Teaching Intra-Active Comprehension with Picturebooks in a Grade Three South African Classroom

University of Cape Town

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Declaration

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Abstract

My posthumanist research explores how the material-discursive reality of the classroom environment, school time practices, and bodily movements affect the teaching and learning of literac(y)ies. My posthumanist research materialised the notion of Intra-Active Comprehension as a way to describe the rhizomatic, entangled processes of children making meaning through the posthuman pedagogies of philosophy with children and Reggio Emilia. This reconfiguration of comprehension provides a more just and ethical understanding of how the teaching of comprehension e/merges when taking account of how human and nonhuman bodies affect and are affected in a classroom and how knowledge is always produced relationally.

Rather than representing and analysing data as inert evidence of what (really) happens in my classroom, my fieldnotes and the iterative re-visiting and re-turning to my video-recordings provide rich opportunities for new and unexpected insights to e/merge – a world-making practice. Through a diffractive reading of the photographs, video clips, memories, writings and drawings, a more just and ethical understanding of the teaching of comprehension in a literacy lesson e/merges through a reconfiguration of the concept of child.

Intra-active comprehension takes consideration of, for example, the carpet, little creatures living in it, whispers and silences, the windows and furniture, the atmosphere, standardised testing, the national curriculum, the clock on the wall, the timetable, and the children's lived stories through movement in a drama lesson. Intra-Active Comprehension offers the opportunity for teachers and children alike to experience and think differently about the small, unexpected 'minor' events that e/merge out of the lively assemblages of the connected bodies in children's daily routines at school and that objects or things all participate in education.

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I am thankful to the Management Team and Directors of the school for allowing me to carry out this research.
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Contents

Table of Figures 8

Introduction ……. 10

Anthropocentrism and the role of language 10

Child and childhood 15

Thinking with theory through practice in our class 19

Talking about what matters 19

Asking questions 27

Implications 28

An invitation to become entangled 29

Chapter 1 ‘Memories Rolling Forward’ 36

Getting started 40

Teacher training 41

Community of philosophical enquiry 43

Videos, bodies and classroom walls 45

A lost teacher-researcher 47

How to transcribe? 50

Knots in my stomach 54

Bodies as bridges 55

Classrooms on the move 59

Chapter 2 ‘How do you get lost?’ 65

Texts as participants with/in the world 70

Gaps in-between words and pictures and…and… 69

Community-questions-paper-pen-ink-hands 79
The 4 C's of P4C 79
'Raise your hand if you know the answer' 85
Matter matters 89
Layout of the school 91
Thinking differently about listening 95
Affecting and being affected 99
Re-turning to the maze 104
Ethical considerations 105
Chapter 3 Doing comprehension 'properly' 109
Reggio Emilia 109
'One Hundred Languages' (and a thousand more) 113
Transcript of: Dramatisation of 'How do we get lost?' - 16 October 2016 117
Driving the process forward through documentation 126
Trees and roots 131
Small events of silence 134
Reggio Emilia inspired Philosophy for Children Approach 136
Mapping lost and stepping back 139
Transcript of: The Lost Thing (2010) Community of Enquiry - 6 November 2016 144
Picking up concepts 146
Chapter 4 We Created This… 154
Teaching and learning literacy in South African schools 154
Creating problems 161
What is comprehension? 163
Comprehension and CAPS 165

How do we do ‘proper’ comprehension? 168
‘The Lost Thing’ comprehension 178
Can comprehension be done differently? 183
Intra-active comprehension 184
Transcript of: *The Lost Thing* (2010) Community of Enquiry - 6 November 2016, Grade 3 Classroom 186
Voices without Organs 190
Transcript of*: The Lost Thing* (2010) Art activity - 10 November 2016, Grade 3 Classroom. 192
Back to roots 195
Chapter 5 Silences & Atmospheric Attunements 200
Atmospheres as an affective force 201
Situated, dis/embodied experiences, affective thinking 205
Pockets of Trouble 210
In and out of Atmospheric Spaces 212
Books-Spaces-Bodies-Atmosphere 220
Chapter 6 Time(in)g Childhood 226
Clocks emerging as something different 231
Clock-time practices in schools 233
Clock-time practices and good teachers 236
Simmering tensions and challenging the norm 240
Making time with the CAPS documents 243
Time-based practices that shape behaviours 246
Intra-actions, e/mergences and clock-practices 248
Transitioning through time and space 253

Time as a process and transitioning 254
With/in the moment of transition 257
Transitioning, time and comprehension 259
Cultivating and creating time in the curriculum framework 261
Chapter 7 Flows and Intensities with(in) timespacematter 263
Exploring rhizomatically…and…and…and 263
Re-turning, tunnelling and burrowing… 264
Temporal diffraction and travel hopping 268
Re-visiting the entangled 269
Epistemic (in)justices 274
'(Con)texts of interpretations' 276
Enfolding different temporalities 280
And re-turning again to questions 282
And back to the beginning…. 284
References…….. 288
Appendices…… 303
A) Information and Consent to Participate in a Research Project – Learners 304
B) Information and Consent to Participate in a Research Project – Parents 299
C) Letter outlining Research to Principal 309
D) University of Cape Town - Ethical Clearance for Research Project 312

Table of Figures

Figure 1.1:	Waiting…….	36
Figure 1.2:	Fieldnotes, 2017…….	37
Figure 1.3:	Can you sit with us?.....	52
Figure 1.4:	Rules for Listening Bodies……	53
Figure 1.5:	Making bridges……	57
Figure 1.6:	Connecting groups……	57
Figure 2.1:	Escaping into the maze…….	63
Figure 2.2:	“But they hated each other”……..	64
Figure 2.3:	Questions-paper-ink-hands…….	78
Figure 2.4:	Hands responding…….	83
Figure 2.5:	Aerial view of the school……	89
Figure 2.6:	Street view of school’s Junior Quad……	89
Figure 2.7:	Inside looking out……	91
Figure 3.1:	‘Lost in thought’……...	112
Figure 3.2:	Art contained……...	118
Figure 3.3:	Smartboard……...	119
Figure 3.4:	Books waiting……...	120
Figure 3.5:	Waiting to be fed…….	120
Figure 3.6:	Mapping ‘lost’……...	135
Figure 3.7:	Being lost on the beach…….	138
Figure 3.8:	Indifferent about the ‘Lost Thing’…….....	139
Figure 3.9:	Getting lost in the video…….	141
Figure 3.10:	Abstract concepts……	144
Figure 4.1:	Grade One Comprehension Worksheet (July)……...	168
Figure 4.2:	Grade One Comprehension Worksheet (October)……	168
Figure 4.3:	Grade Two Pre-Printed Comprehension Booklet…….	169
Figure 4.4:	Grade Three Comprehension passage and questions…….	170
Figure 4.5:	Grade Three Comprehension Answers……...	171

Figure 4.6: ‘The Lost Thing’ Comprehension p1…… 176
Figure 4.7: ‘The Lost Thing’ Comprehension p2…… 177
Figure 4.8: ‘The Lost Thing’ memorandum…… 178
Figure 5.1: Foregrounding the atmosphere…… 202
Figure 5.2: Listening…… 203
Figure 5.3: Waiting for an answer…… 203
Figure 5.4: Pockets of trouble…… 206
Figure 5.5: Outside on the playground…… 209
Figure 5.6: Inside the drama classroom…… 209
Figure 5.7: Forming a small community…… 212
Figure 5.8: Changes in the atmosphere…… 212
Figure 5.9: Affective force of the atmosphere…… 213
Figure 5.10: Walking and running…… 214
Figure 6.1: Clock on the wall…… 222
Figure 6.2: The Weatherboard…… 223
Figure 6.3: Grade 3T Timetable 2017…… 225
Figure 6.4: “Leave what you are doing – we are late!”…… 230
Figure 6.5: “Go! Go! Go!”…… 230
Figure 6.6: Weekly Preparation Forecast…… 233
Figure 6.7: An overcrowded notice board…… 237
Figure 6.8: CAPS Documents specifications…… 240
Figure 6.9: Feeding time…… 243
Figure 6.10: Agreeing on a space to work…… 246
Figure 6.11: “Who is in your group?”…… 247
Figure 7.1: Bodies intra-act with the material…… 274

Introduction

Anthropocentrism and the role of language

Western philosophy foregrounds an anthropocentric view of the world which positions humans as having greater intrinsic value than other species. Australian early childhood educators Affrica Taylor and Mindy Blaise (2014: 377) describe an anthropocentric view of the world as one which involves the “normalised fixation upon exclusively human concerns, agency and exceptionalism that is the trademark of humanist knowledge traditions”. Humans and language are elevated above and are considered more important than nonhuman bodies because reality and practices are represented through language that acts as a “constituting agent through humanly constructed discourse” (Lenz Taguchi, 2010: 12). What we know and understand “as reality is shaped by humans’ collectively constructed discursive meaning in language” (Lenz Taguchi, 2010: 12). Individual humans become the ‘discoverers’ and ‘disclosers’, making the world transparent and knowable through linguistic and other representations they share with other humans (Lenz Taguchi, 2010). As such, humans are understood to be active agents in learning and in constructing knowledge, with only human languages and expressions considered to possess valid agency (Lenz Taguchi, 2010).

Staffroom at a private school, Johannesburg

Grade 3 Teacher: I need to get this comprehension copied. I have to get a move on with the comprehensions. My kids are so weak. I figure we need to do at least a comprehension once a week. But where do I get the time?

Grade 1 Teacher: Do what we do in Grade 1 – we have a book. We killed ourselves last year, we retyped all the comprehensions that we do over a year, had them photocopied and bound into a book. It's brilliant-we have our year's 'comps' sorted! And at the beginning of every year we just recopy the master copy.

Grade 3 Teacher: No ways will that happen now! Maybe I can look at that during the holidays…

Grade 1 Teacher: It makes life easier. No more scrambling to find a last-minute 'comp' that is suitable. By the end of the year, my kids are so well trained…I hand out the books and they get on with it.

(Fieldnotes, 14 September 2017).

In 2017, I was a Grade Three teacher at a private school, Groveview School[1], on the East Rand in Johannesburg. I was sitting in the staffroom and overheard the above conversation between two teachers. The two teachers were discussing how to do more comprehension activities to improve the children's skills, but to also fit the activities into an already overloaded academic week.

I have been a Foundation Phase teacher my entire adult life, starting just after I had graduated in 1993, having completed my 4-year qualification, a Higher Diploma in Education, at the Johannesburg College of Education. I have since taught in both public or government-funded schools as well as independent or private schools.

[1] All names have been changed to ensure confidentiality and anonymity.

South Africa's post-apartheid government inherited a divided and extremely unequal education system. In South Africa there are two public schooling systems: one system which is operational, generally wealthy, and able to educate and accommodate the students (about 25% of public schools) are the private or independent schools. These are privately governed and usually privately funded. The other system is generally poor, dysfunctional, and unable to educate or equip students with the necessary knowledge and skills they should be receiving in their schooling career (roughly 75% of public schools) (Spaull, 2012). These schools are the public or state schools.

In the South African context, the term 'independent' is used to denote schools that are not public or state ones. The term is taken from the South African Constitution (RSA, 1996a) and the South African Schools Act (SASA) (RSA, 1996b). The South African Schools Act recognises two broad categories of schools – public and independent. When the Act was passed in 1996, all former state and state-aided schools were deemed to be public schools. All private schools were absorbed into the independent schools category.

Under the pressures of a negotiated settlement after South Africa's first democratic elections held in 1994, and amid multiple other challenges, including tight financial resources and capacity constraints, the newly elected ANC government legislated the South African School Act (1996) and the National Education Policy Act (1996). Other policies, which included educator training and employment, school governance and funding, as well as the development of the new curriculum (Curriculum 2005 or C2005), which I discuss in Chapter Four.

Critics have since characterised these policies as political gestures or instruments, rather than "genuine educational reform", arguing that they "did not emerge from debates within the education sector ... [or] arise from a 'situational analysis' of existing realities" (Fiske & Ladd, 2004: 170). Nonetheless, the reforms did have an impact on the educational system.
For example, Education policy, the curriculum, and norms and standards are now nationally determined, while provincial departments are responsible for implementation.

Elected School Governing Bodies (SGBs), made up of local community members, teachers, parents and, at a secondary, or high school level, students, are responsible for individual school governance.

The new government attempted to remedy the disparity in teacher training and qualifications, first by an effort to redistribute teachers within the system and then by shifting all teacher training to higher education facilities and out of 'technical colleges' (Chrisholm, 2012: 93). Both these approaches proved to be unsuccessful. Many teachers left the system to avoid redeployment and those wanting to join the teaching profession were discouraged by the limited student intake capacity, higher entry requirements, and cost of higher education institutions.
A third effort to incentivise and encourage teacher education involved the introduction of bursaries, which has been somewhat more successful. However, teachers are still by and large under-qualified, exhibit inadequate command of content and pedagogical methods, and displayed difficulty in meeting the requirements of C2005 (Chrisholm, 2012: 94; Spaull, 2013: 26).

More than twenty years since legislation of the policies that sought to transform the entire education system, implementation continues to be uneven and undermined by severe inequality in human, material and financial resources between schools, communities and provincial departments. While the legacies of the apartheid regime, and the colonial history which preceded it, go a long way in explaining failure to bring about the envisaged educational reform, the conditions under which the new education system was formed also have a significant bearing on the current educational situation (Christie and McKinney, 2017). The complexity of reforming the education system and of upgrading or improving the systemic inequality of the apartheid system, in a context where the human, financial and material resources and capacity continue to fall short, have since become clear. The South African education system is in a state of perpetual crisis and dysfunctionality.

According to extensive quantitative research undertaken by Spaull (2013), a leading academic in the area of basic education, "the South African education system is grossly

inefficient, severely underperforming and egregiously unfair" (Spaull, 2013: 3). The gap between historically advantaged and disadvantaged schools may have increased due to the inadequate implementation and administration of the overly complex, difficult, sophisticated and hastily developed policies of the 1990s and 2000s.

The distribution of academic performance is bimodal and divided, with schools in the lower performing 75 per cent operating in a fundamentally different way to those in the better preforming 25 per cent (Spaull, 2013). Splitting schools 75/25 according to academic outcomes reveals that performance is still tied to the divides of apartheid administration, socio-economic status and language.

Students in the lower performing 75% face a "double burden", "the burden of poverty (operating on both an individual and institutional-social levels) and [...] the burden of attending a school that still bears the scars of neglect and underfunding under the apartheid dispensation" (van der Berg et al. 2011: 8).

Ask any Foundation Phase teacher at Groveview School and they will readily explain the importance and necessity of developing a child's comprehension skills. Reasons offered for teaching the required comprehension skills include that the skills are necessary for the creating of new concepts, or for meaning making or perhaps increased vocabulary or maybe so that the child can understand the meaning of what they have just read.
Enter into a classroom to watch a comprehension lesson and the format and delivery of the lesson is largely the same whether you are in a Grade One, Grade Two or Grade Three classroom. The process or delivery of the lesson follows a tried and tested formula. It starts with the teacher choosing the text or passage of reading that is considered to be at a slightly higher level than the average reading ability of the group. This slightly higher or more difficult level is known as the instructional level of reading (Hall, 1990). The motivation for choosing a slightly more challenging text is that at an instructional level, the book should 'stretch' the child just a bit — not so much as to make her frustrated but enough to continue her growth as a reader. The teacher will ask or set approximately eight to ten questions on the text. The teacher types out the text with the questions set out

below the text and has the original photocopied enough times for each child to have his or her own copy to read from (see Chapter Four). Once the teacher has read through and modelled the correct answers, the children go back to their tables and chairs and complete the activity independently.

Child and childhood

Traditionally, schools are human-centred places where children learn *about* the world – a world *re-presented* in *words* and through concepts. Children learn what it means to be a human and to gather the sorts of skills, competencies and habits necessary to participate in adult human societies when they have grown up. They are not treated in schools *as* citizens, but as citizens-to-be (Haynes & Murris, 2012). Children are also seen as developing subjects who are "unknowing, untheorised, apolitical and unaware" (Knight, 2015: 5).

In traditional, western schooling, knowledge is not about being a part of and being in touch with the world, but about a world represented through words and images. Educational practices have also encouraged or favoured the idea of a child becoming or learning in a socially constructed environment. This viewpoint identifies with the individual looking at the world from an advantageous, "privileged and foundational point of view" (Hultman & Lenz Taguchi, 2010: 526). Lenz Taguchi (2011: 36) states that the:

> [m]ajority of pedagogical practices deployed in schools are still based on instrumental pre-industrial strategies, which do not take into account providing contexts for creative and experimental learning that incorporate body and material artefacts as a part of learning environments.

Social theorists subscribe to the idea that the world is made up of entities waiting to be represented or inviting representation. It is the belief in the use of language or words, concepts and ideas accurately being able to "represent, mirror or reflect pre-existing

phenomena that underpins social constructivism" (Barad, 2003: 86). Karen Barad explains that to represent or mirror something is "to provide an accurate image or representation that faithfully copies that which is being mirrored" (Barad, 2003: 86).

These representations facilitate access to the material world because knowledge is seen to be an accurate reflection or mirror of culture or objects that is the result of social activities (Barad, 2003). It is through the representing or mirroring of concepts that the tripartite arrangement between objects, representations of the objects and the individuals, or "knowers" (Barad: 2003), who produce knowledge, is acknowledged.

Representational practices reflect the social or natural reality and "have no effect" (Barad, 2007: 46) on the objects of investigation because the world is held at a distance, something that is separate from humans because human "beings exist as individuals with inherent attributes, anterior to their representation" (Barad, 2007: 46). So for the very condition for the possibility of knowledge to exist, the object and subject are viewed as separate entities. It is because of the "common-sense view of representationalism that representations serve as a mediator between knower and known and displays a deep mistrust of matter, holding it a distance, figuring it as passive, immutable and mute" (Barad, 2003: 133). Humans are seen as a separate subject from the world and learning takes place within the mind as an internal, individualistic process. The world is considered an inactive, passive object, a tool that is necessary to help construct knowledge or for the human subject to "construct knowledge about" (Lenz Taguchi, 2010: 46).

