movement/ interest around block play. (February)
Materials gathered from different classroom areas to create scene. Small doll from child's personal drawer.

Notes:

This group of girls regularly played with blocks, constructing enclosures for the mimi-dolls and toys they often brought into school with them, or appropriated from other areas of the classroom. Resources of interest were collected into one area and brought to the block play area.

PWD- children used conventional routes to bring the objects to the block play area.

CTR- the block play enclosures created by (MoM) moving materials across areas, and (MeM) - merging materials and resources, led to the production of 'homes' where (PT) play texts were introduced and shared across children.

Example 2. Converging movement interest (June) 'Reading material' by play figure's bed made with resources from writing bench. Pig often taken to block play and incorporated in stories. Children designating spaces to the play objects.

Notes:

Here are the group of girls that enjoy playing with blocks. This kind of play continued throughout the year and I noticed how the play became increasingly complex in its narratives and the constructions children made. The group still enjoy making enclosures for the characters and engaging in imaginary play, integrating stories and characters (PT) into their activities. Here two of the children have transformed resources by cutting up and drawing on paper, from the writing table, to produce what looks like reading material for the character puppet (CMT). Here there is also the emergence of activity associated with schooled literacy (WR/R) in the production of the print materials for the puppet.

Example 3. Pink playdough and re-claimed chocolate box from workshop materials. Children making playdough chocolates for doll. Doll brought from role play area.

Notes:

Playdough is a very popular activity and here the children have been cutting it up and rolling it out on the table. The chocolate box brought over from the workshop area and the doll converge to this area (PWD). The malleability of the play dough, the possibilities for re-shaping and its sensory feel appear to attract children. Here the group engage in role play (PR) and the imaginary scenario of making chocolates for the baby emerges. The transformation of the playdough as it becomes

chocolates, involves CMR, CMT, changing materials through innovative interactions and using tools to transform the playdough.

Example 4. Sticker books were regularly placed in children's drawers and here children are giving each other stickers in response to teacher giving stickers in reading diary (also in picture)

Notes:

Stickers are intensely popular with children. They gain sticker rewards for reading and have taken this into their own hands here by bringing stickers to give to each other, from home. Children's own stickers are kept in personal drawers, and here they make an appearance but do not stray too far from the personal drawers! Here they are drawing on schooled practices and repurposing their own materials in parallel with school goals (CMR) as they merge materials from home to school. (MeM). With respect to use of classroom space, this indicates focal point movement/ interest.

Example 5. Girls re-enacting a wedding as I filmed with camera (October)

Notes:

Dressing-up clothes from the role play area appeared to stimulate this wedding scenario enacted by the children here (CMR). On this occasion, the group asked me to film their 'play' which involved a moving enactment, with much coming and going to where I was filming, and also a narration of events by Emma (ON, PT). The improvised story led to moving materials across areas and changing materials (CMR, MoM). Pathways this time were unconventional (PW) across imagined spaces. The movement/ interest formation shifted from focal to radial, then quickly to converging, then out again, as the girls enacted their narrative.