Maclure (2016: 659) explains representationalism as a process which has "made reduced material realities inaccessible behind linguistic systems that construct or represent them." But this calls into question the accuracy and validity of the representations produced by humans through language. Barad says, "the assumption is that language is a transparent medium that transmits a homologous picture of reality to the knowing mind and that takes observation to the benign facilitator of discovery, a transparent lens passively gazing at the world" (2003: 96). As representationalism reflects on the social and natural realities, it is believed that the "practices of representationalism have no effect on the object of

investigation" (MacLure, 2016: 659). This keeps the subject and object separate but supports the idea that the representations are accessed more readily than the actual objects. Within traditional classroom practices, this is evident when the teacher imposes the use of worksheets and written activities on the child before giving the child the opportunity of exploring and intra-acting with the real objects or experiences, as suggested by the transcript of the teacher conversation above.

South Africa's National Curriculum, the Curriculum Assessment Policy Statement, or what is often referred to by professionals as 'the CAPS documents' recognise the importance of thinking and comprehension skills in literacy as a foundation for children's learning as stated by Roche above. This is evident in the different skills stipulated as requirements in the documents, which I will discuss later. However, while the CAPS documents recognise the importance comprehension by stipulating the necessary requirements for the skills, there is very little information supplied for the teachers who will enact the curriculum in their classrooms. In South Africa, Foundation Phase children continue to underachieve in International Literacy Bench Marking Assessments, where a variety of literacy skills and competencies are assessed. Due to the continued weak results and subsequent pressure of the poor performance by South African children, the South African government has implemented a prescriptive national curriculum. The national curriculum was designed to provide a more structured and sequenced approach to teaching literac(y)ies, explicitly articulating pace, time spent on tasks and learning outcomes (Pretorius & Klapwijk, 2016). There are many didactic guidelines included in the national curriculum that instruct the teachers on what to teach with regards to language (Department of Education, Language Overview Document, 2011).

Drawing on Kuby & Crawford (2017), I found that when creating the data and co-researching with the children in my Grade Three class, these didactic guidelines set out in the national curriculum, the CAPS documents, left me grappling with ways to extend my thinking about how materials, time and space were actively working with, affecting and being affected by the children and myself during the teaching and learning of literac(y)ies.

Each time I re-turned to the footage of the ordinary events happening in my classroom, captured in my computer screen, there were completely unexpected and unpredicted things and doings that e/merged that I had not noticed as I carried out the busy plans as the teacher. When re-turning to the events through my computer screen, I was sometimes seized by a feeling of their significance, or gently nudged: there was a 'glow' about them (MacLure, 2010). During the school day, I had been occupied and often exhausted with a class of 22 children, but through watching the footage of discussions, looking at the artwork and experiencing the dramatisation of the concepts, I noticed elements within the children's practices that were entangled with educational theories: these were rich descriptions, layered with mixtures of the formal, informal educational theories and pedagogies, the physical performances of school, as well as visible time-space-material intra-actions.

My research study is about exploring these small, unexpected 'minor' events, the doings and the things that take place in a Grade Three South African classroom in a private school in Johannesburg, Gauteng. And it is about the children intra-acting with/in these events, doings and things and be-coming through the entanglements of their everyday routines of school. It is also about hands, carpets, chairs, the children's discussions and artworks, the classroom window, clocks and timetables, silences and whispers and the video camera and embodied movements through drama. Entangled with this study is me, as the teacher, who is also intertwined in these same events. It is also about me, as the teacher becoming a co-researcher and beginning my research by thinking with theory through practice. It is about *thinking with*[2] the children's conversations, philosophical discussions and the work that is produced. The study is also about creating and finding the new. The new *thinking with* and the new knowledge about the concept of child and childhood and the new knowledge about teaching and learning of literac(y)ies.

As discussed above, the concepts of child and childhood are viewed as a preparation for adulthood, but developmental theories assume a deficit model of both these concepts.

[2] In this context, *thinking with* would include the sensing, the feeling, the doing with the children's conversations, philosophical discussions and the work that is produced.

Child is compared to adult in terms of adult knowledge and experience and there is an expectation of child to develop and follow a unilinear trajectory that is seen as ‘normal’ (Pacini-Ketchabaw, 2012; Rose and Whitty, 2010). The westernised, traditional perspective of early childhood education focuses on the “child centred pedagogies and addressing the developmental needs of the (becoming autonomous) individual child within the child’s (exclusively human) sociocultural context” (Taylor & Blaise 2014: 2). This westernised, traditional perspective positions certain children as ‘abnormal’ or lacking because the normal is shaped by western ontologies and educational theories that underpin formal classroom assessments. Children are traditionally assessed by formal school-based assessments, observations and international standardized testing practices. These assessments are based on generalised, pre-set, westernised performance and developmental indicators.

Thinking with theory through practice in our class

Critical post-human studies and the ontological turn, driven by theorists such as Deleuze (e.g. 2004; Deleuze & Guattari 1987), Barad (2007), Haraway (2008), Braidotti (2002; 2013), Latour (1993), and Bennett (2010) function as a framework that welcomes the unpredictabilities of everyday life in the Grade Three classroom and sees the intricacies as possibilities for creating or producing new knowledge and redesigning old subjectivities (Rautio & Jokinen, 2015). This recent material or ontological turn in research has encouraged a new study or scholarship in education, which focuses not only on the “human and the discursive, but to include the more-than-human, such as the material, space, atmosphere, breath, sound or nonhuman animals” (Murris & Haynes, 2018: 12).

To move beyond the personal and escape the psychological, psycho-analytical or sociological interpretations associated with reflections and representations of educational research, I have drawn on particular research methodologies that have recently e/merged. These non-representational methodologies include the concepts of diffraction (Lenz

Taguchi, 2010), intra-action and entanglements (Barad, 2007), rhizomatic analysis (Deleuze & Guattari, 1987, 2014).

Added to the methodologies, I was also intrigued by the paragraph of Kathleen Stewart (2007: 4-5) who guides her readers at the opening of her book *Ordinary Affects* as follows:

> I write not as a trusted guide carefully laying out the links between theoretical categories and the real world, but as a point of impact, curiosity, and encounter. This book tries to slow the quick jump to representational thinking and evaluative critique long enough to find ways of approaching the complex and uncertain objects that fascinate because they literally hit us or exert a pull on us. My effort here is not to finally "know" them - to collect them into a good enough story of what's going on - but to fashion some form of address that is adequate to their form. . .

As humans, we have experienced an extensive ‘age of meaning’ in which language is seen as the epitome and carrier of all meaning (St. Pierre, 2011) and the making or comprehending and communicating of the various understandings is virtually equal to existing. The preoccupation of education, Rautio and Jokinen (2015) argue, is to attach a great deal of value to the meanings or understandings and theories derived from developmental theories and thinking about children’s actions (MacLure 2013). In my practice as a teacher, I am aware of how everything that the children do generally has to have an explanation or reason attached. It is almost impossible for a teacher to observe children playing on a jungle gym or writing their stories, without interpreting these actions against the criteria or standards generated from either developmentalism or discursive power relations. I am not trying to ‘know’ the children, as Stewart suggests, or to psychologise each action or sentence as an objective bystander. It is by taking a detached researcher/observer position in analysing and psychologising the behaviour that I effectively shut down options of seeing any potentialities or new knowledge emerging. By ‘knowing; the children in my class, has a sense of finality attached to it. It is almost saying

that because I know them completely – there is nothing new to discover, no new possibilities may e/merge.

As a result of the above concerns with traditional practices in my classroom, I turned to the increasing body of critical early childhood researchers who are interested in re-imagining childhood and pedagogy beyond the sociocultural developmental theory and practice (Dahlberg & Moss 2013; Lenz Taguchi 2014; Murris 2016; Ohlsson 2009; Pacini-Ketchabaw 2010; Taylor, 2013) and re-viewing pedagogical practices which disrupts the westernised, traditional understandings of early childhood education (Pacini-Ketchabaw 2010; Pacini-Ketchabaw & Taylor 2015).

In order to create opportunities in order for new possibilities to e/merge and new knowledge is created, this research investigated a project in my own class where I made use of two intra-active pedagogical approaches, namely Philosophy with Children and Reggio Emilia. These two approaches were read through one another diffractively as proposed by Karin Murris (2016). I used a Reggio inspired Philosophy with Children approach (Murris, 2016) in my Foundation Phase Grade Three classroom and investigated how comprehension can be taught diffractively and the differences that it makes for the teaching and learning of literac(y)ies and how I regard the children in my classroom.

By focussing on the small, daily events and ordinary things that took place in the classroom, I have attempted to resist closure and rigidity, and instead of generalised, representational declarations, draw attention to the peculiarities or the parts ‘that glow’ (MacLure, 2010) from these events and the ways in which the concept of child and childhood are produced in them. The concept of childhood here is e/mergent, in which I take into account how the concept of child is produced through the fluid and entangled combinations of entities or bodies that participate in classroom events: the material beings, architectures, the video camera, other human beings, time, space, and other bodies.

Talking about what matters

Drawing on quantum physicist Niels Bohr and feminist theorist Donna Haraway (2008, 2016), Karen Barad proposes that knowledge is constructed through “direct material engagement with the world” rather than by “standing at a distance and representing” the world (Barad, 2007: 49). Barad suggests a relational materialist or posthumanist philosophy which takes into consideration the agency of the environment, materials, spaces and the performative agency of matter (Barad, 2003, 2007). Matter is defined by Barad (2007: 151).in the following way:

> [M]atter does not refer to a fixed substance; rather matter is a substance in its intra-active becoming-not a thing but a doing, a congealing of agency. Matter is a stabilizing and destabilising process of iterative intra-activity. Matter does not refer to an inherent, fixed property of abstract, independently existing objects; rather matter refers to phenomena in their ongoing materialisation.

Barad explains the relational materialist or posthumanist philosophy as the “material-discursive” and says that the knowing or understanding of the world can be thought of as the “result of a process where the material and the discursive are mutually implicated in the dynamics of intra-activity” (Barad, 2007:152). Intra-action is a term from Barad and means multiple bodies, human or non-human, make themselves intelligible to each other through direct engagement, entanglement or interference (Barad, 2007: 29). Lenz Taguchi draws on Barad and explains that intra-action relates to the “relationships between organisms and matter (human or non-human) which are understood *not* to have clear and inherent boundaries but are always in a state of intra-activity. Intra-activity is different from the familiar concept of interactivity which refers to the “inter-personal relationships between at least two persons or entities that are understood to be clearly and inherently separated from each other” (Lenz Taguchi, 2011: 40).

This posthumanist conceptual framework is radically different from current humanist theories and practices regarding education and schooling. Critical Posthumanism, according to Carol Taylor (2016: 202),

> undoes the binary separation of knowing and being; and it troubles concepts of will, intention, and agency, recognizing them not as individual possessions, nor as manifestations of the negotiated pull of structure and agency as in social constructionism, but as force, flow, affect, and intensity distributed across a multiplicity of different human‐non-human modalities.

By elevating or favouring language, nonhuman bodies are marginalised, as well as people who are in the process of becoming literate, and "materiality itself is always already figured within a linguistic domain as its condition of possibility" (Hein, 2016: 134). Karen Barad argues that quantum physics shows as a matter of fact that meaning and matter are entangled and meaning making cannot be a human only activity or process through language, but rather "neither discursive practices nor material phenomena are ontologically prior or epistemological prior...matter and meaning are mutually articulated" (Barad, 2007: 152). In other words, meaning is the result of co-constructed processes between bodies, which include both human and nonhuman bodies. Matter is not seen as a separate inactive, passive entity that a human manipulates. Carol Taylor (2016: 202) says that "matter is not 'given' to the human but rather acts on its own terms in an emergent, contingent, and dynamic practice of materialization which includes human and non-human bodies and gives rise to unpredictable, if sometimes enduring, assemblages and conglomerations."

In contrast to the traditional humanist theories that define the child by "fixed subjectivities" (Knight, 2015: 5), it may be possible to think of child by using "alternative figurations to express the kind of internally contradictory, multi-faceted subject" (Braidotti, 2002: 6). Or to think of child who is "competent, autonomous, independent and resilient individuals" (Dahlberg, Moss & Pence, 2007: 105).

The posthumanist approach suggests that “learning and knowing takes place in the interconnections in-between different matter making themselves intelligible to each other” (Barad, 2007: 140). It is through the “supplements and extensions that the children connect to in different ways”, that the child e/merges through, and as part of their entangled intra-actions with everything else.

The central concept of my research study for intra-acting with the complexities of teaching and learning literac(y)ies outlined in the beginning of the Introduction is the tracing of the entanglements by Karen Barad (2007, 2010, 2003). **Entanglement** refers to the connections among all the bodies, both human and nonhuman, existing and be-coming in an event. According to Barad (2007, ix), “existence is not an individual affair”, by which she means that the separate, bounded existence of a human being (a child or an adult) outside her material, social and discursive relations is an illusion. Entanglement is not to be thought of as simple intertwining (because bodies do not pre-exist their connections), but the connections of the entanglement are relations of interdependence and mutual constitution. It is the very nature of entanglements ebb and flow and reconfigure, “it is not so much that they change from one moment to the next or from one place to another,” Barad, (2007: 74) states “but that space, time, and matter do not exist prior to the intra-actions that reconstitute entanglements.”

The concept of entanglement is used in my study to create opportunities for the lively variety of intra-actions to unfold as I focus on the events which happen in my classroom. I take entanglement as a **given**, always in existence and the task of this research is to try to attune to it, to “stay with the trouble” (Haraway, 2016) and be aware of the differences that e/merge. Entanglement and the concept and practice of diffraction embrace all aspects of research, from how the children, who are my co-researchers, are seen, to how research is actualised and written and reported. Rather than to psychologise the events that take place in my classroom and ask what they mean, I try to reframe the question to ask *how* the event works. In my study, I try and explore the tracings of processes rather than identifying causes and effects. It is through diffraction that, instead of describing what is, or

the meaning that each event holds, I explore the “dynamic unfoldings and processes of change” (Smartt Gullion, 2018: 129).

Part of my research methodology is focusing on small, ordinary events or “micromovements” (Olsson, 2009; Massumi, 2017) that occur on a daily basis in my classroom. From the point of view of bodies joining other bodies the “important thing becomes to seek to open for potentiality in every situation, in relation to *every body*, not in relation to everybody” (Olsson, 2009: 5). Previously, I would have represented the meaning of the event as a bounded act, in isolation. But rather, critical posthumanists ask how the event works, what new has e/merged?

Using such a methodology in my research, Barad (2007: 74) explains that it contributes to:

> An epistemological-ontological-ethical framework that provides an understanding of the role of the human and the nonhuman, material and discursive, natural and cultural factors in scientific and other social-material practices, thereby moving such considerations beyond well-worn debates that pit constructivism against realism, agency against structure, and idealism against materialism.

I underpin my research with the principles of posthumanism which concentrates on the entanglements between human and nonhuman bodies and disrupts the usual practices of centering the human. According to queer theorist and quantum physicist, Karen Barad (2014), the concept of **diffraction**, an optical metaphor, is also “a method and a practice that pays attention to material engagement with data” (Bozalek & Zembylas, 2018: 47). Diffraction, for Karen Barad and Donna Haraway is a “process of being attentive to how differences get made and what the effects of these differences are” (Bozalek & Zembylas, 2018: 47). Diffraction, then is a mapping of interference, not of replication, reflection, or reproduction from witnessing an event in isolation (Barad, 2007). A diffraction pattern does not map where differences appear, but rather maps where the effects of differences appear. For example, I use diffraction as a methodology when the liveliness of matter – carpets, hands, the video-camera, clock practices and the curriculum, the school’s

architecture, my own education and so forth are all read through one another, thereby creating an interference pattern that are the effects of the differences. My task as researcher is to study how “differences get made in such a process and the effects that differences make; what is excluded and how these differences and exclusions matter” (Barad, 2007: 30).

The posthumanist perspective helps focus how difference comes to be constituted by a seeing and focusing on the world through the distinct human/non-human binaries. When resisting this, teachers and researchers become “attentive to, and responsive/responsible to the specificity of material entanglements in their agential becoming” (Barad, 2007: 91). For example, by paying attention to the glass wall in my classroom or the clock on the wall and how they are entangled materially and discursively in teaching and learning (see Chapters One and Two).

Being entangled myself in the research with the children and with/in my classroom as their teacher and as the researcher, means that my position in the research is not that of a distant analyst. I am ontologically entangled with other bodies, both human and non-human right from the beginning and this has implications for what it means to know and what knowledge is. As Barad (2007: 9) explains, “knowing does not come from standing at a distance and representing something, but rather from a direct material engagement with the world”. In my research project, the notions of intra-actions and diffractions make it possible for me to take into account that knowing exists simultaneously in different locations, times and spaces: my classroom in 2017, my researcher’s space, the children’s work as co-researchers, conversations, memories, the land on which the classroom is built, the national curriculum that is entangled with curricula elsewhere and so on. Instead of focusing on implementing a specific teaching technique or learning engagement with prespecified learning outcomes, I am interested instead in the e/mergences of the new, the forces of becoming as teachers/children “teach <-> learn from/to/with each other” (Kuby & Crawford, 2017: 22).

Asking questions

As a teacher, I am trained to ask questions of the children in my classroom. Questions that generally require a singular correct or preferred answer – the answer I already know. I am aware that questions are not passive objects that are 'given' out to a group of (usually) children. Resonating with and through me is Donna Haraway's (2016: 12) popular sentence:

> it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties.

The above sentence speaks of the embodied, situated knowledges in and outside the classroom, the rhizomatic entanglements, the connections in-between bodies and how they intra-act and diffract with other bodies. The sentence also foregrounds the importance of stories and who or what tells them with no beginning or end, but rather an ongoing cyclical e/mergence or becoming with/in the world. The questions are also in continuous movement. There cannot be one singular correct or preferred answer to the questions. Rather, the questions work on and with me, and at the same time influence me – a process that will not stop when I have 'finished'. I am also aware that the research questions and I are connected and entangled. The questions are part of the research process as much as I am.

Throughout the enquiring process that is my thesis, I re-turn again and again to the questions, diffract and modify them and this includes a growing awareness (through the writing process) of the humanist assumptions embedded in, for example, the sub questions three and four. Rather than changing them now, in retrospect, I prefer to be honest and open to the reader and show in my writing how understanding of posthuman literac(y)ies practices changed and grew through the process of writing itself.

My main research question asks:

What difference does it make when I teach literac(y)ies diffractively using the intra-active pedagogies of P4C and Reggio Emilia for the teaching of literac(y)ies in my Grade 3 class?

This main research question is supported by the following sub questions:

1. What is Intra-active Comprehension?
2. and…how does Intra-active Comprehension reconfigure child in relation to more than human?
3. and…how does Intra-active Comprehension open up opportunities for child to create new knowledge or concepts?
4. and…how does Intra-active Comprehension work in order for child to read picturebooks differently?
5. and…

Implications

The aim of my study is not to rectify or offer a solution for the literac(y)ies problem in South Africa's educational system. Instead, the objective is to show that when teaching literac(y)ies differently and within the confines of CAPS, child is positioned differently ethically, ontologically and epistemologically. My research broadens and enriches the way we think about the concept of child and literac(y)ies. It is a contribution towards the learning and teaching of literac(y)ies and the creation of new knowledge as it brings into focus the agency and entanglements of not just child, or the adult/teacher, or the material as individual objects, but rather the "relational entanglement" (Murris, 2016: 155) and intra-actions of all individual bodies with one another – a move away from individualism and human-centeredness..

This thesis has implications for the theory and the practice of teaching literac(y)ies in South Africa, in particular reasoning and comprehension. My research is a contribution to the above literature of literac(y)ies in early childhood education, as I put the theory to work in my own teaching practice by thinking differently about how children construct new knowledge as they are always already relationally entangled with /in time, space and matter in the classroom. It means resisting following the child and embracing mutual transindividual relationality in research practices.

As such, the project creates opportunities to re-view and disrupt the western binaries of the concepts of child/adult, teacher/student in early years education (Lenz Taguchi 2010). Because children are often positioned “as simple, concrete, immature thinkers who need age-appropriated interventions in order to mature into autonomous ‘fully-human’ beings” (Murris & Muller 2018: 152), my research also creates a space to examine the notion of ‘ontoepistemic injustice’ in early years education, which I will explore in Chapter Two.

An invitation to become entangled

The research study took place over a six-month period in a Grade Three classroom, at a private school in Johannesburg. During this time frame, I had allocated approximately sixty to ninety minutes per week to the research study in my teaching. At times, I used other periods like the ones for drama and art in order to create data. Per week, the time allocated for drama was thirty minutes, and one hour for art. The time allocations were not strictly adhered to due to time constraints of the timetable or other activities taking precedence.

Murris (2016, 2017) has adopted Barad’s methodology of diffractively reading texts through one another, with two approaches to education Philosophy for Children and Reggio Emilia. This has been my inspiration as I was already interested in both. So with this diffractive reading as my methodological tool, the process of creating data began. Using Philosophy for Children’s pedagogy, the community of enquiry, I started the process of creating data by reading *Tusk, Tusk* (McKee, 2006) with my class of Grade Three

children. Part of this so-called community of enquiry process is for the children to generate and then choose one of their own questions to investigate collaboratively.

Drawing on the Reggio Emilia inspired approach, the principles of pedagogical documentation and a pedagogy of listening were adopted to drive the learning process forward. In order to make this possible, we watched the video[3] of the picturebook *The Lost Thing* (Tan, 2010). This provocation led us to explore the concept of lost through a visual map, by unpacking the language around 'lost' through idioms, expressions and various lived experiences.

Using Reggio Emilia inspired pedagogy of '100 languages', we explored collaboratively the 'lost' in drama, by making meaning of the concept through movement. We also explored the concept in art, by collectively drawing what it means to be lost and how we experience lost as an embodied idea.

I made fieldnotes of the children's work, and documented their discussions with one another and with me, as I walked around the class while they were working. Video footage of the children intra-acting with the human and nonhuman bodies was taken, watched and then either transcribed by me or stills from the video were taken to be used later to re-turn to, again and again.

Informal discussions and conversations took place with the children as they explored the concept 'lost' and these were noted in my fieldnotes and then transcribed later. I also spoke individually to three experienced teachers from Grade One, Two and Three, from the school where I conducted the research. These informal conversations lasted approximately ten minutes and were noted down and transcribed soon after they had taken place.

The chapters in this thesis are diffracted though one another and so the structure does not follow the traditional layout. By drawing on Deleuze and Guattari's rhizomatic assemblage, this research dips in and out of the past, but not in a linear, progressive manner. Rather, re-turning back and forth again and again to small seemingly ordinary events and in that

[3] ([Online]. Retrieved 3rd October 2017)

way, data was created. In my project, I diffract with the data and I attempt to create a fluid, dynamic intra-active relationship between the theoretical literature and my teaching practices. Practice can and should intensify theory by connecting practical examples to them. In turn, theory should broaden and enrich the field of intervention for practice (Olsson, 2009). Practice and theory are always entangled, merged and in posthumanism it is impossible to separate the two as this would imply a power producing binary.

The research is divided into seven chapters. Each day, in the Grade Three classroom seemingly ordinary events happen, simple, routine things that usually go unnoticed during the school day. In each chapter, I have returned to these 'ordinary' events by paying careful attention to the details that matter and woven the theory through these everyday events.

As part of Chapter One, I explore as part of my response-abilities as a teacher to interrogate the way in which relationality brings literac(y)ies into existence. My posthuman focus is not anti-human (Braidotti, 2018), but extends my classroom community of enquiry to also include the nonhuman (e.g., matter) which has made me intra-act differently with the data I created when I was doing reading comprehension with my Grade Three children. I argue that agential realism offers a philosophy of *performativity* instead of representationalism and I explain the difference and why it matters. For example, material objects, like the large carpet, are performative 'agents' and can actively work with and on bodies to make them behave in specific ways and are part of the new knowledge created. Not only is the furniture in the classroom a performative agent, but my voice, my silences, my body and even the spur of the moment decisions I make are performative agents and work with the bodies in my classroom. The performative agents are all part of the entanglements which are always fluid and changing. It is through the entanglements; the human and nonhuman bodies are in the process of be-coming in relation to one another.

With/in Chapter Two, elements of an entanglement are traced by adopting Karen Barad's agential realism, explained and already drawn on in my analysis of an example from practice in Chapter One. In this Chapter, the analysis turns to a moment in the video when a child raises her hand when the picturebook is explored during a philosophical community

of enquiry. The girl forgets to stick to the rule of not raising your arm when she would like to speak, but rather to offer her hand into the centre of the circle. Noticing this, offers me the opportunity to explore what it means to listen in class for me as a teacher and how that is not limited to the use of my organ's ears. I explore how in the listening the architecture of the school where I teach is entangled with the learning with/in my classroom.

The video-camera, as discussed in Chapter Three, does not simply record what is, or was there, but its material facility to go over and over the footage again and again brings something new into the world (Murris & Babamia, 2018). Acknowledging the role of the material in the event that is explored in Chapter Three makes it possible to regard my re-search as an act of world-making and to understand knowledge construction as a kind of material-discursive 'worlding' (Haraway, 2016). Framed by the philosophy of posthumanism, this chapter looks at the rhizomatic nature of teaching and learning literac(y)ies in a Grade Three classroom. By not focussing on the tree like structure of knowledge construction and rather being aware that there is no beginning, middle or end to the way new knowledge is created, the process of creating new knowledge is seen as fluid and entangled.
This means that within the rhizomatic structure, becoming, or 'and…and…and', has replaced the verb 'to be'. And so the ideas from the children in my class are always fluid, moving and being entangled with other bodies, both human and nonhuman. Viewed from a rhizomatic perspective, the process of comprehension or thinking with practice is seen as an ongoing and connective activity where a variety of modalities and products are made, assembled and transformed in a way that goes beyond the traditional prescribed methods of doing comprehension 'properly'.

The teaching and learning of literac(y)ies as per the national Curriculum Assessment Policy Statement (CAPS) documents is unpacked in Chapter Four and explored in detail. The CAPS documents ensure that the prescribed literacy curriculum enacts a narrow, technicist and prescriptive way of teaching literac(y)ies. In an Italian context, ateleriesta Vea Vecchi (2010) argues that schools today, because of the hurried superficial content that is delivered, have weakened the sense of wonder, excitement, the interests and the

emotions of the children. Vecchi (2010: 27) argues that in today's world there a sense of "violence towards dreams" by removing the necessary aesthetic dimension from education. This includes the "aesthetics of actions, of intelligent perceptions and of time and rhythm; aesthetics that develop together with reasoning and emotion" (Vecchi, 2010: 27). In this chapter, I introduce the concept of intra-active comprehension. The term intra-active comprehension came about as a response to the need of a term to describe, the rhizomatic and intra-active processes of children creating-with-materials-time-space-environment-humans, inspired by critical posthumanism theories. Barad explains knowing or understanding as a material practice of engagement as part of/with this world as the world is becoming, suggesting that the intra-activity between the child-materials-space-time-environment produces or creates the new knowledge (Kuby & Gutshall-Rucker, 2016).

Intra-active comprehension is different to the traditional comprehension process of teacher generated 'question and answer' worksheets where children's voices (and bodies) are suppressed and ignored (see Chapter Four).

An intra-active pedagogy assumes that human bodies create knowledge through a direct material engagement with the world as the material (including human bodies) are active participants in knowledge construction. It is also being aware of the possibilities that the material affords when teaching and learning literac(y)ies. The Philosophy for Children (P4C) (Murris, 2016) and the Reggio Emilia approach (Olssen, 2009; Lenz Taguchi, 2011) can be considered as intra-active pedagogies. Intra-active comprehension uses these two approaches which are read diffractively through one another to create a 'superposition' (Barad, 2007). Intra-active comprehension uses the Philosophy for Children's community of enquiry (see Chapter Two) and Reggio Emilia's pedagogy of documentation (see Chapter Three) and to drive the process of creating new knowledge forward. I will show how the advantages of intra-acting with the provocation and creating such complex, rich and entangled ideas can be far more beneficial for the children, and myself, than answering pre-set questions with one correct answer.

Entangled with/in Chapter Five is the accounting for nonhuman agencies. This means that we have to begin to also consider how the *nonhuman* bodies directly participate in educational entanglements. Objects or things with their own "thing-power"(Bennett, 2010: xvi) such as chairs, paper, classroom spaces, chalk, video cameras and computers, pencils, worksheets, books, uniforms, and art equipment all *participate* in education, "they're not merely inert stuff that forms the *background* for a more important 'human' learning experience" (Snaza, Sonu, Trumen & Zaliwska, 2016: xx; italics inserted). Because the spaces we inhabit, move through, and intra-act with, have become routine or familiar, they have become almost invisible. Human bodies tend to be unaware of the affect of places and spaces on how, for example, their mutual agency is implicated in knowledge construction. Even worse, point out that we are not even aware that we are not aware of the places and spaces we intra-act with, not even aware that we are missing something. In response to this lack of cognizant attention, Bennett (2010) calls for different ways to create new procedures, technologies and "regimes of perception that would enable humans to consult nonhumans more closely, or listen and respond more carefully to their outbreaks, objections, testimonies and propositions" (Bennett, 2010: 108).

In shifting my focus from being acted upon by the clock, and for "creating space for time that is not uniform but enables opportunities for the singularity of this encounter to emerge" (Duhn, 2016: 383), infinite possibilities open up for data creation which is explored in Chapter Six. The new produced for my own practice as a teacher is the idea of learning to work *with* the clock, rather than working with time as a commodity, something to control. The ethical difference this makes is that it would resist teachers' inclination to control children through clock time, as in when the children can eat or play or go to the bathroom. It would also challenge the idea of treating the children as mere objects of measurement, as in the rate/manner in which they reach developmental milestones and how the children achieve externally pre-set academic assessment standards. It would also disrupt the idea that some children are labelled as needing assistance in the form of medicine to help them concentrate and focus during the academic day. The tensions that lie simmering beneath the theory/practice binary resonate with the notion that time is a commodity, to be calculated, bought, sold, wasted, saved and spent. The concept of time then assumes a

humanist colonising ontology and time becomes a human tool used to control. Time also becomes a possession, which informs the idea and language use of ‘having time’ or ‘running out of time’, much like the White Rabbit from the novel *Alice in Wonderland* (Carroll, 1865).

In Chapter Seven, I draw on Karen Barad’s (2014: 168) explanation of re-turning to the past as a “multiplicity of processes, such as the kinds earthworms revel in while helping to make compost or otherwise being busy at work and at play, an imagery of the soil being turned over and over with it being ingested and excreted”. By re-turning to the events throughout the thesis, I am diffracting with my re-memberings. I explore the vitality of the intra-actions between human and nonhuman bodies through the materiality of the community of enquiry and creating meaning with picturebooks. I also try to develop a sense of learning and being with the world as opposed to learning about the world as a distant observer.

The essence of this research is about materiality, looking past or beyond the humanist constructs of the individual mind and language associated with education, with teaching and learning of literac(y)ies and with teaching de-coding and comprehension.

Chapter 1 ‘Memories Rolling Forward’

Through the computer screen, I re-turn to research data created in my classroom through the video footage. A large, rectangular carpet is positioned against one wall, in the front of the classroom. The carpet is our meeting place first thing in the morning where the plans for the day are discussed. Any administrational duties and tasks are also carried out on the carpet – daily attendance register, collection of reply slips and money for field trips, or perhaps a conversation if the regular programme has changed due to a sports day or field trip etc. Throughout the day, the children move between their desks, where they do written work, to the carpet, where whole-class teaching occurs. The carpet is also the area where I, a Grade Three teacher, do group reading or where I meet with small groups of children or individuals for extra help in the various subjects. Moving from their desks to the carpet, several times a day, creates a time and space for the children to move around, stretch, chat to friends and so they are not confined to their desk space for long periods. By sitting together in the space made by the carpet, a different atmosphere is created. There is a sense of collaboration, a sense of togetherness of bodies with/in learning. The focus shifts from individual written work done at their desks to a sense of togetherness, a building of community (also with the carpet and other more-than-human bodies). When discussing the meeting place in the particular classroom of their research, Kuby and Gutshall Ruckshaw (2016: 57; emboldened in original) claim that “community building happens all the time, every day. Relationships are fluid and changing. We are in the process of **becoming** and uncovering how the space – physical, curricular and relational - is used”.

I have found much inspiration for my own research in Hillevi Lenz Taguchi’s writings. She adopts a Baradian *agential realism* when theorising her pedagogical work in and outside classrooms. Karen Barad (2003: 128) explains agential realism as a new metaphysics, a new ontology of/with the world as follows:

> Agential realism is an account of technoscientific and other practices that takes feminist, antiracist, poststructuralist, queer, Marxist, science studies, and scientific insights seriously, building specifically on important insights from Niels Bohr, Judith Butler, Michel Foucault, Donna Haraway, Vicki Kirby, Joseph Rouse, and others...It entails a reworking...the familiar notions of discursive practices, materialization, agency, and causality, among others.

From an agential realist perspective, it is possible to recognise nature, the body, and materiality in their becoming without resorting to the use of transparency or opaqueness, the geometries of "absolute exteriority or interiority, and the theorisation of the human as either pure cause or pure effect" (Barad, 2003: 812). But at the same time remaining purposefully accountable and response-able for the role "we" play in the entangled practices of knowing and becoming.

Agential realism offers a philosophy of *performativity* instead of representationalism. Performativity is a way of engaging with/in the world without representing the world through language. Representationalism uses words to re-present pre-existing things from a distance, which positions us humans "above or outside the world we allegedly reflect on" (Barad, 2007:133). Unlike performativity, which insists on "understanding, thinking, observing, and theorising as practices of engagement with and as part of the world" (Barad, 2007: 133). Thus, drawing on Barad, the piece of carpet in my classroom is part of what Lenz Taguchi (2010: 4) calls "a performative production of power" as it creates a meeting place for the human and nonhuman bodies in the classroom and makes things happen pedagogically. Material objects are performative agents and entangled they actively work on bodies to make them behave in specific ways. So, chairs or desks are not performative agents on their own, as this would assume a traditional kind of linear causality. But my voice, my silences, my body, my words and the spur of the moment decisions I make can in their relationality with other bodies, be considered performative agents. As Lenz Taguchi (2013: 202) explains:

> A performative understanding of discursive practices challenges the representationalist belief in the power of words to represent pre-existing things. Performativity, properly construed, is not an invitation to turn everything (including material bodies) into words; on the contrary, performativity is precisely a contestation of the excessive power granted to language to determine what is real.

Be(come)ing on the carpet makes it possible *to think and be differently together* in the classroom, disrupting the usual focus on individualised learning in modern education, where each child and teacher has their designated space behind a desk, sitting on a chair. It also makes it possible to disrupt human exceptionalism, that is, the idea that intentionality, intelligence and agency are reserved for humans only.