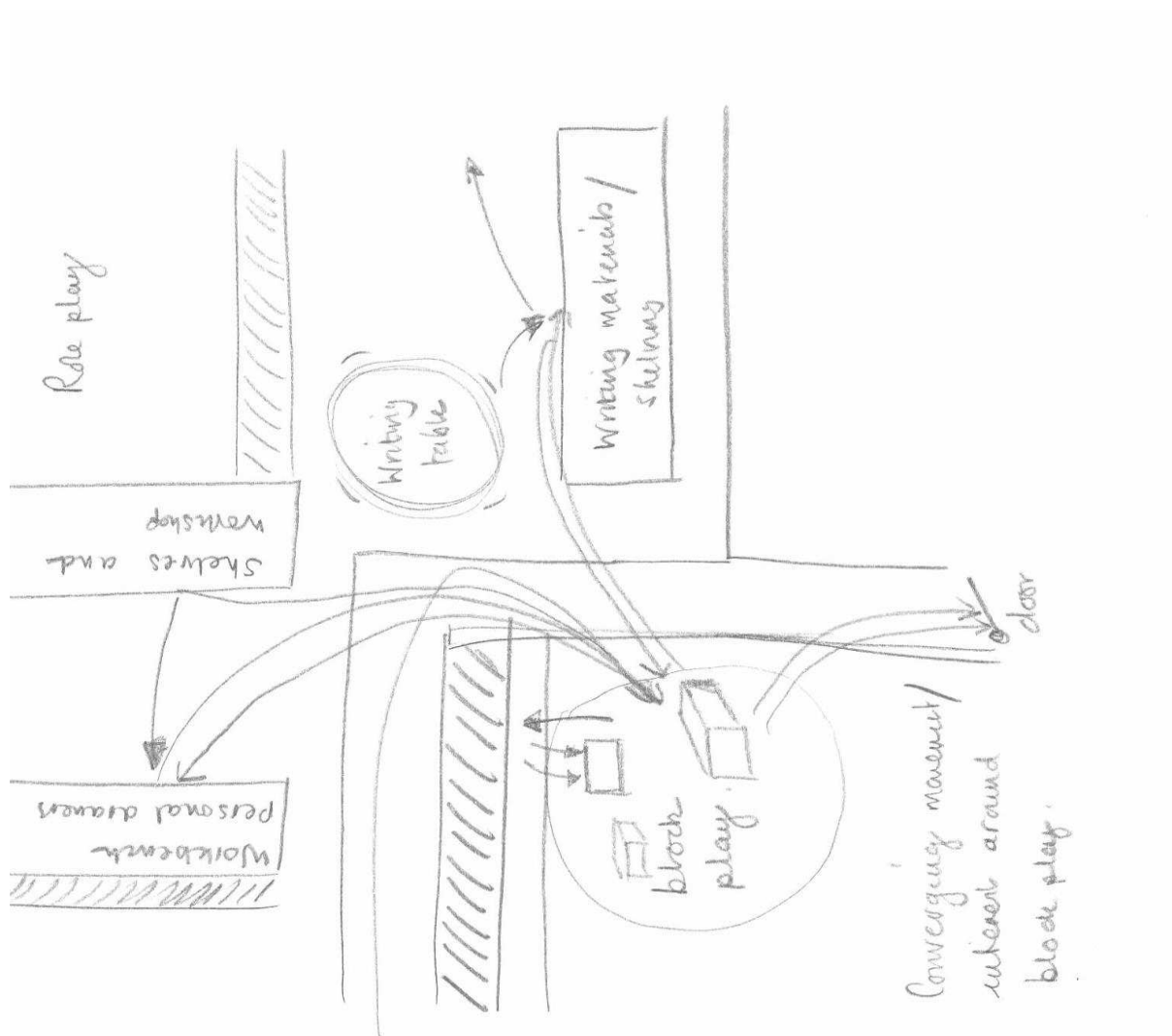
Example 6. (Below) Superhero peg puppet play - image shows converging movement/ interest formation

Notes:

Superhero puppets were very popular with the children. The teacher had provided pegs and felt and other materials for the children to make superhero puppets. The photograph shows a number of minutes after the children have made their puppets. The puppets have travelled across and around the classroom meandering through imaginary airspace (PW), and this photograph shows how these have converged into one imaginary meeting place (MoM). At this point, the group are debating which has the strongest superpower and the hierarchy of the puppets is being debated. The children physically position their puppets in relation to their powerful positions and argue which has the best superpower (PT). There is some really sophisticated negotiation going on here and the way that the children relinquish, give and take and gently assert is brilliant to see.

Appendix 1c. Movement mapping related to children's material/ spatial productions (Sample movement mapping around block play)

The movement map below shows the main flows of movement that I observed as the children were setting up and playing with the block play enclosure. The arrows represent the main and dominant flows and direction of children's walking movements, over a period of time while the girls played with the blocks, rather than individual children's movements.



Appendix 1d Dates of visits and coded film episodes

Date	Length of footage	Title	Space/ area/s of continuous provision	Materials/ resources	Coding	Notes
16/17 th September 2015 (Visits 1 and 2)	1:02	Amy and the Rabbits 1	Writing table	Pencil, paper	CMR, SL	Drawing significant objects / name writing
	1:04	Amy and the Rabbits 2	Writing table	Pencil, paper	SL, CMR	Drawing significant objects / name writing
	1:44	Computer and object play	Computer bench	Laptop / small figures	MeM	Bringing objects to play with the laptop
	1:01	Girls collaborative play	Outdoor area-large construction	Large crates, role play clothes and travel materials	RP, PT, CMR	
	1:31	iPad 2	Carpet area	iPad	DL	Harry using Tangled app/ Criminal building pipes
	1:04	IPad tapping	Carpet area	iPad	DL	Random tapping
	2:00	iPad	Carpet area	iPad	DL	Having trouble sharing
	0:59	J+J home	Role play area – house	Household objects/ furniture	RP, PT, MiM	
	3:00	KL name	Writing table	Pens/ pencils	SL	
	1:02	MMK	Writing table	Wipe-off boards, pens/ pencils	SL	Drawing people, writing names
	4:25	R/C bears	Small world	Bears, trees, wood	PT, MiM	Bears fighting/ hiding/
	1:27	V	Workshop area	Diary	SL	V talks about her writing