Bodies, both human and nonhuman – insects, bits of fluff, dust, pieces of paper, pencil sharpenings are entangled with the materiality of the carpet which offers some protective warmth from the cold tiled floor. The size of the carpet actively helps bring into being the physical size of the circle of bodies and determines how tightly the bodies are grouped. The human bodies do not try and move off the materiality of the carpet edge and sit on the floor (which is dusty and cold). If they had, it would have increased the size of the circle. Rather, they squash their bodies into small spaces between other human and nonhuman bodies, wall-cables-plugs-boxes, to fit onto the carpet. The material objects described above, like the carpet, wall and other human bodies, can be understood to actively perform on bodies and make the bodies behave or perform in specific ways. Lenz Taguchi (2010: 5) writes that, “[a]ll spaces and certainly pedagogical spaces, call upon us and demand specific ways of sitting, moving, talking or socialising with different affective force and intensities”. Sitting in a specific space, like the circle of bodies on the carpet, can thus be understood as a “material-discursive phenomenon that emerges in the intra-action that takes place in-between a subject, who is inscribed in discursive meanings” (Lenz Taguchi, 2010: 5). In other words, sitting in a specific spot, position and way is part of the material-discursive phenomenon that e/merges as part of the intra-action that takes place in between the human and nonhuman bodies, like the children’s bodies and my own body, the carpet, the wall or even the little chairs that hold the child-bodies.

I had invited the children to sit in a circle on the carpet. Twenty-two Grade Three bodies sit cross-legged in a circle around the edge of a carpet, leaving a circular space in the centre of the carpet, where six sheets of A3 sized blank white paper were lying on the carpet (see Figure 1.1). The paper was positioned in such a way that the six sheets created one large white canvas. The children were waiting for me to begin...

Figure 1.1: Waiting

Getting started

Re-turning to my fieldnotes, I had made a comment prior to starting the process of inviting the children to the carpet. I knew I had to start the research because I was 'running out of time' (see Chapter Six), I expressed my uncertainty as to where to begin (Fieldnotes, Sept 2017):

> *I am not too sure where to start. I am familiar with P4C and how I was trained. How different will the P4C session be? How do I facilitate and use the critical posthumanism theories in a way that will be meaningful/beneficial??*

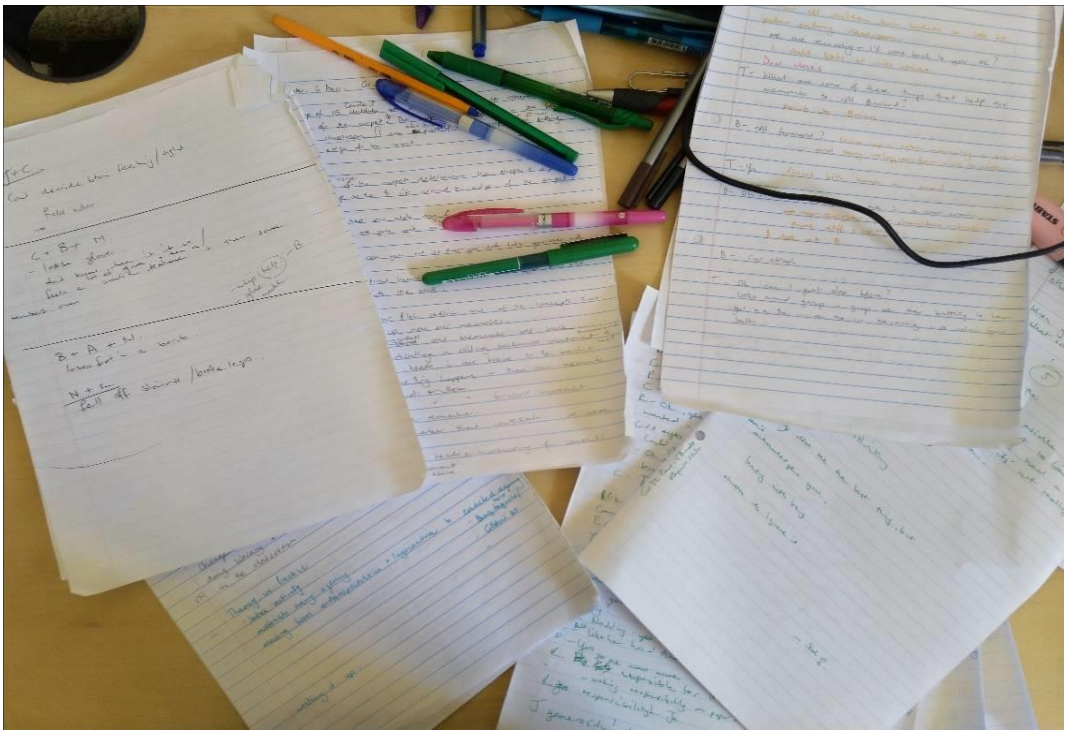


Figure 1.2: Fieldnotes, 2017.

Sitting and re-reading my fieldnotes (see Figure 1.2), I am aware of all kinds of other empirical materials, things I have been keeping and thinking with during my day as a teacher: photographs; emails exchanged with parents, staff and others; minutes made in weekly staff meetings; worksheets and exercise books; pieces of paper with children's drawings; pencils, erasers and sharpeners; official curriculum materials collected in files. I am aware that all of this 'stuff' influences and shapes my daily teaching practices. These things are material-discursive research participants helping me to move on to memory spaces and create new forms of data. "Rolling memories forward", as one of my learners described it in a lesson (see transcript below).

Teacher training

Being a trained Foundation Phase teacher, I feel competent in preparing for the usual literac(y)ies lessons in my classroom. In terms of preparation, for each lesson, I plan the way in which I will 'deliver' the lesson (in the way I have been taught to do it in teacher training). I also plan the content that needs to be taught or delivered according to the school's year plan which is based on the requirements in the national Curriculum Assessment Policy Statement (CAPS) documents. Being an experienced teacher, I do not plan my lessons in great detail as I would have done in the beginning of my teaching career. An example of a weekly lesson plan can be seen in Chapter Six (see Figure 6.6).

As per the stipulations in the national curriculum, the three main subjects in the Foundation Phase are Mathematics, Life Skills and Literacy. These three core subjects are given specific amounts of time in the timetable (see Chapter Six). According to the international testing that the Grade Three children do at the end of the academic year, the children of Groveview School are achieving satisfactory results in both Literacy and Mathematics. Results in standardised testing are not only the measure by which schools tend to judge the success of their teaching, they also work to inform a particular kind of teaching, that is, a 'teaching for the test'. My thesis is a critical engagement with such a

pedagogical approach and disrupts the idea that the teaching of comprehension should be informed by performance in international tests.

For complex situated reasons (multilingualism, poverty, lack of educated teachers etc.), many South African children do not perform well in the standardised tests as I will explore further in Chapter Four. In comparison with other countries, South African Foundation Phase learners continue to underachieve in International Literacy Bench Marking Assessments, where a variety of literacy skills and competencies are assessed.

Trained as a Foundation Phase[4] teacher in South Africa, I am familiar with the stipulated requirements set out in the CAPS documents in terms of the content that needs to be taught in in the phase and in particular, Grade Three. I have worked in both government and private schools for 25 years. I joined Groveview School[5] in 2008 as a Grade Two teacher and at the time of my research project, I was a Grade Three teacher. I held the position of Head of Curriculum for the Foundation Phase and I was on the School Management Team for the Primary School.

The class I was teaching comprised a group of 22 children ranging in age from 8 to 10 years old. The class was evenly mixed in terms of gender, 12 girls and 10 boys. There were 8 children who had already turned 10, as they have been retained at some point in the Foundation Phase. In South Africa it is not unusual for children to repeat classes, mainly due to not achieving the required academic standard. Of the 22 children, there were 8 children of Indian descent, 5 black children, 1 coloured[6] child and 8 white children. Of the 12 girls, 1 girl takes prescription medication for attention deficit disorders, while 4 of the 10 boys are on some form of medication for attention deficit disorders. These children have been identified by teachers (either in Grade R, Grade One or Grade Two) as having some kind of 'barrier to learning'. It is school policy that the teacher may not officially

[4] In South Africa, the Foundation Phase includes Grade R (Reception Year) through to Grade 3, five to nine year olds.

[5] All names are pseudonyms to ensure confidentiality.

[6] During the apartheid period, the national government introduced numerous legislations based on racial classification. For example, the legislative basis for racial classification during apartheid was the Population Registration Act No. 30 of 1950. This Act divided the South African population into three main racial groups: Whites, Natives (Blacks), Indians and Coloured people (people of mixed race).

diagnose the child's condition but may suggest the child to be formally assessed by an independent educational psychologist or medical practioner. Once the psychologist/ doctor has assessed the child and made recommendations, it is the parent's prerogative to follow through with the recommendations. As their teacher I have the responsibility of having to give them their medication when they are at school at the times prescribed by their doctors[7].

However, re-turning to my desk and fieldnotes, the uncertainty I was experiencing and had noted in my fieldnotes was not because I was teaching a usual lesson which I had taught in the past. Instead, I was planning on working with the Grade Three children in a *community of philosophical enquiry*. Planning for a community of philosophical enquiry is very different from my standard weekly lesson planning.

Community of philosophical enquiry

The community of philosophical enquiry is the pedagogy of an approach to teaching and learning called Philosophy for Children - also known as 'P4C'. I was introduced to this educational approach while completing my Honours and Master's degrees at the University of the Witwatersrand. Philosophy for Children (P4C) was pioneered and developed by Professor Matthew Lipman, Ann Margaret Sharp and other colleagues at the Institute for the Advancement of Philosophy for Children (IAPC) at Montclair State University (Gregory, Haynes & Murris, 2017: xxi). Lipman argued that there was a need for a philosophical curriculum that would encourage children to develop, 'sharpen' and improve their thinking skills in a multidimensional process which incorporated thinking in a critical, creative, collaborative and caring manner (Lipman, 1991) and these ideas will be explored later in my thesis. Lipman, in close collaboration with his colleague Ann Margaret Sharp, developed an educational programme in which philosophical content is adapted to

[7] This practice sometimes causes ethical dilemmas for me, as I do not subscribe to a medical approach to learning difficulties as they tend not to take the political context into account and instead work with the idea that the deficit is *in* the child.

children's needs and interests. Since its invention it has become "a significant educational and philosophical movement" and has been "practiced, interpreted, debated, researched and recreated in more than 60 countries around the world" and in a wide variety of settings: "nurseries and kindergartens, secular and religious schools, children's shelters, youth groups, teacher education departments, universities, and government education departments" (Gregory, Haynes & Murris, 2017: xxi).

The aim of P4C is considered by Vansieleghem and Kennedy (2011: 174), "to help [members of a community of enquiry] become more thoughtful, more reflective, more considerate and more reasonable individuals". With its focus on *thinking*, rather than learning decontextualised skills, adopting P4C has therefore profound implications for teaching literac(y)ies in schools. The community of philosophical enquiry (Lipman, 1991; Fisher, 1998; Kennedy, 1996) encourages both teachers and children to work collaboratively in (what is claimed) a more secure, caring environment while exploring concepts through philosophical dialogue. David Kennedy (1996: 2) describes the community of enquiry as a group of people who:

> [C]ommunicate together regularly and whose common project is to enquire critically and creatively into something they find important, find out how things work, in short, create knowledge together.

The idea of a community of enquiry, as described above, is predominantly from a *human*-centred perspective and assumes (like most current approaches to teaching and learning) that intelligence and consciousness is 'in' the bounded human body. In contrast, critical posthumanist and new materialist Rosi Braidotti (2018: 21) suggests that in the current concept of 'community', many 'people' are currently "missing". Drawing on Deleuze, Braidotti (2018: 21) offers an alternate posthuman definition of 'people' to include:

> non-human agents, technologically-mediated elements, earth-others (land, waters, plants, animals) and non-human inorganic agents (plastic, wires, information

> highways, algorithms etc.). A posthuman ethical praxis involves the formation of a new alliance, a new people.

This new definition of people as members of any community, including a community of enquiry, is a reconfiguration of the human and the knowing subject and a critique of the normative 'human' of humanism which "Deleuze and Guattari define (1987) as sharply as any feminist as: male/white/heterosexual/owning wives and children/urbanized/speaking a standard language, i.e. 'Man', or rather by now – 'ex-Man" (Braidotti, 2018: 6).

When building communities of enquiry as part of my literac(y)ies teaching, the children are often seated on chairs, not behind desks or tables, and in a circle so that everyone is visible to the other members of the group. The importance of this material rearranging of the classroom is usual in P4C theory and practice, but to include the material as "non-human agents" (Braidotti, 2018: 21) and as *part of the community* in enquiry is not. Many P4C practitioners also include some movement as part of the P4C sessions. The children are instructed to move in and out of the circular seating arrangement to work in pairs or in small groups. While it is typical to sit on chairs, I had invited the children to sit in a circle on the carpet.

Re-turning to the video clip, the children are sitting on the carpet, waiting for me to begin…

Videos, bodies and classroom walls

From a posthuman perspective, *movement, sounds, materials, time and space are always entangled* and cannot be separated out from each other because for example, sound is also movement at a molecular and material level. I have, however tried to separate *movement, sounds, materials, time and space* as a narrative device to draw the reader's attention to the fact that transcripts in my research study are not only about the discursive.

**Italics – movement*, *sounds*, *materials, time, space*

Me: After our session of Philosophy…

I look around the group - I make eye contact with the group of children.

Me: Cole, are you with us?
My voice is soft, almost inaudible, my face is turned, directing my voice towards one body.

Cole: Mmm…
He makes a humming noise to indicate agreement

Some of the other bodies wriggle or straighten their backs, the carpet keeps the bodies in a tight circle–my intra-action with Cole has worked on the others and their body positions.

Me: Can you sit like you *are* with us and so you can see us?

My eyebrows are raised /arched, and my eyes widen.

Cole's body is repositioned and is now cross- legged. The wall gives support as a backrest.

Me: In our P4C session, one of the concepts that was brought up was memories. Someone suggested our memories roll back....

My arm moving in large circular motion indicating a rolling backwards movement.

Me: In our heads, in our brains to the back and then something happens and then our memories roll forward…

My arm moving in large circular motion indicating a rolling forwards movement.

Me: ...and then we remember. Do you remember that conversation we were having?

Nodding of heads, murmuring of agreement

Me: So, what were the things that might...we have all these things in our memories stashed away. Someone said at the back of our heads...deep at the back of our heads.

I touch the back of my head, screw up my eyes.

A lost teacher-researcher

Affecting me are Donna Haraway's (2016: 12) words:

> it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties.

It speaks of the embodied, situated knowledges in and outside the classroom, the rhizomatic entanglements, the connections in-between bodies and how they intra-act and diffract with other bodies. There is no beginning or end, but rather an ongoing cyclical e/mergence or becoming with/in the world.

Most research practices tend to treat data as passive matter without agency and the analysis that then e/merges is identified, categorised and represented by a detached human adult researcher who engages with and analyses the data actively and from a distance. Taylor (2016: 5) states that "doing posthumanist research in education is a challenge…Posthumanism proposes different starting points for educational research and new ways of grasping educational experiences than those afforded by humanism".

I found it difficult intra-acting with the data that e/merged, more questions seemed to make themselves apparent and I felt completely out of my depth. I experienced a sense of anxiety, uncertainty and disorientation. I was unsure where to start. How do I work with the data differently by adopting posthumanism theories as a navigational tool (Braidotti, 2013) and how does the data work with/through/on me? How do I know if I have 'done enough' with my Grade Three children? Is what I have done with them different to the way I usually do things in my classroom? How do I teach, intra-act and even live in a way that is considered posthumanist? I would watch snippets of the video clips taken during the research study, read through my field notes that I had made while talking with the children, then leave the material and come back to it a few hours or days later 'picking' at it.

All I experienced was discomfort and a dull nag that time was running out to complete the data ‘collection’ and analysis. Lisa Mazzei describes this uncomfortable position as “researching situations that we no longer understand, situations which we no longer know how to react to, in spaces which we no longer know how to describe” (Deleuze, 1989 cited in Mazzei, 2010: 504). Elizabeth St Pierre (2011) suggests letting dense ideas wash over you, while Candace Kuby and Tara Gutshall Rucker (2016) recommend that the ideas based on a critical posthumanist perspective need to be read over and over. Knowing and being cannot be separated, and by drawing on Barad, Kuby proposes (along with Lenz Taguchi and others) an ethico-onto-epistomological approach to research, teaching and learning. As Derrida (1991: 57) claims:

> [e]ach time [we] begin a new text, however modest it may be, everything falls apart in the face of the unknown or the inaccessible, a crushing feeling of clumsiness, of inexperience, and of powerlessness. Anything [we] had already written is instantly annihilated, or rather, as if thrown overboard.

I experienced feelings of clumsiness and powerlessness when I re-turned to the data and my intra-action with the data as new and other theories informed my thinking both with and without my realising it. However, how one goes about this is “another question that demands us to read, think, read, think and become differently in our entanglements with the material world as researchers and/or teachers” (Kuby, 2017: 366). While I read over and over, I still experienced high levels of discomfort and anxiety in working with the data. Am I doing it ‘right’?

I felt lost. Kuby and Gutshall Rucker (2016: 196) explain that in order for educators to be and “become through emergent listening with children, we must be open to the otherwise or possibilities that are not-yet-known. This is unpredictable. Uncertain. Scary. But possible.” Schulte (2013: 4) writes:

> Lost, because being there through research is in part a practice of straying afield…to harbor a love for what is unexpected and yes, unnerving. Being there with

> children through research is exactly that, a process of joyful yet unsettling reciprocity that is understandably temporal and forever incomplete.

It was only after a while that I realised that I had been firmly entrenched in the "safe space of knowing" (Mazzei & McCoy, 2010: 506). I had started analysing the data as a detached observer/researcher, only focusing on the language and the words the children had spoken. I had already begun to determine themes, possible links and connections. I was analysing the words for implications and what they might mean. In contrast, from a critical posthumanist perspective, the data is a co-constitutive force, working with and on the researcher, as the researcher works *with* the data. Data has a way of "making itself intelligible to us. This can be seen, or rather felt..." (MacLure, 2013: 661). This embodied aspect of sensation resonates in the "body as well as the brain" (MacLure, 2013: 661).

As a researcher I was invited to become aware of all my faculties that "register the flows of smell and the intensities of touch, level, temperature, pressure, tension and force" (Lenz Taguchi, 2012: 272) in the intra-connections that e/merged as part of my entanglement with the data. Lisa Mazzei encourages thinking with data (Mazzei, 2010). As a researcher it was my task to think "with the vocabularies that provide new descriptions and that encourage different understandings or engagements that confront the very image of thought that guide us" (Mazzei, 2010: 505).

Candace Kuby (2017: 3) describes the challenge for herself poignantly when thinking with theories – especially when thinking with "more-than-human ontologies":

> …we found ourselves stuck and restricted by language and traditional ways of writing up transcripts and research. We asked ourselves, how can we not only think with theories but also write with theories?

Diffractive analysis constitutes an alternative methodology to critical reflection and more traditional qualitative analysis of data. Diffraction is about studying how "differences get made in such a process and the effects that differences make; what is excluded and how

these differences and exclusions matter" (Barad, 2007: 30). Maggie MacLure explains these differences as the "data fragments that glows" (MacLure, 2010: 282). She suggests that the glow seems to invoke an "emergence of sense in encounters with the data...something abstract or intangible that exceeds propositional meaning" (MacLure, 2013: 661).

According to Kuby and Gutshall-Rucker (2016: 17), a critical posthumanist framework "changes the way we produce and view data and intra-actions in the classroom, how we transcribe video and audio clips, how we think with/through data, what counts as data and how we write up the research". Posthumanism is a "paradigmatically different way of thinking about knowing (epistemology), being (ontology), and doing (axiology)" (Kuby, 2017: 286). Kuby and Gutshall Rucker (2016: 18) explain that a transcript is considered to be a "version, typically written or oral, of material originally presented in another medium...literacy transcripts unfold linearly, most often privileging language."

How to transcribe?

I was unsure as to how to transcribe the material in a way that would not privilege language and would allow the intra-actions in-between human bodies-time-space-materials-nonhuman bodies to e/merge. How could I do justice to their entanglement? The 'in-between'? Their relationality? In this chapter, I have tried to come to the data differently by doing more justice to the role of the nonhuman in intra-action, for example, by paying attention to the sounds, movements, time and space, but I still felt that I privileged language and human intra-actions too much. My attention and gaze kept being drawn to the children and their movements and what they were saying. I then decided to change the colour of the font in the transcript and see whether this would make a difference to my diffractions with what was 'happening' in my classroom. It is almost impossible to leave the humanist habits of privileging language, the human means of communication, behind and at the same time it is almost impossible to trace some of the entanglements that were e/merging and adequately (re)present these on paper. Of course, even my desire to

represent was misplaced. I could only re-present, that is, express some new ideas that e/merged as I re-turned again and again to 'the' data. My challenge was to *diffract* and not to *reflect*. Jessica Smartt Gullion (2018), explains reflection and diffraction as both optical phenomena which describe different ways of seeing the effects of light as the light intra-acts with a surface. However, reflection repeats or reflects the same way a mirror repeats or reflects an image. Diffraction, on the other hand "creates something new" (Smartt Gullion, 2018: 129), much like the waves in the sea that ripple out when a rock creates an obstacle in the pathway of the waves. The waves' movements interfere and intersect with other waves, creating new patterns in the water.

It is, observes Karen Barad, interesting to note that diffraction illuminates "differences within (dark within light within light)" (2014: 176). In this research study, I have tried to move away from reflection – describing a scene, or the children in my class and their actions – to diffraction – where I ask questions about the entanglements and how they work and "how boundaries are configured and reconfigured" (Smartt Gullion, 2018: 129). What I have tried to shift is the exclusive focus on the social and do as much as possible justice to the role of the material in learning when diffracting through the intra-actions, but my humanness keeps surfacing. At the same time, posthumanism does not mean anti-human (Braidotti, 2013). But I have tried to constantly remind myself to focus as much as possible on the intra-actions between the humans, nonhumans, material as well as the discursive forces, and in this way, move away from an anthropocentric (teacher or child centred) way of analysing and interpreting events.

To focus on the intra-actions between the human and nonhumans and the material-discursive, Donna Haraway suggests that staying with the relations themselves means becoming differently attuned to what exactly is emerging anew or being "remade in every dance of relationing" that occurs when human and nonhuman bodies meet (Haraway, 2008: 25). However, even changing the font colour, and trying to isolate sounds, movements, time and other diffractions was also troubling for me. I was trying to straighten out or neaten up the intra-actions that make up entanglements. How could I effectively convey the entanglements that are a 'melting pot of intra-actions' in writing is structured

linearly. With this uncertainty in mind, Elizabeth St Pierre (2011: 621) explains how she "thinks with everyone's words" as she writes about what she had read and brought into the analysis of her data that e/merged. She argues that the created data are never brought into being as "brute" or stand alone, but always with certain contexts, therefore they "always ready products of theory" (St Pierre, 2011: 621). St Pierre (2011: 622) states that she:

> [I]magines a cacophony of ideas swirling as we think about our topics with all we can muster – with words from theorists, participants,…friends,…ghosts who haunt our studies,…and with our bodies and all other bodies and the earth and all the things and objects in our lives – the entire assemblage that is a life thinking and, and, and… All those data are set to work in our thinking, and we think, and we work our way somewhere in thinking.

For St Pierre, the "theory, data, data collection and the subsequent data analysis becomes impossible to disentangle" (2011: 622) and so her claim that she sees no point in separating her work into chapters, for example, 'theoretical perspectives', 'data analysis' and the 'interpretation of the data' influenced the way I attempted to start writing about data.

Being unsure of myself in how to work with data, I paid attention to my own physical body (that is never separate from my mind or the nonhuman) and tried to "register how the data interferes with the sensibilities of …[my] bodymind… and what this brings to the event of reading the data" (Lenz Taguchi, 2012: 272). I intra-acted with the video data again, taking careful note of how data intra-acted with me and any physical, tangible affective reactions that e/merged.

While observation usually orients towards the words spoken or the sayings, video footage is helpful, because it "foregrounds the doings and renders noticeable the complex set of bodily presences and absences, movements in the space, material details, colours, sounds and rhythms that happen on the scene" (Mengis, Nicolini & Gorli, 2016: 4). As the

camera I used was fixed in one position, many intra-actions as they performed in the classroom can be observed, although tracing entanglements also involves the in/visible across space and time (see Chapters Five and Six). However, much cannot be articulated, or I have no access to, although it still affects me. As researcher I am not an objective viewer, positioned as neutral onlooker, a witness to something that unfolds in front of my eyes without being implicated or with a response demanded from me.

Being in this uncomfortable position causes some anxiety. I often feel the need to be 'a role model' for my younger colleagues and sense the pressure of having to be an example by implementing good teaching practices. This year there are several young and inexperienced staff members in the Foundation Phase. As a result, it is part of my job to mentor the staff by being available to assist with their planning, preparation and teaching practices. I also feel that as a teacher with experience, I should be seen to have all the answers and be in control of the classroom and in charge of the children in it.

Lenz Taguchi (2010: 4) argues that:

> ...pedagogical practices are being increasingly mainstreamed and normalised in relation to universal standards. These tendencies reduce the complexities of teaching and learning in an increasingly complex and diverse world.

Her argument is an important one for me as a teacher-as-researcher. As a Foundation Phase teacher in a South African school, I feel pressure to ensure that the practices in my classroom are seen by the management of the school as conforming to what is considered good teaching strategies which I discuss below. Especially for children in South Africa, children's circumstances are often very different from what is regarded as 'normal' in the West and are far from universal. At the same time, school managements use the results of standardised tests as a means to evaluate performance and success, even in a school in Johannesburg.

Knots in my stomach

Diffracting through the video footage, I re-membered the session and the knots in my stomach that I experienced because a boy called Cole was not sitting ‘properly’. Such reactions are not only material, but at the same time they are also discursive. The discourses about how children should behave and what it means to be a good teacher, I have also internalised and they govern my behaviour at school (see, for example, Dahlberg & Moss, 2005). There was a chance that a colleague or one of the teaching assistants could have entered the classroom. Even though I was in the classroom, the children were not participating in a traditional lesson, for example, working quietly at their desks. Or, if they were on the carpet, they were not involved in a practical lesson, working with concrete apparatus. Although I am an experienced teacher, I always experience some kind of anxiety that I am judged by others not doing the ‘right’ thing. Even when people as a matter of fact are walking past and not making judgements about what is happening in my classroom, there is always *the possibility* they can. It is in this way that discourses govern people’s actions, thoughts and behaviour. With reference to Lynn Fendler’s work, Dahlberg and Moss (2005: 19) name this disciplining of the self by the self with the term ‘governmentality’ which they explain as the “way in which people and populations become to be governed or managed not through external coercion, but by more subtle and more effective practices”. These practices include surveillance of teachers, assessments, test results etc. But more importantly, these subtle and more effective practices, Dahlberg and Moss (2005: 19) explain:

> work directly *on* us, steering towards desired behaviour. But they also work *through* us, acting on our innermost selves, reaching to the innermost qualities of being human: our spirit, motivations, wishes, desires, beliefs, dispositions, aspirations and attitudes.

Bodies as bridges

'Back' to the classroom through the video recording as my apparatus, I notice how Cole has positioned himself such that he is sitting with his back to the wall. His feet are flat on the floor which makes his legs bent into an inverted V shape. Cole's hands are resting on his stomach and he is looking down at his fingers. Sitting like this almost creates a barrier between him and the rest of the group. As such, the rest of the group are not really able to see his facial expressions (see Figure 1.3) and his posture does not invite collaboration.

Figure 1.3: Can you sit with us?

I was irritated by how he was sitting, and I needed him to behave/sit in a completely different way. A way that is considered to be an acceptable, correct way of positioning his body when sitting on the carpet. To other teachers or any other children looking in, Cole's body expressed disinterestedness.

There are a number of brightly coloured posters hanging on the wall of my classroom. They are used not only to decorate a classroom, but they are designed to help discipline bodies into sitting properly (see Figure 1.4). These types of posters are supposed to work as a visual reminder of the accepted norm for teachers and children, of how children's bodies should be performing. I could not get up and physically manipulate his body into this normative ideal position. Of course, what these moralising posters do not take into account is that children might have very different ideas about what it means to listen and what a listening body looks and feels like. However, as a teacher I could use my voice, its tone and pitch to influence his body positioning.

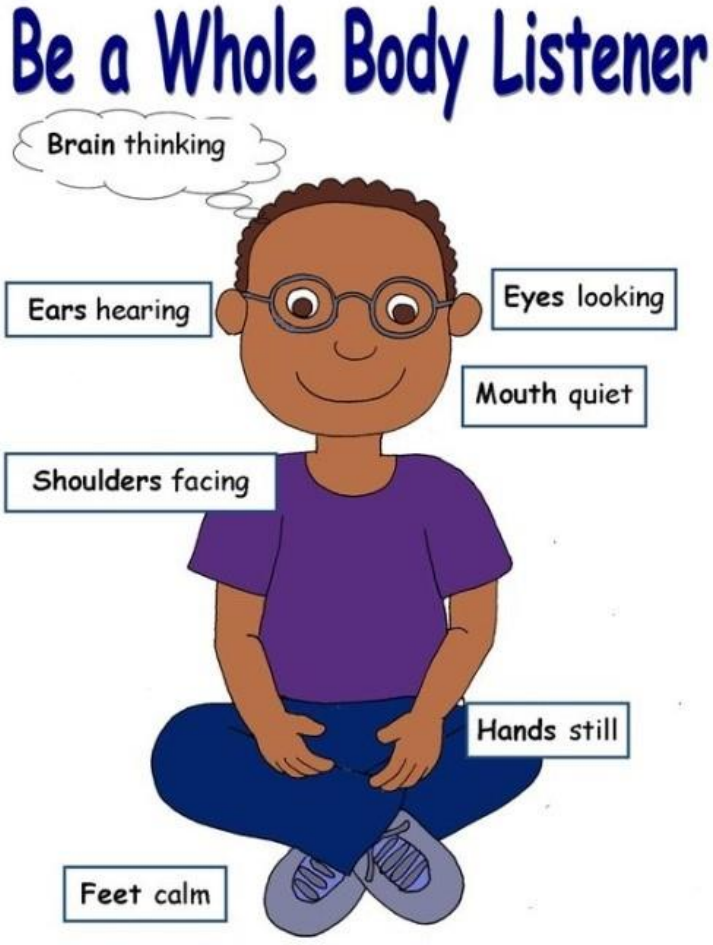


Figure 1.4: Rules for Listening Bodies.

As Maggie MacLure (2016: 173) points out, “language is intimately implicated in the production of state and social order”. Language’s main function is not to “represent, refer, inform, or communicate, but rather to transmit ‘order-words’” (Deleuze & Guattari cited in MacLure, 2016: 173). She explains that order-words are disciplinary, both in the sense of ‘commanding obedience’ and of ‘creating order’. They “carry the implicit assumptions that produce subjects and command social duty ... this emphasizes their unavoidably political, pragmatic, and collective force” (MacLure, 2016: 174). Deleuze and Guattari (1987: 107) compare the order-words to a “death-sentence” because each time an order word is issued by a teacher, parent or some other figure of authority, a death sentence is issued – to stop or change some kind of behaviour. Order-words prevent or obstruct the natural, potential movements of becoming. Once a child is subject to an order-word, something takes shape at the expense of all other possibilities that are silenced or suppressed (MacLure, 2016).

Similarly, De Freitas and Curinga (2016) argue that language is not only about the correlation and resemblance between sign and object, or the mirror-like function of language. Language and the use of order words realise the moulding function of language. Utterances and language act not only as information or communication but also materially reconfigure the classroom. Teaching can be seen as the teacher imposing order words or “semiotic coordinates on the students” (De Freitas & Curinga, 2016: 255). For example, when I used the words...

“Can you sit like you *are* with us and so you can see us?”

These words become the order words that intra-acted with Cole’s body and shaped his body into a new position. At the same time, my voice acted as a material-discursive agent and not only affected Cole’s body position, but the rest of the classroom community (including the nonhuman) reacted to my voice by checking their own bodies and readjusted their position on the carpet. De Freitas and Curinga (2016: 255) remind us that by using my voice in a particular way “language becomes a material expression”. Hearing and intra-acting with the sound and intonation of my voice, new body positions e/merged,

and new knowledge was created as to the specific sets of social obligations, what it means to listen in a classroom and specific identities in the classroom space. The use of language, according to De Freitas and Curinga (2016: 256) is never purely a

> [M]atter of a subject representing, describing, corresponding or complying to that which is outside of it, but rather produces instead a force field of activity, where intensity flows across the space of potential energy.

The force field of activity described above includes expression in language. This is explained as the musicality or the "prosodic effects of speech" (De Freitas & Curinga, 2016: 257) and include aspects of speech such as the tone, the volume, the pitch changes, repetitions, gaps between words and the way certain words are emphasised. The prosodic effects of speech rarely go noticed in typical data analysis. Generally, if the prosodic effects of speech are highlighted in any analysis, it is usually considered or subsumed as part of the overall communicative intent of the speaker. In contrast, De Freitas and Curinga (2016: 257) suggest that, by focusing on the prosodic utterances, an opening is created to discuss how the body is partaking in the classroom encounter and how these utterances are "part of the collective block of sensation". With this 'in' bodymind, speech itself may be considered to be a creative material-discursive force, part of the learning assemblage by "*literally adding more material*, projecting and binding with other bodies and linking up with other nearby frequencies in distinctive ways" (De Freitas & Curinga, 2016: 257).

The pitch and volume of my voice had decreased; it was the lowering of the tone and the sound that was audible that also added to the intra-actions between myself-Cole-otherbodyminds-the wall. It was not only the words that I used but also the sound levels that were made when I spoke; the lowered volume also changed the way all of the children were sitting, even if the comment was not directed at them. At the same time, my eyebrows raised, and my eyes widened as if to punctuate the sentence and accentuate my displeasure. My facial expression and the lowered tone of voice not only accentuated

my displeasure but also helped to discipline Cole's body and conform it into, what I (and the poster) regarded as, a more acceptable shape.

According to MacLure, there is always a chance that the child will "unmoor or uproot the constants that hold the linguistic sign system together" and the other sign systems, the "gestural, mimetic, ludic and other semiotic systems will regain their freedom and extricate themselves... from the dominant competence of the teacher's language" (Deleuze & Guattari cited in MacLure, 2016: 175). While Cole's body position initially changed, and he responded to the order words as well as the prosodic effects of my speech, there was a moment of 'unmooring or uprooting' by Cole. He became increasingly restless and later on in the video, during a small group activity, while I was working with another group of children near Cole's group, I was very aware of Cole lying on his back, smiling and 'flicking' his tongue at the camera and a little while later (and it is only partially evident in the video clip) Cole waved at the camera. Two photographs taken from the video are below.

Figure 1.5: Making bridges.

Figure 1.6: Connecting groups.

The video apparatus as well as the teacher operating the video, are both clearly part of the entanglement of ‘what is going on in the classroom’, which disrupts the idea that using video footages gives teachers-as-researchers objective data of their classroom. The video has performativity and is also part of Braidotti’s (2018) ‘enlarged’ notion of community of ‘people’ I discussed above. Moreover, video apparatus governs what humans in class do and don’t do. There was, what looked like Cole’s regaining of body freedom, as his body was no longer controlled by my order-words, my raised eyebrows or wide eyes as in the beginning of the session, but it is difficult to tell what the affect is of the video-recording. His body is now stretched out on the carpet and in doing so he makes literally a bridge from his small group of young bodyminds to another group near him.