22 nd September visit 3	3:50	AKD	iPad	Hairy letters	DL	
	5:01	BK	iPad	Toco robot lab	DL, PT	
Chapter 3	0:40	Chn's small world 2	Workshop/small world	Frozen spot tray – workshop materials	MiM, CMR, CMT, MeM, MoM, PT, PW	Creating own materials
Chapter 3	0:43	Chn's small world 3	Workshop floor	Frozen spot tray – workshop materials	MiM, CMR, CMT, MeM, MoM, PT, PW	Creating own materials
Chapter 3	1:04	Chn's small world 4	Workshop floor	Frozen spot tray – workshop materials	C-R MiM, CMR, CMT MeM/MoM, PT, PW	Creating own materials
	4.03	DTD	Writing table	Pencil and paper		Name writing
	0:31	L- house	Home corner	House objects	RP/ RFP	
	0:58	L-house 2	Home corner	House objects	RP/ RFP	
Chapter 3	0:45	Making seaweeds sea	Workshop floor	Frozen spot tray – workshop materials	MiM, CMR, CMTMeM,MoM/PT,PW	Creating own materials
Chapter 5	1:20	Solo play bears	Small world		MiM	
	1:21	Solo play bears 2	Small world		MiM	
Chapter 3	1:38	Spot tray – E makes this for everybody	Workshop floor	Frozen spot tray – workshop materials	SL MiM, CMR, CMT, MeM,MoM,PT, PW	Creating own spot tray
	0:49	TD letters in name	Writing table	Pencil and pen	SL	Teacher directed
	4:22	Writing table (2)	Writing table	Pencil and pen	SL	Exploratory mark making
28th September 2015	1:50	And still analysing space	Role play area – Bear Cave	Boxes and teddy bears	MoM, PT	
	1:24	Going on a Bear Hunt	Writing table	Paper, glue, scissors	SL,CMT	
	0:44	iPad phonics	Carpet area	Hairy Letters	DL	
	2:15	It is our space!	Role play area- Bear Cave	Boxes and teddy bears	MoM,MiM, PT	Episode involved moving iPad boxes across area

	1:56	In a bear cave, made it at last!	Role play area – Bear Cave	Boxes and teddy bears	MoM, MiM, PT	
	0:23	Matching bears Lucy	Light frame	Bears, images of bears, light frame	SL, MiM	Picture/ object matching
	1:50	Still arranging space	Role play area- Bear Cave	Boxes and teddy bears	MoM, PT	
6 th October 2015	2:40	Adding text to map	Writing table	Paper, card, scissors, pens	SL, CMR	Bear hunt map – spelling words
Chapter 6	1:53	Characters and positions 1	Small world	Playpeople	MoM, MiM, PW	Moving characters across space
Chapter 6	2:02	Characters and positions 2	Book area	Book box and puppets	MoM, MiM, PW	Moving characters across space
Chapter 6	1:58	Characters and positions 3	Book area	Book box, shelves and puppets	MoM, MiM, PW	Moving characters across space
	1:05	D, D and dice	Writing table	Dice, numbered teddies	MiM	Bear hunt map – spelling words
	5:01	D Ipad	Carpet area	Toco Boca lab	DL	Entertaining using iPad
	5.30	Let's make a pop group	Carpet are	Lego Friends story maker	DL	Selecting characters
	2:16	D and D	Writing table	Dice numbered teddies	MiM	Bear hunt map – spelling words
	0:54	Drawing – wipe-off	Writing table	Wipe off pens, boards	SL	Bear hunt map – spelling words
	2:44	Making map 3	Writing table	Paper, card, scissors, pens	SL	Bear hunt map – spelling words
	2:39	Making map 2	Writing table	Paper, card, scissors, pens	SL	Bear hunt map – spelling words
	1:07	Making map	Writing table	Paper, card, scissors, pens	SL/PT	Bear hunt map – spelling words
	0:42	Nursery rhyme	Book area		SL, ON	Child reading aloud
	5:34	Rubbing out	Writing table		SL	Talking about drawings
	1:14	Tracing f	Writing table	Wipe of pen, f sheet	SL	Lots of social chatter

23 rd October 2015	1:50	D iPad	Carpet area	iPad	DL	Selecting characters
	0:44	iPad letter formation	Carpet area	iPad	SL,DL	A,p,t, selecting
	0:31	iPad phonics	Carpet area	iPad	SL,DL	Spelling cvc words satpin
	2:34	iPad squabbles	Carpet area	iPad, sand timer	DL	Visit to doctor – ‘you did it!’ The criminal!
	1:41	Laptop 2 with L	IT bench	laptop	DL	Talk around game
	0:46	Laptop	IT bench	laptop	DL,SL	Literacy program
Chapter 6	0:41	Layla puppet play 2	Carpet area	Large + small puppets	MoM, PT	Puppets and figure play
Chapter 6	2:18	Layla puppet play 3	Carpet area	As above	MoM,PT	flying puppets
Chapter 6	0:35	Layla puppet play 4	Carpet area	As above	PT,Mom	Puppets talking
	0:22	Layla puppet play	Carpet area	As above	PT,MoM	Selecting puppets
	1:05	Sticker book	Personal drawers	Book from home	MeM/,CMR,MoM	Materials from home
	2:49	Storytelling 2	Book corner		ON	Oral story – filmed on iPad
	0:47	Storytelling 3	Book corner		ON	Oral story - princess
	2:57	Storytelling group	Carpet area	Dressing up clothes, card ‘jewellery ‘	RP/,ON,PT,CMR,CMT,PW	Re-enacting story about a princess and wedding
	0:46	Storytelling	Book corner		ON	Oral story – casting friends
	1:36	t-led science	Small world area	Pumpkin, water tank, recording sheet, pencils		Science experiment organised by teacher
	0:41	t-led sequencing	Writing table	Scissors, pencils, worksheet, workbook	CMT,SL	Individually completing task sequencing growth of seed
4 th November	2:32	B and the little people	Floor area-construction	Blocks, play people	PT/MeM/MoM/CMR	Using blocks to create building
	2:40	B and the little	Floor area-	Blocks, play people	PT,MeM,MoM, CMR	Adding ninjas to the above

		people	construction			
	2:12	Playing witches	Roleplay area	Witch artefacts	PWD/ PT/RP	Stirring cauldron
	0:38	Potions Lab 2	Role play area	Witch artefacts	PWD,PT,RP	
	1:44	Potions Lab	Role play area	Witch artefacts	PW,PT, RP	Mixing potions, stirring objects
	1:54	Puppets and house pair	Small world area	House, furniture and finger puppets	PR,MeM,MoM	Creating vehicles, moving puppets across space
	1:32	Tracing using iPad	Small, low table	iPad app	SL,DL	Joining letters, following arrows
	5:33	What do you see?	Book area	Book with class photos	PT,SL	Innovating with known story and class book
11 th November		Apple spell	Role play area	Wooden spoon,	PT,CMR, CMT	Casting spell on R – into an apple
	2:47	B and the iPad Gruffalo	Small, low table	iPad app, Gruffalo	PT,DL	Catching the chips !
	3:42	C while the teacher is away	Teacher's station and whiteboard	Selection of teaching materials	SL	Using teacher's resources
	1:49	D while the teacher is away	Teacher's station and whiteboard	Selection of teaching materials	SL	Using teacher's resources – use of space defined by lit pedagogy – played out by children
	00:58	Disappearing spells	Pathway - designated	Witch artefacts, wooden spoon, torch	RP,CMR,MiM	Making objects disappear
	0:47	E mirroring writing	Writing table	Pens, paper, books	SL	Watching adult, and writing
	2:24	E star chart	Children's personal drawers	Star charts	SL	Comparing stars...
	2:53	E writing	Writing table	Pens, paper, books	SL	E is writing in a book at the writing table/ not TD
	0:48	Letter formation	Carpet area	iPad- Hairy Letters	SL	

		iPad				
	2:15	L and characters	Construction area	Blocks, class faces on lolly sticks	PT,SMR,MiM	Building enclosure for play people classmates
	3:36	Telling a story	Book area	Class book	ON,SL	Telling known story using prompts from class book
	2:00	Walls and enclosures	Writing table	Pens, paper,	SL	Children drawing walls and enclosures
	1:44	Writing spells	Role play area	Artefacts related to witches. Paper to write spells	SL,RP	
January 10 th 2015 Chapter 5	2:48	Initial paper strips	Writing table	Range of paper and writing resources	CMR CMT, MiM, MoM, PW	Activity with strips of paper started
	0:58	Prompts to write	Writing table	Key words, finger space marker, pens, papers, books	SL,	Children writing about 3 little pigs / behaving like writers
	3:50	AKD iPad	Carpet area	Hairy Letters, find the objects	DL	Having trouble with the iPad
Chapter 5	00:01	Attaching strips	Writing area	Plastic lid/tape/card pieces	CMR CMT, MiM, MoM,PW	Lift the flap to see the letters
Chapter 5	00:02	Cutting strips	Workshop area	Scissors, paper strips	CMR CMT, MiM, MoM,PW	Cutting card into squares
		iPad d	Carpet area	Hairy Letters	SL	Tracing d
	00:49	Teacher led guided	Carpet area	Pens, writing books, word bank, finger space prompt	SL,CMT	Guided writing
Chapter 5	00:49	Letters on cut strips 2	Workshop	Card/scissors/ pens	CMR, CMT, MiM, MoM, PW	Putting letters onto cut up strips
Chapter 5	00:28	Letters on cut	Workshop	Card/scissors/pens	CMR	As above ...