The drama teacher at the school where I teach had agreed to help out with the videoing of the sessions. He would come in and out of my classroom as his timetable allowed and would then take the video camera off the stand and walk around with the camera filming what was happening using the camera as a “roving point-of view” (Mengis, Nicolini & Gorli, 2016: 14).

The Drama teacher had to leave the classroom to go and teach one of his classes and so left the video camera filming on its own while attached to a tripod. As the camera in my classroom is fixed in one position, human and nonhuman intra-actions in the classroom can be observed and much cannot be observed but is still ‘present’ (e.g. how the curriculum is entangled with what is going on). Of course, much cannot be seen but felt, although difficult to articulate in language. As the viewer, we are positioned as onlookers, witnesses of something that unfolds in front of our eyes (Mengis, Nicolini & Gorli, 2016). A video-recording is an apparatus.

An apparatus, according to Barad, is the set of “material-discursive practices...with which we engage the world” and that are “productive of and part of the phenomena we study” (Barad, 2003: 819). Drawing on Barad (2003), Mengis, Nicolini and Gorli (2016: 5) state that an apparatus is not a “passive observing instrument and measuring device but has a productive force and is consequential for how a phenomenon materialises in the practice

of inquiry". The camera, the drama teacher, myself, the young bodyminds and the video footage intra-act and are part of the diffractions created when analysing the footage. Intra-acting with the video, I was able to see how the "directions and orientations of bodies, objects and movements contribute to create the space of the collaborative practice" (Mengis, Nicolini & Gorli, 2016: 16). I was able to see how the small groups of young bodyminds used the space created by the carpet. They were in close physical proximity to one another but continued to intra-act with the other bodies in their group as well as the materials.

Classrooms on the move

As I re-turned to the video data a nagging question e/merged that made me feel very uncomfortable. I asked myself: After 24 years of being a teacher in the Foundation Phase, surely, I am capable of intra-acting with Cole differently? I am clearly affected by others looking in through the glass window. The concept of 'intra-action' (see Introduction and Chapter Four) implies not just interaction between two or more humans, but a relationality that is always 'in-between' and includes the nonhuman. Hence, my concern about what would happen if Cole had remained in his position with his knees pulled up and almost blocking his face from the rest of the class community, was not just of social or psychological concern. I was not only concerned about how it would make other children feel or how it would affect the social make up of my classroom, but I also wanted to pay attention to the sheer materiality of the encounter.

Part of the ethos of building a community of enquiry in Philosophy with Children (P4C) (see Chapter Two) is to respect the ideas of everyone in class, hence, the need to sit in such a way that everyone can see each other's faces in class. I noticed my response to watching myself on the video and it became clear to me that I was also governed by my desire to be a good P4C facilitator. Correcting Cole's body posture worked in that it complied with what is prescribed as desirable classroom behaviour in P4C. Lenz Taguchi (2010: 5) writes that "[a]ll spaces, and certainly pedagogical spaces, call upon us and

demand specific ways of sitting or moving, talking or socialising with different affective force and intensities".

There are specific ways of behaving in a class and not only for the children. The teacher's body is also intra-acted with/by other human and nonhuman bodies and through the continuous diffractions, new behaviours e/merge. Classrooms are always on the move and not only the humans in them. The task of the researcher is to trace some of these (infinite) entanglements. Most are invisible of course, but their affects, dispersed and unquantifiable are nevertheless felt. We tend to treat the nonhuman as mere background to what really matters in educational research. Atmosphere, school codes of behaviour, posters, classroom walls, carpet, voices and so forth diffract through a school community and affect the children, the parents, management staff, other teachers, and myself. My perceptions of who counts as authority figures, my awareness of the presence of other staff and the need to please the wider school community (e.g. parents, the principal), especially in a private school all affect me deeply. So did the possibility that Cole's behaviour might be seen as evidence of a lack of discipline in my class or that I might be judged as not adhering to curriculum standards and be regarded as not teaching literac(y)ies the 'proper' way and thereby disadvantaging the children. All of these human factors are powerful ways of shaping individual teachers' behaviours and governing their bodies to adhere to particular sets of social obligations and particular identities in the classroom space. But not only the human, also the nonhuman sediments the world in its iterative becoming (Barad, 2007, 2013, 2017). Take, for example, how the corridor worked in what happened in my classroom.

My classroom is positioned on a main corridor and links the primary school to the high school. This corridor accommodates a large amount of passer-by traffic which includes other students from the high school as well as the primary school, administrative staff, other teachers, parents, security staff as well as managerial staff and on occasion, the directors of the school. The design and structure of the classroom is unusual as the wall facing this busy corridor is not made of bricks but rather has large, sliding glass panels. These glass panels function as windows as they let in the light and also slide open for

ventilation. Not only can the passing pedestrian traffic see everything that goes on in the classroom, but when the panels are open, the sounds from the classroom are also clearly heard (see Figure 2.6 and 2.7). I will discuss this in detail in Chapter Two.
Having my memories roll forward by diffracting with the video footage and experiencing the affect the footage had on me, even in the present moment was interesting. I was more concerned with the way Cole was sitting and what image this may have presented to others on the corridor.

One of the main focuses of my job as a teacher is literacy education and the teaching of literacy skills as outlined in the national curriculum (CAPS; see above). Although the school I work at is a private school, our curriculum is informed by CAPS. If anyone had come into my classroom and observed what was going on, they would have seen the skills of listening to a story, questions generated by the children about the story, an oral discussion based around the philosophical concepts raised during the community of enquiry, comprehension skills, collaboration and group work between the children, questioning and the articulation of answers.

As mentioned in the introduction, the aim of my research was not to find a practical solution for the low literacy achievements in South Africa - my concern is also of an ethical and political kind. It is about my response-ability to interrogate the way in which relationality brings literacies into existence. My posthuman focus is not anti-human (Braidotti, 2018), but extends my classroom community of enquiry to also include the nonhuman (e.g., matter) which has made me intra-act differently with the data I created when I was doing reading comprehension with my Grade Three children. It is to the question why this matters, and why matter matters I now turn to in my investigation.

Chapter 2 ‘How do you get lost?’

Re-membering Chapter One where I engage with a short transcript of a community of enquiry with my Grade Three learners, *(Videos, Bodies and Classroom Walls)* in this chapter I try to trace some of the other human and nonhuman threads of the entanglement, thereby sedimenting my understanding of what was ‘going on’ in my classroom. I go ‘back’ in time and start at the ‘beginning’. But where did ‘it’ begin?

I started the philosophical enquiry by reading the picturebook written and illustrated by David McKee called *Tusk Tusk* (2006), but in an important sense it was not the beginning at all. Entangled with selecting this story for the community of philosophical enquiry is my theoretical and practical understanding of Philosophy for Children (P4C), the complex theories of critical posthumanism and the location of the research: the classroom and school in Johannesburg. With/in this chapter, elements of this entanglement are traced by adopting Karen Barad’s agential realism, explained and already drawn on in my analysis of an example from practice in Chapter One. In this chapter, the analysis turns to a moment in the video when a child raises her hand when the picturebook is explored and she forgets to stick to the rule of not raising your arm when she would like to speak. Noticing this, offers me the opportunity to explore what it means to listen in class for me as a teacher and how that is not limited to the use of my ears. Entangled in the listening is the architecture of the school where I teach, and I explore how its structure is entangled with the learning with/in my classroom.

The picturebook, *Tusk Tusk* (2006) opens up an explicit yet secret space for the main characters of the story, a group of elephants. Readers of this picturebook by McKee, are positioned to hypothesise and use their imagination when a group of white and black peace-loving elephants escape into a maze (see Figure 2.1) to avoid the more aggressive black and white elephants who are fighting each other.

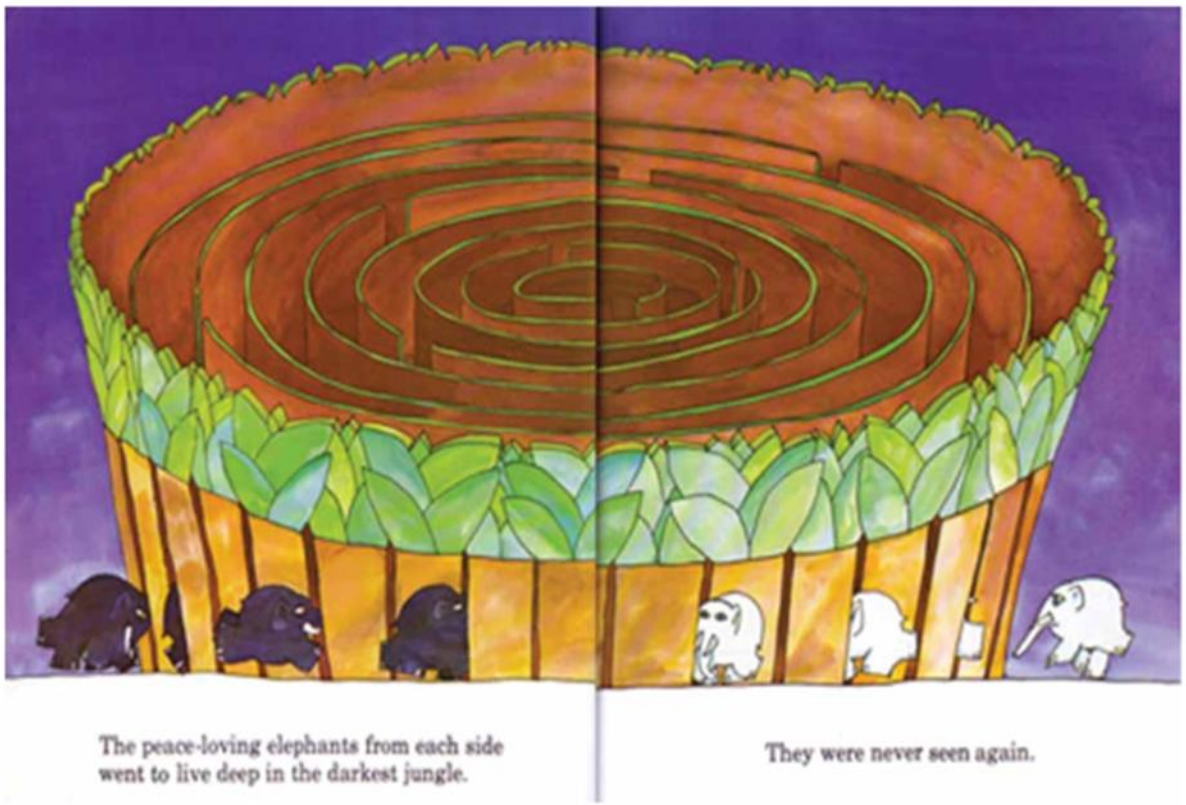


Figure 2.1: Escaping into the maze.

The black and white elephants decide to attack each other (see Figure 2.2). They do this, on later pages, by turning their trunks into fists and other weapons and they continue fighting until both groups of elephants were dead.

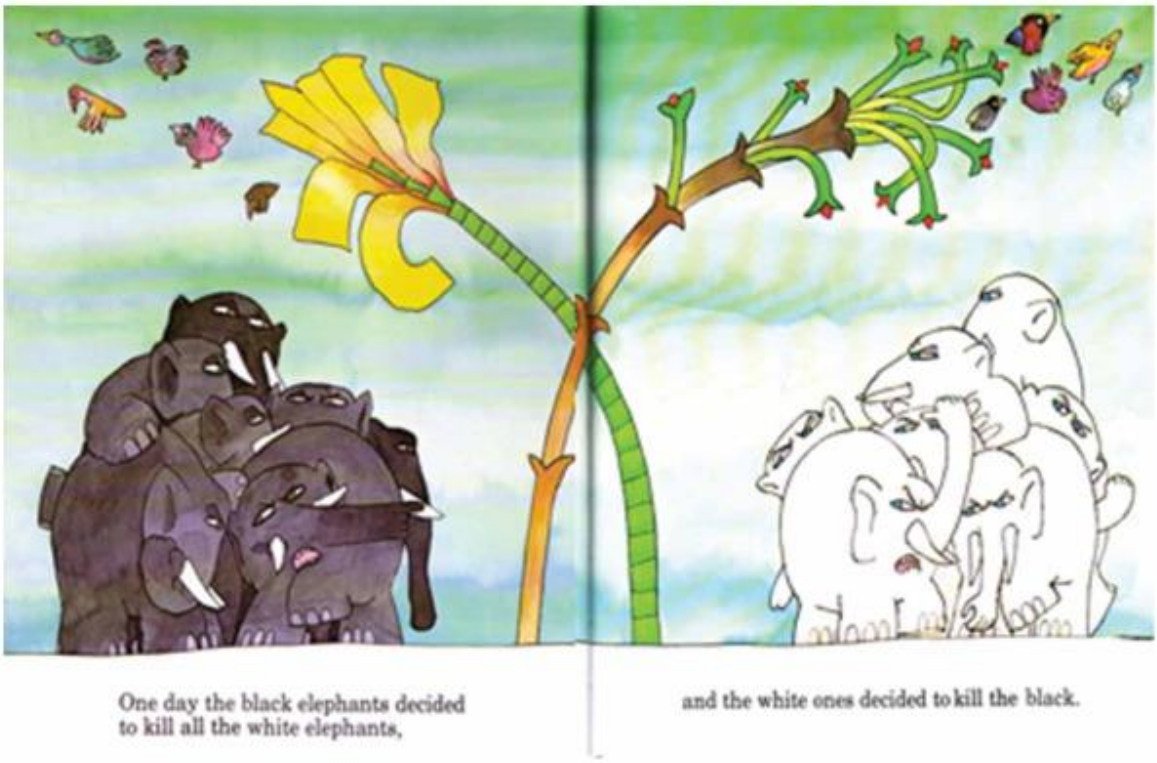


Figure 2.2: “But they hated each other”.

As the readers, we are not aware of what happens in this maze, where the elephants went to escape, but years later grey elephants e/merge from the maze. Initially, the grey elephants all live in harmony. However, the picturebook ends on an ironical note: "...the little ears and the big ears have been giving each other strange looks" (McKee, 2006: 16) and so the story ends with uncertainty about the future of the remaining grey elephants.

There are various websites that suggest picturebooks for Philosophy for Children (P4C) practioners. Some suggest *Tusk Tusk* (McKee, 2006) as a suitable picturebook to be used for P4C enquiries (www.p4c.com). This particular book by McKee is often chosen by teachers to create spaces that will encourage discussions on the themes of tolerance, diversity, difference and conflict resolution.

There is a risk, however, involved in choosing books for the themes or concepts that create space for philosophical discussions. The themes may be considered dangerous or controversial in that they could lead to discussions regarding questions based on death, politics, religion or sex. Discussions that may make teachers feel uncomfortable. According to the law, as a teacher I am 'in loco parentis' and as such, I have a duty to safeguard the children in my care. Being in this position of taking care or safeguarding the children in my class can, according to Haynes and Murris "put teachers in a position of surveillance" (2012: 178). It is in this position of surveillance that many teachers make decisions on behalf of the children regarding what books can be chosen and what subsequent questions can be raised, claiming that the lack of emotional or developmental maturity or the young age may prevent the child from making the right choices. Children are also often viewed, by teachers, as not being capable of making decisions for themselves as to what they should discuss and as a result, teachers in authority make the decision on behalf of the children without listening responsively to what the children have to say.

As a teacher, I am accountable to the other staff, the school management team as well as the body of professional teachers, as to what goes on in my class. As discussed in Chapter One, teachers do control their own behaviour in order to meet the expectations of the other staff, which Dahlberg and Moss (2005), refer to the disciplining of the self by the self as 'governmentality' (see Chapter One). Not only are teachers accountable to the other staff involved in the school but also to the parents, I am a figure of authority and *in* authority of the children in my class. Some parents do not want their child to be involved in discussions regarding controversial topics and questions.

The teacher tries to control, limit or even censor content or the discussion out of concern for the young, immature, fragile child. Censorship perpetuates assumptions made by adults about the concept of child and childhood. While no picturebook, even the self-critical or playful ones, are devoid or innocent of expressions of ideology (Haynes & Murris, 2012), it is through educational activities that require children to diffract with and through the text that these value positions be questioned.

If, as teachers, we censor books like *Tusk Tusk*, then we are demonstrating our low expectations about the children's ability to do that themselves. The policing or censorship of material also implies that we hold on to a particular kind of truth and vision of a decolonised future. Children should be involved in such discussions. Rather than having picturebooks policed by the adults, the philosophical community of enquiry could be considered "the natural home of collaborative interrogation of texts and pictures" (Haynes & Murris, 2012: 41). As discussed earlier, the community of enquiry is a unique classroom space in which the children are encouraged to participate in making decisions about the lesson content through democratic procedures (Haynes & Murris, 2012).

I need to be careful that I do not use my position of authority to influence the children in a negative way, for example, by not listening to the children regarding the book of their choice or by not letting the community of enquiry focus on a particular question that was chosen by the children. Dahlberg & Moss (2005) ask if adults *really* listen to children? As a result of the teachers not listening to the children's ideas, questions or their interest in a particular book, the child's own ideas about meaning making is hardly ever taken into account. Olsson suggests that through the practice of "true listening" (Olsson, 2009: 79), the idea of listening to what desiring production is in question or what are the children preoccupied or interested in? This kind of listening asks for a pedagogy of collective, intense and unpredictable experimentation. Through true listening, a space is created that is needed for bodies "to do things and that permits the exploring of the potentiality of every situation" (Olsson, 2009: 79), where the possibility or "unexpected ways of thinking and talking and doing" (Olsson, 2009: 79) can happen.

While I did listen to the children when they chose this book and the subsequent questions, I did feel anxious and nervous as to what ideas or thoughts may e/merge during the community of enquiry. What judgements or comments would be made by those looking in the glass window? I will diffract with the choice and suitability of this particular book by drawing on the work of Darren Chetty, an experienced teacher and P4C facilitator, later in this chapter.