		strips			CMT, MiM, MoM, PW	
	1:10	Lolly stick class	Construction area	Class photos on sticks, wooden blocks	RP,PT,MiM	
	00:47	Stars and writing	Writing table	Writing materials	SL	Behaving like a writer – E free writing on writing table
Chapter 5	00:15	Strips in pot	Workshop area	Junk eg pot, tissue paper, card, pens, scissors	CMR CMT, MiM, MoM,PW	Putting cut card with letters into pot
Chapter 5	00:11	Strips to writing table	Computer table to writing table (see below)	Strips of card, pens,	CMR CMT, Mi, MoM, PW	Taking writing from computer to writing table
	05:34	Tracing F	Writing table	Laminated letter sheet, pen		B talking about writing
Chapter 5	03:55	Writing on strips 2	Computer area	Card strips , pens	CMR CMT, MiM, MoM, PW	Taking writing from computer to writing table
Chapter 5	01:20	Writing on strips	Computer area	Card strips, pens	CMT, MiM. MoM, PW CMR	
January 17 th	0:41	A writing	Writing table	Red books, pencil	SL	Writing about experiences in writing book
	1:32	A writing 3	Writing table	Red books pencil	SL	As above
	1:11	A writing 2	Writing table	Red books pencil	SL	As above
	1:28	Collaborative space/characters 2	Construction	Blocks, pigs, pieces of carpet	PT,CMR, CMT, MoM, MiM, PW	Pigs having a birthday party
	1:08	Collaborative space/characters 3	construction	Blocks, pigs, pieces of carpet	PT,CMR, CMT,MoM,MiM,PW	Pigs birthday party continued
	2:09	Collaborative space/characters 4	Construction	Blocks, pigs, pieces of carpet	PT,CMR,CMT,MoM,MiM,P W,	As above

	1:12	Collaborative space/characters 0	Construction	Blocks, pigs, pieces of carpet	PT/CMR/CMT,MoM,MiM,PW	As above
	0:22	Copying names	Signing in board	Pens, whiteboards	MiM/ SL	
	2:50	Drawing	Writing table	Pens, whiteboards	MiM/ SL	
Chapter 5	00:13	Flying superheros	Classroom walkway	Made puppets	PT,CMR,CMT,MoM,MiM,PW	Playing with puppets made in workshop
	00:49	Guided writing	Writing table	Red books and writing support materials	TL,SL	Guided writing
	2:37	Guided writing	Carpet area			Guided writing
	2:09	H guided	Carpet area			Guided writing
	1:07	My colouring book	Small world area	Pens and colouring book	PW/MoM	Book brought from home
	6:07	Superheros in the theatre	Puppet theatre/ carpet area	Made puppets, puppet theatre	PT,/MoM	Puppet theatre story telling and special powers
	0:47	Superheros	Puppet theatre	Superhero puppets	PT	
Chapter 5	0:47	Superman laser eyes	Classroom walkway	Superman puppet	CMR , PT, MoM,MiM,PW,PWD	
February 10 th 2015	0:52	B writing valentine	Writing table	Card , pen, word prompts	SL	Writing pre-made card for parent
	1:09	Chocs to baby's bed	Playdough table	Chocolate box, playdough and doll	PT/CMT/MeM/MoM	Making a bed for the doll from a chocolate box
	7:39	Laptop groups	Carpet area	Laptop, sand timer and programmes	DL	Four boys, chatting around laptop program
	0:55	Superheroes flying	Floor area	Stick puppets and flying	C-R PT, MoM, MiM, PW,PWD	Flying then detaching
	1.20	Valentine's writing	Writing table	Cards, pens	SL	Prepared cards- children writing
	0.59	Valentine's guided	Writing table	Cards, pens	SL	Prepared cards- children writing
March 2015	1:29	'Are you ready?'	Carpet area	iPads, IWB, teacher's song	RP	Catching bugs

	2:50	Lena's menu	Writing table	Prepared booklets, pens	CMR, SL	Writing menu for Hungry Caterpillar
	0:23	Lena's writing 2	Writing table	Pens paper	SL,CMR	Girls discuss writing / drawing
	2:55	Selecting friends app	Reading corner	iPad and app	DL, CMR, PT	Lego Friends app
May 6 th 2015	0:46	Corey , Josh cutting superheroes	Workshop	Scissors, pre-printed sheets	CMT, CMR, MeM	Maths superhero sheet to workshop
	0:30	Corey, Josh, writing mat	Writing mat	Paper, pens, cards	SL, CMR	Exploring resources, cards in envelopes
	1:06	Corey, Josh, Callum cutting out figures	Workshop	Superhero sheets, sellotape, scissors, card, paper, pens	CMR, MeM, CMT, MoM	Assembling resources
	0:32	Figures – new princess	Small world	Small world figures, royal family	PT	Royal baby, play people play
	1:04	Riley and Jack's hiding places	Floor spaces	Post-its, pens	CMR, MoM, PW	Hiding, sticking post-its on others, writing on post-its
	0:11	Riley and Jack's unofficial space	Floor spaces	Post-its, pens	CMR, MoM, PW	Hiding, sticking post-its on others, writing on post-its
	0:47	Riley and Jack's post-its	Floor spaces	Post-its, pens	CMR, MoM, PW	Unofficial, secret writing
	1:11	Tilly, Erin and cards	Writing mat	Cards, pencil	SL, SD, CMR	Erin watches Tilly as she writes
	0:58	Writing mat, filling envelopes	Writing mat	Cards, pencils	SL/CMT/	Writing cards
May 11 th 2015	1.05	Flying superheroes	Floor area	Child made peg superheroes	RP/ PT/MoM CMR/ PW	superhero flight in camera
	0:28	iPad robot select	Carpet	Toco Robot Lab	DL	Building the robot together
	0:47	iPad robot steer	Carpet	Toco Robot lab	DL/ PT	Moving the robot through maze

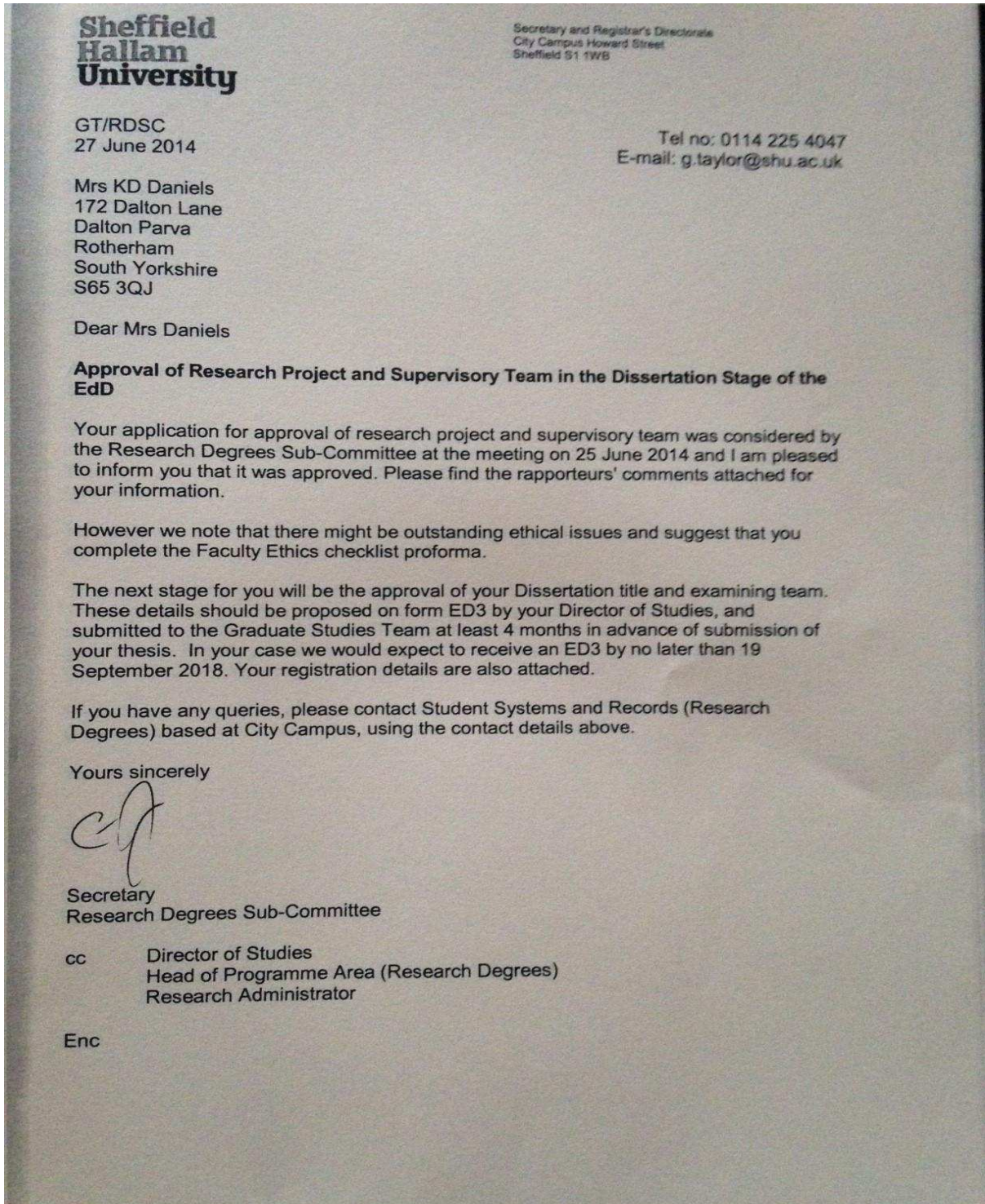
	2:06	iPad selecting	Carpet	Hairy Letters	SL/DL	Tracing letters
	0:16	iPad spray car	Carpet	Lego Friends	DL	Exploring what iPad can do
	3:05	Lego friends story	Carpet	Lego Friends	DL/ CMR	Exploring lego Friends
	2:59	Phonic spelling iPad	Carpet	Apps Entangled and phonics/spelling	DL/ SL/CMR	
	2:03	Pigs home block play	Carpet	Blocks, play figures, bits of paper, toy cat 'Hello Kitty'	PWD, PT, CMR, CMR, MoM	Cat figure central to play – babies waking and crying
	1:19	Superhero negotiation	Workshop	Child made peg superheroes	PPF, TO	Negotiating super hero power
	2:08	Superhero play	Window ledge	Play people	PT/MoM/Mim/PW	Child telling story through song
	1:54	Tracing I iPad	Carpet area	Hairy Letters	SL/DL	Phonics and dig literacy
	0:58	Tracing D iPad	Carpet area	Hairy Letters	SL/DL	Phonics and digital literacy
June 10 th 2015	0:23	Heidi plays a phonic game	Light tray	Cards to read and match / images	SL/DL	Illustrating what to do
	0:42	Literate bodies	workshop	Card, scissors	MoM/Mim/PW	Making letters and stamps
	1:08	Scissors, talk and card	workshop	Card, scissors	MoM/Mim/PW	Making cards
	1:35	Still cutting and making	workshop	Card, scissors	MoM/Mim/PW	Sticking stamps
	1:12	We doing origami	workshop	Card, scissors	MoM/Mim/PW/ MeM	Making origami objects
	0:58	Heidi teaches phonics	Carpet area	Wipe-off board and pen, teacher's chair	SL/CMR	Children playing teacher
	1:56	Flying Elsa – telling stories	Carpet area	Basket, Frozen figures	PT/MoM/ SL	Telling stories
	0:17	Olaf repurposed as an eraser	Carpet area	Frozen figures, wipe-off boards	Mom/ MiM/ SL	Writing and rubbing out
	2:56	Henri knows his letters	Writing area	Letter tracing sheets, pens	MoM/ MiM/ SL CMR	Practising letter formation
	2:07	We don't like to do SATs!	Writing area	Letter tracing sheets, pens	MoM/ SL CMR	Talking about SATs