Texts as participants with/in the world

Part of a "response-able methodology is the cultivation of collective knowing, desiring, being and making-with so that we render each other capable" (MacLure, 2013:). With regard to reading texts, it would mean our ability to respond to the texts and to be "interpolated by the wonder of the texts or what 'glows' in them" (MacLure, 2013:). It is also, according to Haraway (2016), the capacity to *be* for some worlds and not for others – differences that matter which are to be made. Being in touch with the text is a type of response – constituting both the text and the reader in response-ability (Barad, 2014). A response-able methodology is not a once off reading, but an ongoing and fluctuating entanglement of experimentation with the ideas of re/reading and re/turning to one's own and others' texts. Karen Barad states that "matter's dynamism is generative not merely in the sense of bringing new things into the world but in the sense of bringing forth new worlds" (2007: 170), of engaging in a continuing reconfiguring and iterative sedimentation of the world. Therefore, human and nonhuman bodies do not simply take their places in the world, nor are they situated in, or located in, environments that act as backdrops. Rather environments and bodies are intra-actively co-constituted. Bodies (human, environmental or otherwise) are "integral 'parts' of or dynamic reconfigurings of, what is" (Barad, 2007: 170).

Moving away from a binary logic to a logic of desire, (the concept of desire is discussed below) critical posthuman "P4C scholars have recently started to pay more attention to the picturebooks materiality: the effects of graphic design, choice of art style, visual grammar,

use of colours, and medium (paper, virtual etc)" (Murris, 2016: 6). I find it interesting and useful for my research study how these 'languages' intra-act, connect and influence each other also depends on what readers "bring to" the narrative themselves and the affordances of the material environment (Murris, 2016: 6). As such, texts can be considered "participants in the world, one piece of our ever-changing assemblage, along with material objects, bodies and sensations" (Leander & Boldt, 2012: 15). The intra-actions in-between child-picturebook produce, "in his actions and body, something new, something that is partly the carried-forward excitement or effects felt when he read the text and partly all the other things the present context allows him to bring to the assemblage" (Leander & Boldt, 2012: 16).

It is in this way that the entanglement of child-teacher-picturebook and all other nonhuman elements are involved in knowledge production - different matter make themselves intelligible to each other (Barad, 2011). The picturebooks make themselves intelligible not only through the two different sign systems (at a *discursive* level), namely the words and the illustrations, but also their *materiality* - including the 'gap' or tension in-between words and illustrations. Central in philosophical enquiry with picturebooks is how concepts are 'picked up' through children's dis/embodied experiences and literac(y)ies desiring as was evident in the Grade Three community of enquiry about 'being lost'.

From a posthumanist perspective, the material-discursive object, the picturebook, "has agency: it invites you to pick it up and read it in a particular way" (Murris, 2016: 205). Mackey (2016: 166) explains that "the hand serves as a connector between the tangible object and the immaterial element of attention". Lambros Malafouris (2013: 44) poignantly expresses this shift in how we think about texts-as-things: "things mediate, actively shape, and constitute our ways of being in the world and of making sense of the world...Things envelop our minds, they become us".

Gaps in-between words and pictures and…and…

In this section I start by exploring the still dominant literature about the relationship between words and pictures before experimenting with a posthuman angle that is increasingly articulated in the literary and literac(y)ies education field.

Stephanie Harvey and Anne Goudvis (2007: 70) argue that children's literature encourages and "develops reading skills, a learning of content knowledge, comprehension of texts, evaluation or judgement of different texts and literature as well as syntactic and grapho-phonic knowledge". As a subcategory of children's literature, picturebooks have the advantage that they are texts that contain a rich and complex mixture of written words and visual images that offer powerful, thought-provoking and embodied experiences for the young reader as well as the adult. Picturebooks are therefore ideal texts as provocations for communities of philosophical enquiry. Philosophy with picturebooks makes it possible to open up magical spaces that provoke children to use their imagination, to think out loud, to suggest ideas that are not necessarily their own and to test their ideas playfully with others (Haynes & Murris, 2012). Children's literature scholar, Perry Nodelman (1988: 56) explains the intricate relationship between the words and the pictures as being ironic as words often tell the reader something that the pictures do not and vice versa. Bettina Kummerling-Meibauer (1999, cited in Sipe, 2012: 6) explores the ironic relationship between the two different sign systems in which there is "valuable information missing from the text that is supplied by the pictures" and calls this a "semantic gap". Reader-response theorist, Wolfgang Iser claims that every text has a gap or "indeterminacies" (Iser, 1978, cited in Sipe, 2012: 8) which the reader or viewer needs to explore while reading the picturebook resulting in an infinite number of creative possibilities. Reading picturebooks involves complex skills that require "transmediation" or "the translation of content from one sign system into another" (Sipe, 1998: 101). He explains that there is a constant flow or movement between the reading of the text (words) and viewing the images, and back again. The result is a process of continuous oscillation, because the meanings of each sign system are always shifting. Sipe (1998: 103) points

out that the possibilities for new meanings to e/merge each time the reader reads the picturebook are “inexhaustible”. It is this ‘inexhaustible’ potential for new meanings that makes picturebooks a rich resource to encourage children to review and reread and, in so doing, they will produce ever-new insights as they construct new connections and make modifications of their previous interpretations (Sipe,1998: 103).

Good stories or picturebooks, while being realistic and familiar, also often highlight a different version of ‘reality’ and allow the reader an opportunity to look at reality through different lenses. Maria Nikolajeva and Carole Scott (2000: 235) claim that picturebooks are “particularly stimulating because they elicit many possible interpretations and involve the reader’s imagination”. Part of the creative thinking and imagination involved in using picturebooks for teaching literac(y)ies is the characters and situations those texts feature. Picturebooks often have unknown or strange and magical settings, problems or characters. As Haynes and Murris (2012) observe, they are about outer space featuring aliens, the man in the moon or ugly monsters. Often these stories are built on binary opposites such as ‘beauty and ugliness’, ‘big and small’, ‘love’ and ‘hate’, ‘good’ and ‘bad’ as well as ‘human’ and ‘animal’. Kieran Egan (1993: 301) explains that these binary opposites are crucial for the imagination as “children might not use abstract concepts explicitly, but they constantly use abstractions in their thinking”.

These creative opportunities are an opportunity for both child, and adult, to diffract with the words and illustrations and to offer alternative possibilities or suggestions while filling the ‘gap’ in the story. Maria Nikolajeva confirms that children make use of complex narrative strategies or techniques in order to read the pictures, but she cautions that the visual images in picturebooks “seldom convey first-person point of view, which creates a confusing contradiction” for children (Nikoactlajeva, 2003: 242).

In contrast, Haynes and Murris welcome this ‘confusing contradiction’ for children. They argue, that it is this ‘gap’ between the text and the pictures and the “resulting indeterminacy of meaning [that] requires hard, intellectual work” (Haynes & Murris, 2009: 179). And so with their “multiple narratives, ambiguity and contradictions, picture books

are regarded as emotionally and cognitively demanding texts" (Haynes & Murris, 2009: 179). Each time the child intra-acts with the picturebook**,** the child needs to interpret and think about the text, the pictures and the 'gap' between the two sign systems which invites further reading, investigation and exploration and most importantly necessitates the creating of new meanings of readers of all ages (Sipes, 2012: 4). I tend to agree with Haynes and Murris' take on how the relationship between word and picture can work to provoke very diverse and lively discussions with my Grade Three children. As reported elsewhere (Thompson, 2013; Murris & Thompson, 2016), powerful enquiries e/merged as a result of this 'gap' in-between texts and pictures.

The ideas expressed by the children in the research study for my Master's degree, about this gap in-between texts and pictures agree with outcomes reported elsewhere (Haynes & Murris, 2012) that children do not accept the adult 'gap-filling' between image and words, but rather how "their imaginative intelligence had been made visible in their drawings by producing other possible readings of the text" (Murris & Thompson, 2014: no page). Through/with thinking together "philosophically with others in a community of philosophical enquiry and the material affordances of the paper and pencils, the children brought into creative existence their *own* ideas *through thinking with others* in a community" (Murris & Thompson, 2014: no page). In this way, with/in the material-semiotic act of drawing the children had created something new.

But as I will argue below, posthumanism has opened up new perspectives on this so-called gap between images and words. There is more to explore and that is the 'in-between'.

The examples from practice I explore in this thesis, investigate how the reading of picturebooks always involves affect *and* cognition and is therefore more demanding and complex than usually acknowledged in the field of literac(y)ies. Analysing children's responses include, but also go beyond what Haynes and Murris (Haynes, 2002; Haynes & Murris, 2000) articulated almost two decades ago, for example, analysing the children's ability to draw cognitively demanding inferences, their questions and their emotions when

thinking together about picturebooks. A posthuman approach includes analysing how not only the human bodies, but also the nonhuman bodies affect and are affected in philosophical enquiries with a picturebook (see, e.g., Murris & Haynes, 2018). Similarly, my analysis of the dis/embodied responses to the picturebooks we explored philosophically escapes humanist signification. More justice is done to the complexity of 'what is going on' in reality when adopting a posthumanist orientation, because it does not reduce meaning-making to mental operations that so-called take place 'in' children's minds or brains. Hence, the use of picture books as texts affects the relationship between teaching and learning through its reconfiguration of both teacher and learner, ontologically, epistemically and ethically. I discuss later how, by engaging with the material-discursive relationality *in-between* myself as teacher and the children, as well as the resources they use, a richer literac(y)ies experience is realised in the sense that more dimensions of any educational situation are taken into account when analysing data.

Although the humanist literature about picturebooks is helpful to explain the discursive power of the picturebook in the teaching of comprehension, an important posthuman shift is thinking through what texts are *doing*, materially and discursively, and *simultaneously*. Leander and Boldt (2012: 4) explain that:

> [T]exts are not about the world; rather they are participants in the world. Texts are artefacts of literacy practice, but do not describe practice itself. What emerges is the production of desire in which the child does not aim to produce texts but to use them, to move with and through them, in the production of intensity.

Similarly emphasising the notion of desire, Kuby and Gutshall-Rucker (2016: 36) have introduced the term "literacy desiring" to explain what is produced or created in-between people, events and materials rather than focusing on an end product, "the literacy desiring we conceptualize is about the present processes of producing – a force, a becoming, a coming together of flows and intensities" (Kuby & Gutshall-Rucker, 2016: 315). They write that the idea of desire in education means that the focus is on the new knowledge produced through the intra-actions with the nonhuman. Through desiring that, not so much

child as subject, but child as *phenomenon* (so, not as a bounded individual *in* the world, see Murris, 2016, Murris & Haynes, 2018) produces new realities (Olsson, 2009; Kuby & Gutshall-Rucker, 2016). Literacy desiring emphasises the fluid, sometimes inadvertent, "unbounded and rhizomatic ways multimodal" (Kuby & Gutshall-Rucker, 2016: xv). artefacts or things come into being through "intra-actions with humans and nonhumans such as time, space, materials and the environment" (Kuby & Gutshall-Rucker, 2016: xv). Deleuze and Guattari explain that desire is not synonymous with a negative lack or need, but rather it is seen as a positive force. For Deleuze and Guattari, the "logic of desire is about production –emerging, producing and becoming" (cited in Kuby & Gutshall-Rucker, 2016: 36).

As the literature explored so far clearly suggests, picturebooks are rich resources to open up discussions about philosophical concepts. However, a picturebook such as *Tusk Tusk* (McKee, 2006) has also been avoided by teachers and practioners because the story has no definite, concise happy ending and can easily provoke a discussion about race and sex, and the "intersection of the two: sexual relations between people of different colour" (Haynes & Murris, 2013: 1090). While Haynes and Murris suggest that picturebooks are successful resources to initiate discussions about controversial issues, they warn "against censoring books and subjects, and suggest that reading and discussion of literature creates a questioning and philosophical environment" (Haynes & Murris, 2012:177).

While not disagreeing with these possibilities raised by Haynes and Murris, Darren Chetty argues that books like *Tusk Tusk* (McKee, 2006), are just as able to establish as to challenge such prejudice and cultural norms. Racism and discrimination are also controversial topics that some teachers would prefer to avoid, particularly in post-apartheid South Africa, because these topics "touch on deeply held beliefs or personal sensitivities or allude to moral panics, for example concerning children's safety" (Haynes & Murris, 2012: 176). These topics present all kinds of dangers in the classroom and teachers may want to mediate or even limit the flow of the community of enquiry processes. In this way, teachers then take on the role of patrolling "boundaries of privacy and confidentiality"

(Haynes & Murris, 2012: 176) and also impose limitations on children's opinions that may be freely expressed.

While the book *Tusk Tusk*, (McKee, 2006), has been recommended as a way to encourage dialogue about race, tolerance, diversity and difference, a powerful critique by Chetty suggests that books like *Tusk Tusk* by McKee, (see also *Elmer*, McKee, 1989) are problematic in opening up discussions about discrimination and race, because this particular book does not accurately reflect how racism and discrimination actually operate in the world. Chetty (2014: 15) states that:

> [I]t is not neutral to ignore the foundations of systematic discrimination and the ways institutions have arisen out of and continue to perpetuate the oppression of minoritized groups.

These books do not show racism in terms of inequality or as the power to exclude. The author has excluded "culture, geography, power imbalances, indigenous and non-indigenous, religion, language, diversity and history" (Chetty, 2014: 24) as a source of or reason for racism. According to Chetty, this leads to an over-simplification of racism, to the "point of falsifying" (Chetty, 2014: 24) how racism works or operates in the world. Instead of creating a space for honest discussion, these books are almost a "form of ideology" (Chetty, 2014: 24) or a fable that conceals reality.

To create a space for honest discussion that does not conceal reality, awareness of our own limited epistemic viewpoints requires a certain amount of honesty and openness when diffracting with the world. Chetty suggests that if teachers/adults want to work to keep some children's voices from being privileged in a classroom while other voices are equally silenced or diminished, then we as teacher/adults need to be aware of our own privileged positions that we are entangled with and may bring to the community of enquiry. As the teacher/adult/, we need to be aware that our perceptions of each student is distorted by our own cultural lens and that "our students have a great deal to teach us and

that the world is a rich and complex place about which we always have more to learn" (Chetty, 2014: 24).

I think that the book *Tusk Tusk* should be used for philosophical enquiries and not just read to children as a book to fill the last five minutes at the end of a school day. I have a particular interest in what children themselves think about a story. What ideas puzzle them and how they diffract with the picturebook. I had chosen this book as a provocation for the community of enquiry for a number of reasons as suggested in the paragraphs above. I had used this book before with a similar age group and in my experience, the children had responded in a positive manner to the book. In the current political environment, it is as important now, as it was at the end of the Apartheid era to have open and honest discussions regarding race, age and gender discrimination so that the children in my class can be involved in such discussions so that these value positions be interrogated.

Entangled with the classroom, the book, human and nonhuman bodies, is the link or thread connecting to the past. Not only have I used this picturebook in previous P4C enquiries, but Karin Murris used *Tusk Tusk* (2006) as part of the University of the Witwatersrand's "creation of good practice audio-visual resources to be disseminated to all higher-education institutions in South Africa" (Haynes & Murris, 2013: 1089). Karin visited the school where I was a Grade Three teacher and led six philosophy sessions over a period of three weeks with the children in my classroom as part of the 'good practice' case study. In an article based on this intervention, Haynes and Murris (2013: 1091) argue that:

> Collaborative thinking between teachers and children is a social, relational affective and imaginative practice. Its identity is explicitly and implicitly shaped by teacher's ideas, and therefore informs what is worthwhile in class. Often unexamined beliefs, one's own school experiences and deep-seated emotions, connected with freedom, control, power and social status, influence how we conceptualise education, how we decide what is worthwhile and who is worth listening to from an epistemic perspective.

It is the idea of epistemic justice suggested by Haynes and Murris that I will draw on later in this chapter. As stated before, the philosophical community of enquiry pedagogy positions children as rich, resilient and resourceful, not as fragile, vulnerable and in need of protection by an adult who is an epistemic authority, who knows better and also knows what should be included as best practice in terms of what children need. This is considered a kind of onto-epistemic injustice (Murris 2016). Simply by "*being* child (onto), young people are discriminated against because of their age and judged to be epistemically inferior" (Murris & Thompson, 2014: no page).

Community-questions-paper-pen-ink-hands

Decisions about the political correctness of the use of a particular picturebook are entangled with the pedagogy of the community of enquiry (CoE) at the heart of this research project. It is not only the pedagogy I adopted for my project, but also my research instrument to create data. The CoE is a powerful pedagogical and research intra-vention where the children, as a class, intra-act with a provocation (in this case a picturebook) and are then encouraged to ask their own questions as starting points for philosophical enquiries. As part of the enquiry, ideas are expressed, listened to and challenged by the community (myself, the other children in the class, the chairs, the book etc.) in a caring (ethical), creative and critical manner the focus is the generation and discussion of philosophical concepts as lived in their everyday lives. It is the idea of working democratically *as* a group not just *in* a group that offers "rich decision-making challenges and educational opportunities as it raises awareness of how power can operate in collaborative thinking" (Haynes & Murris, 2013: 1090).

Re-viewing the video of the data created from the community of enquiry, I watch myself as I opened and began to read the book *Tusk Tusk* (2006), to the children. The children were all seated in front of me on the large carpet at the front of the classroom. I sat on a small chair and held the book so that all of the children could see the pictures page by page and follow/read the text if they wanted to do so. This materiality played a significant role in the

ideas produced. After I had finished reading the story, I paged silently through the book showing the pictures again to the children. Once I had finished showing each page, I asked the children to think of anything that was puzzling them, something that they wanted to investigate or find out a bit more about. I reminded them that sometimes we could find the answer in the story, but they should try and think about something that does not have a clearly defined answer and that we could possibly find the answer together.