Glossary of codes

Code	Activity associated with schooled literacy (SL) (TL- Teacher led)
RP	roleplay stimulated by materials/ organised areas/ literate 'behaviours'
ON	oral narratives shared with others
PT	play text introduced – imaginary story or situation created by child or children to underpin or explain the play action
WR/ R	practices associated with schooled print literacies (name writing/ drawing objects/ letter formation/ emergent writing/ reading)
DL	Children's digital literacy practices
	Activity associated with moving across classroom areas
PW	Creating new pathways between areas
PWD -	Pathway designated – pathway across or between classroom areas intentional use
	Activity associated with children's transformation of resources
CMR -	changing materials or resources by innovative interpretation, repurposing
CMT-	Using tools to change materials and resources
	Activity associated with children's transformation of the classroom
MeM-	merging materials / resources across more than one designated classroom area
MoM-	moving materials / resources across designated classroom areas
MiM-	moving materials/ resources within classroom areas

Appendix II. Ethical Approval Processes.

University Approval



Young Children's Authoring study: Parent consent form

Dear parent/ carer,

I am writing to let you know about a research project that is planned to take place from September 2014 to June 2015. My name is Karen Daniels and I am a doctoral student and member of staff at Sheffield Hallam University and my research work is based on how young children learn to write. The study is being supervised by Professor Guy Merchant and Dr Cathy Burnett at Sheffield Hallam University.

The study will be looking at how young children are learning about mark making and writing in the early years classroom. I will be visiting the school to undertake the research approximately every two weeks over the course of the year: In order to investigate young children's mark making I would like to carry out the activities below, with your permission.

- filming and photographing children as they take part in mark making in their everyday classroom activities
- sharing these film clips and photographs with the children, so they can talk about their experiences.
- recording what the children say about their writing

The film clips, photographs and transcripts of what the children say will be transcribed and kept digitally in password protected files. All children involved and the setting will be made anonymous. The data collected will be used to build upon what we know about young children's writing and may also be used in presentations, conferences and papers written for educational publications, such as journals.

I am therefore writing to you to ask if you are happy for your child to take part in the study. The study will ensure that the child's day or experience at school is not changed or disrupted in any way. Please note that if you decide that you do not wish your child to be filmed or photographed, then this will not affect any of their usual experiences in any way. You are also able to withdraw your child from this study at any time up to a month after the study has taken place without giving reason for your withdrawal.

If you have any questions about this study, please contact K.Daniels@shu.ac.uk . You can also contact my supervisors Professor Guy Merchant at G.H.Merchant@shu.ac.uk or Dr Cathy Burnett at C.Burnett@shu.ac.uk .

Please complete the form below and return to your child's class teacher.
Yours faithfully,
Karen Daniels

Your name:

Name of your child:

Please answer the following questions by circling your responses

1. I have read and understood the information about this research
Yes No
2. I understand that I am free to withdraw my child from this work:
 - At any time until a month after the research has concluded Yes No
 - Without giving any reason for your withdrawal Yes No
3. I am willing for my child to take part in the study? Yes No
4. I am willing for the researcher to film or photograph my child?
Yes No
- 5 I am willing for my child to be asked about their mark making?
Yes No
- 6 I am happy for the researcher to use pictures/ footage/ comments by my child in educational conferences/ journal articles? Yes No

Many thanks for completing this form

Young Children's Authoring study: Head Teacher Letter and Permissions Form

Dear Head Teacher,

I am writing to ask permission for children and practitioners in your school to be involved in a research study that will take place between September 2014 and June 2015. The project will focus on the role of children's agency in mark making.

My name is Karen Daniels and I am a doctoral student and member of staff at Sheffield Hallam University. The study is being supervised by Professor Guy Merchant and Dr Cathy Burnett at Sheffield Hallam University. My research work is based on how young children learn to write and investigates the ways in which young children author texts. In the study, I will be investigating children's meaning making in the classroom, and how this supports their literacy development.

If you agree to take part in this study, I would hope to visit the school to carry out research work at the following times:

Sept-Dec 2014 – One half day per week –observing children taking part in everyday events in the classroom and identifying possible case study children

Jan-April 2015- One half day per two/ three weeks - following up case study children

April-Jun 2015-Four full days – completion of field work

Please also see the information sheet that has been provided and which contains more detail about the study, including research questions. The findings of the study will be shared with you at a time arranged with you during the year. may also be shared with other educationalists at conferences or through written publications.

If you have any questions about this study, please contact K.Daniels@shu.ac.uk . You can also contact my supervisors, Professor Guy Merchant at G.H.Merchant@shu.ac.uk and Dr Cathy Burnett at C.Burnett@shu.ac.uk

If you are happy for your school to participate in the study, please complete the form below.

Name:

School:

Please answer the following questions by circling your responses

1. I have read and understood the information about this research?
Yes No

2. I understand that I am able to withdraw your centre from this research :
- At any time until a month after the research is completed? Yes No
 - Without giving a reason for my withdrawal? Yes No
3. I am willing for my school to take part in this study? Yes No
- 4 I am willing for the researcher to film or photograph the children, if parental permission is also granted? Yes No
- 5 I am willing for the children to be asked about their mark making, if parental permission is also granted? Yes No
- 6 I am happy for the researcher to use pictures/ footage/ comments gathered during the study in educational conferences/ journal articles, if parental permission is also granted? Yes No

Many thanks for completing this form

Additional Information about the study for head teacher and school staff

Aims of the study and research questions

Research aim: *To investigate 4 and 5 year old children's meaning making moment-to-moment during self-initiated play activity in a classroom.*

The three central questions of the main study are:

- 1) *How do young children experience literacy pedagogy in school contexts?*
- 2) *How are teachers conceptualising and enacting literacy pedagogy in early years school contexts?*
- 3) *What are the relationships between the intended literacy curriculum as indicated by school, and the ways in which this is interpreted and actualised in practice?*

Planned data collection will include:

- Gaining the perspectives of the early years teachers, the children and the researcher in the study. (young children talking about films or photographs of

them authoring, children talking about the texts they have created, observation and rich description of classroom pedagogy)

- Observation of children during self-initiated activity.
- Filming of children engaged in authoring practices. Teacher and researcher discussion of events.
- Inductive identification of arising themes. Researcher to complete multimodal analysis of significant authoring practices by children including noticing evidence of agency and structure.
- Gaining child, practitioner, researcher perspectives.

Potential for participants or third parties to benefit from the research:

- The study aims to look at children's experiences of the classroom. The study involves both children and practitioners perspectives and so may contribute to the continuing professional development of teachers.
- The research study findings will be shared with the setting and this may support their self-evaluation process.
- By reflecting on young children's meaning making, practitioners may gain an alternative perspective on how the young children in their setting are involved in literacy learning.
- Children and practitioners may benefit from this study as they are participants in the study whose perspectives are sought and valued. Third parties may benefit from this study as it has the potential to acknowledge and understand the diverse ways in which children may be experiencing literacy policy and pedagogy.

Arrangements for obtaining participants' consent

- Consent will be sought by a letter to head, staff and parents. Only those children returning consent letters will be filmed or observed in the study. As the filming and photographing will be done using a hand-held camera by the researcher, judgements can be made about when to film and when not to film children's mark-making activity. Children whose parents have given consent will be observed and filmed during mark-making events. If any child who joins the activity/ areas where filming is taking place, then filming for that event will cease. The letter will ensure that parents know that their child's education will not be changed in any way whether they choose to give consent for their child to take part or decline.
- Practitioners in the study will also be asked for written consent. Once data that has been collected and selected for use to inform the study's findings, it will be shared with practitioners involved.

Arrangements for how participants will be made aware of their right to withdraw from the research

- The consent letter will inform participants of their right to withdraw from the research and of opportunities to withdraw particular sections of data from the study at points in the study .Once the participants have viewed the data to be included in the study, they will be given a period of two weeks to state whether there are any parts that they wish to withdraw.

Arrangements for debriefing the participants

- Interim report: This will include opportunities for practitioners reviewing and discussing the data gathered and the discussion of emerging themes. This will be the point at which practitioners may withdraw data from the study.
- Report: After data analysis, the researcher will revisit the setting in order to feedback on key findings emerging from the study. A written report of the main findings will be provided to the setting including copies of data sets.