I sat quietly for approximately 1 to 2 minutes and the children did the same. This quiet time is generally used as a space to think about the story or as described above, anything that is puzzling or worth investigating. The 1 or 2 minutes are never a fixed amount of time (see also Chapter Four), because I usually gauge by the children's movements, and end the quiet time when their body movements increase significantly. I understand this as a way of listening to them, rather that judging this as the children becoming 'restless', or 'bored'. This listening in-between their bodies and my body, the carpet, the wall etc. and sensing it would be a good moment to 'start', I asked the children to move back to form a circle around the edge of the carpet, to work in pairs with the person sitting next to them and explore each other's questions. I asked them to either choose the question they liked the most or to try and combine their two questions into one. I went around the circle asking each pair to share their question with the rest of the group, I wrote each question down on a large sheet of paper, using thick felt tip pens.

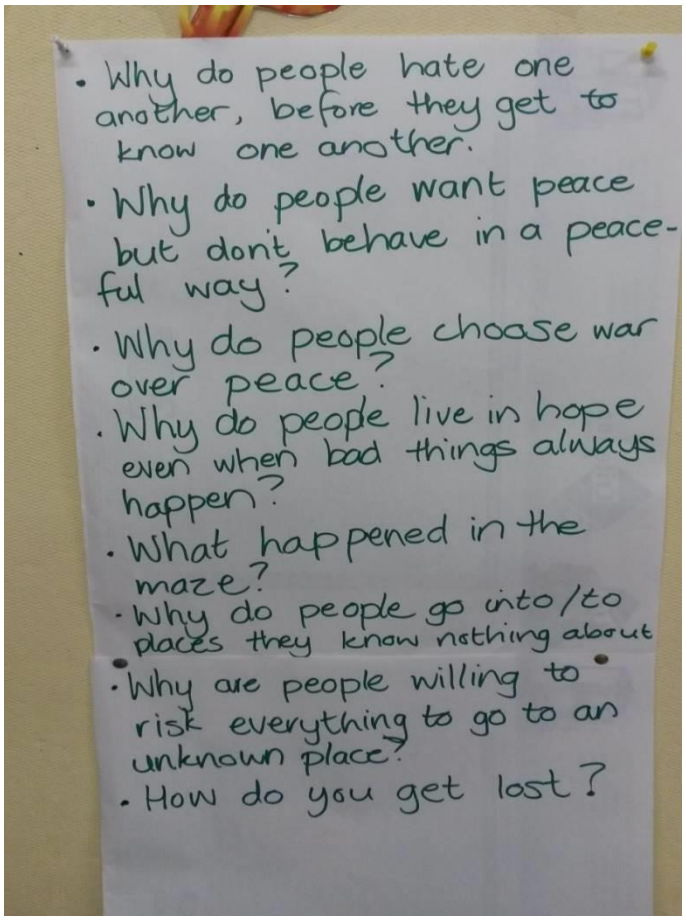


Figure 2.3: Questions-paper-ink-hands.

The 4 Cs of P4C

It is claimed that by participating in a community of enquiry all members, including the teacher, develop the caring, creative, critical and collaborative richer, more sedimented thinking identified by Lipman (1991) – the shorthand of the '4 Cs of P4C' for many practitioners. Engaging in 'care-full' thinking during a discussion is not to be regarded as not voicing one's own opinion in fear of hurting someone's feelings. Rather, being 'care-full' is taking care about what and how things are verbalised. Being care-full members of the community of enquiry asks that the children take responsibility for their words and actions. Sharp expresses this move away from the psychological by emphasising that caring thinking "attends to the feelings of students as well as their thinking" (Sharp, 2007, p. 248). The inclusion of caring thinking has an impact on literac(y)ies, and other subjects, because the social concepts of "respect and care permeate the practice of all other thinking strategies, providing an ethical overlay which reinforces the interpersonal dimensions of thinking" (Splitter & Sharp, 1995: 10).

Posthumanist literature and research helps to reconfigure the notion of embodied thinking with the help of affect theory (see, e.g. Massumi, 2015, Dahlberg & Moss, in Olsson, 2009, De Freitas & Curinga, 2015). With the reconfiguration of the subject as unbounded, the notion of *affect* does justice to the posthuman deconstruction of individualised bodies as containers of feelings and emotions that are private to a self which I will explore in much detail towards the end of this chapter. For now it suffices that affect is not the same as feeling or emotion and could be described as an "experience of affections of the body by which the body's power of acting is increased or diminished, helped or hindered" (Buser, 2013: 232).

In the mainstream P4C literature (Lipman, 1977; Splitter & Sharp, 1995), creative thinking in children is connected to the children's and teacher's ability to create knowledge imaginatively and offer opinions and ideas that are connected to other's thoughts and ideas. For example, in their earlier work, Haynes and Murris (2011) argue that P4C requires a developed level of inventiveness in thinking processes to make links and

connections to other threads or trains of thought. This kind of childlike and playful lateral thinking is important for literacy. As Van den Brink-Budgen (2002: 28) points out, the ability to engage in creative thinking offers opportunities to comprehend, evaluate and use the information given in creative ways even when a child might not have the 'background knowledge' of a particular concept. Creative thinking enables the making of links to other subjects or experiences, so that the knowledge that is created is not compartmentalised or isolated (Lipman, 1977).

But of course creative thinking takes on a different dimension in posthumanism as the ontological starting point of relationality, rather than individuality, makes a difference for what counts as 'new'. When a thinker is already part of and entangled with a world she is not separated from, as a matter of fact the thoughts produced do not belong to any particular individual. Neither thoughts, nor nonhuman bodies, nor human individuals are bounded containers with insides and outsides moving through space and time.
As we have seen in Chapter One, the idea of a community of enquiry is predominantly from a *human*-centred perspective and assumes (like most current approaches to teaching and learning) that intelligence and consciousness is 'in' the bounded human body. Critical posthumanism reconfigures the concept of 'community' through a more inclusive notion of 'people', previously excluded from what counts as a person and a fully human: women, people of colour, people living in poverty, gay people etc., and also includes the nonhuman (Barad, 2007; Braidotti, 2013, 2018). I have also argued that posthumanists tend not to include children as excluded from the notion of fully human and it is particularly in this area that my research offers something 'new'.

It is almost impossible to write about P4C adopting posthumanism as my navigational tool (Braidotti, 2013). Key thinkers in the field tend to refer to the importance of critical thinking (one of the other 4 Cs of P4C) for example, as the activity of making distinctions and connections, and recognising inconsistencies in an argument. They also write about children in need of becoming critically aware of their own thoughts and reflective practises so as to develop the capacity to resist the overt persuasion from more articulate peers (Haynes, 2003; Vansieleghem & Kennedy, 2011; Splitter & Sharp, 1995). However, an ontological shift is discernible in the field (see, e.g. Kennedy, 2012; Murris, 2016; Murris &

Haynes, 2018). This shift is not present in the South African national curriculum CAPS documents (DBE, 2011), and the curriculum guidance does not offer clear guidelines how critical thinking and reasoning in the humanist sense can be incorporated into daily class teaching. Splitter and Sharp (1995: 10), for example, write that critical thinking in literacy involves the child's "thinking about thinking", which happens when the child thinks about the meaning of abstract concepts. For example, as the child thinks about their everyday language and questions the language itself, critical reflective thinking is taking place. How this should be done in literacy education is unclear, but critical reflective thinking is at the heart of comprehension. It is implicit in CAPS that all questions are asked by the teacher (DBE, 2011: 23). However, these questions are often based solely on the text and do not really engage children in a deeper involvement with the text or invite them to go 'beyond' the text.

The last 'C' of the 4Cs of P4C, collaborative thinking, e/merges when members of a community of enquiry intra-act and diffract *as* a group rather than thinking individually *in* a group. The difference being that in a group, the members think and behave as individuals, but when intra-acting as a group, the members contribute, compare, suggest and test new concepts that e/merge, build on to one another's ideas and arrive (possibly) at a consensus, although dissensus is also celebrated. Crucially, individual boundaries between thoughts, ideas and feelings cannot be identified, because they (ontologically) *are* not units in space and time. I agree with Kuby and Crawford (2017: 29) who argue that "posthumanist theories helps us to think of the collaborative literacies…that manifest in assemblages, flows, processes and becomings".

As a way in which to explore philosophical concepts during the community of enquiry as assemblages, flows, processes and becomings children's creation of and engagement with philosophical questions as provocation is critical. Like others in P4C, Jana Mohr Lone (2011) points out that the questions are raised by the children and need to appeal to the group. But I have found in practice that their exploration of philosophical concepts is often different from that of adults, more playful and experimental – something adults can learn from, and this should therefore appeal to posthumanists, because they emphasise the experimental nature of their research practices (see for example: St Pierre, 2004, 2011;

Lenz Taguchi, 2010). P4C builds on children's often "experimental stance with new ideas, their ability to think out loud and to change their mind often without strong attachment to particular beliefs" (Haynes & Murris, 2013: 1091).

'Raise your hand if you know the answer'

Like in many schools, when a child wishes to speak or answer a question in my class, they indicate this by raising their arm up straight above their head, usually with the index finger extended, pointing upwards. The child has to wait until the teacher calls upon the child and they may then speak. Joanna Haynes (2008: 65) expresses her political concern about this procedure as "rules for classroom talk are summaries of prohibition and restriction, rather than invitation, encouragement and guidance. The emphasis is too often on holding back, waiting, or being invited by an authority figure". In a classroom, raising a hand and waiting to answer a question also helps control the noise levels so no one is shouting or calling out the answer. The teacher then tends to choose the child with their arm up, and therefore has control over who answers the question, and this can also act as a form of assessment. The child knows or does not know the correct answer as most questions asked in class are factual and rhetorical, that is, the answers are known by the teacher who asks the questions (Benjamin & Eccheverria, 1992). Often, the child who does not have their hand up may also be called on by the teacher to give an answer for the teacher to check level of attentiveness or consolidation of the concepts being taught.

At the same time, it is seen to be a reasonably fair system as everyone should be given an opportunity to answer, but for all sorts of complex reasons a child will not put up their hand.

Figure 2.4: Hands responding.

We tend to judge the child who does not participate in this way as maybe ‘shy’ or ‘lacking in confidence’, but it could also be that a child is daydreaming or simply forgets that in philosophy we do things differently, or perhaps does not want to play this ‘game’ of answering questions the teacher already knows the answer to. Much, if not all, is speculation.

In my P4C lessons, the children do not raise their hands, but instead I have taught them to extend their arms outwards towards the centre of the circular space with their palms facing upwards, as if offering something, like an idea or thought, to share with the rest of the community. This can be seen in the above photograph (see Figure 2.4), where the children on the right in the photograph have their arms outstretched and their palms facing upwards. In the community of enquiry, the teacher shares the authority (Michaud & Valitalo, 2017) who decides and chooses the next person to talk, but rather the child who last spoke in the community picks the next person to contribute their ideas to the community and they are encouraged to build on previous speakers.

Watching the video footage again, I am aware that at the start of my journey with P4C, I would have focused on the human element in the photograph only. For example, five years ago I would have focused exclusively in my research writing on and discussed the girl's perceived personality, her shyness maybe at speaking to an audience, the fact that she is considered an 'at-risk-learner' with barriers to learning that include memory retention concerns. I would have assumed that she had forgotten the hand position during a community of enquiry. I may have considered that once she had suddenly noticed the way her hands should be, the *correct* manner of engaging with the group she had to mask her own behaviour to fit in with the socially acceptable behaviour of the others. I may have even said that her behaviour had been influenced by the group. From a humanist perspective, I might have claimed that the girl thought about her actions first and then acted upon her thoughts through her body movements.

Again, from a humanist perspective looking at the video, I probably would only notice the circle of human bodies and analyse what they are doing or not doing and saying. I would also notice my own body as part of the community of enquiry, but I am also different – my clothing and my body positioning stand out. In this particular 8 second clip of the video, I am doing most of the talking, while the children listen. The binary divides are apparent - adult/child, teacher/student. Lenz Taguchi (2010: 54) says that this representational perspective "assumes that language is a transparent medium that transmits a true picture of reality to the knowing mind". Understood from a representational perspective, my understanding of the children's bodies, their movements and what they are thinking reflects what is happening in the world through my mind that is not a part of that world. The knowledge I construct as a researcher is mediated through language - a perspective that makes the "human become observers of the world" with practices of knowing and being separated from each other (Barad, 2007: 160). With its privileging of the human, the humanist perspective is both anthropocentric and logocentric. Humans and language are hierarchically elevated above nonhuman bodies because it is through human language that reality and practices are represented. What we know and understand as reality is

shaped by humans' "collectively constructed discursive meaning in language" (Lenz Taguchi, 2010: 12).

By taking a detached researcher/observer position in analysing and psychologising the behaviour I have effectively shut down options of seeing any potentialities or new knowledge emerging. Dahlberg and Moss (in Olsson, 2009: xxii) suggest that teachers should be "attentive to the conditions under which something new is produced", rather than representing the children and interpreting events solely in terms of the normative theories that assume unilinear developmental stages or learning goals. And even poststructuralist and social-cultural approaches to literacy research, although not holding on to the objectivity of the researcher, do not do justice to the materiality involved in the teaching of comprehension.

Disrupting the normalising prescriptions of developmental psychology that positions me as a detached researcher/observer, I see myself instead as already materially and discursively entangled in this event. I am part of the video and the photograph of the particular scene as I hold it and look at it, but I am also *in* the photograph with the children and the other nonhuman bodies in the classroom. I am also entangled with the research and the pedagogy and so I try and work with the data differently, but it is a real challenge.

Reading the foreword of Olsson's book by Dahlberg and Moss (in Olsson, 2009: xxiv), I am affected by the following words:

> [H]owever, while you turn in circles among these questions, there are becomings which are silently at work, which are almost imperceptible.

It gave the invisible questions floating around us and between us, a ghostly presence. The questions themselves were entangled and almost imperceptibly intra-acting with/in the humans. The questions do their silent work, affecting and being affected, turning into new questions that provoke further thinking and other ways of being. New knowledge e/merges, an iterative process of worldmaking (a 'worlding'). If the questions mattered in

this entanglement, then what else mattered and what was being affected and in turn affected other bodies?

Matter matters

Drawing on quantum physicist Niels Bohr and feminist theorist Donna Haraway (1991, 1997, 2008), posthumanist, physicist and queer theorist, Karen Barad proposes that knowledge is constructed through "direct material engagement with the world" rather than by "standing at a distance and representing" the world (Barad, 2007: 49). As explained in Chapter One, Barad suggests a relational materialist or posthumanist philosophy which takes into consideration the agency of the environment, materials, spaces and the performative agency of matter (Barad, 2003, 2007). The concept of materiality is always more than being 'just' matter because matter is also entangled with the ideas of "relationality, difference, excess, force, vitality, and causation in complex terms – all of which makes us recognise that phenomena exist in a multitude of interlocking forces" (Coole & Frost 2010: 23).

Matter then, is a complicated and diverse process, relatively open and consisting of productive possibilities which are entangled with all humans. And so with this understanding, the concept of agency is inevitably re-considered. Matter is defined by Barad (2007: 151) in the following way:

> [M]atter does not refer to a fixed substance; rather matter is a substance in its intra-active becoming - not a thing but a doing, a congealing of agency. Matter is a stabilizing and destabilising process of iterative intra-activity. Matter does not refer to an inherent, fixed property of abstract, independently existing objects; rather matter refers to phenomena in their ongoing materialisation.

Her posthumanist approach suggests that "learning and knowing takes place in the interconnections in-between different matter making themselves intelligible to each other"

(Barad, 2007: 140). It is through the “supplements and extensions that connect to in different ways”, that the child e/merges through, and as part of their entangled intra-actions with everything else. Being entangled is not just or simply to be intertwined with another, Barad (2007: ix) explains entangled as in:

> the joining of separate entities, but to lack an independent, self-contained existence…thereby making it impossible to differentiate in any absolute sense between creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future.

Barad explains her agential realism or posthumanist philosophy as the “material-discursive” and says that the knowing or understanding of the world can be thought of as the “result of a process where the material and the discursive are mutually implicated in the dynamics of intra-activity” (Barad, 2007:152). Intra-action is a new term coined by Barad and means multiple bodies, human or nonhuman, making themselves intelligible to each other through direct engagement, entanglement or interference (Barad, 2007: 29). Lenz Taguchi draws on Barad and explains that intra-action relates to the “relationships between organisms and matter (human or nonhuman) which are understood *not* to have clear and inherent boundaries but are always in a state of intra-activity” (Lenz Taguchi, 2011: 40). Intra-activity is considered different from the familiar idea of interactivity which refers to the “inter-personal relationships between at least two persons or entities that are understood to be clearly and inherently separated from each other” (Lenz Taguchi, 2011: 40).

The event of re-turning to the classroom through my gazing at the photograph (see Figure 2.4) is constituted by infinite entanglements. Their relationality is prior to their individual parts. Researching these entanglements, involves tracing some of them and paying attention to the ‘in-betweens’, a pursuit that is always incomplete and unfinished and for the agential cuts enacted I am response-able for as a researcher. This arms-legs-hands-humans-glass-window-space-time entanglement is entangled with the policies and management of the school, its architecture, the current curriculum, outcomes-based

education, South Africa's post-apartheid education policies, international literacy benchmark testing and so forth. Barad (2007: 180) argues that:

> time is not a succession of evenly spaced individual moments. It is not simply there as a substance or measure, a background uniformly available to all beings as a reference or an ontological primitive against which change, and stasis can be measured.

While this entanglement is the result of intra-actions discussed above, the becoming of the entanglement "is an unfolding of time but the inexhaustible dynamism of the enfolding of mattering" (Barad, 2007: 180). As part of the unfolding entanglement, I intra-act with the photograph as it e/merges from the intra-action with the materiality of the school.

Layout of the school

I draw on Karen Barad's concept that space is not a backdrop against or container in which events unfold but rather, she argues that space is "not a given, but rather that space and society are mutually constituted and that space is an agent of change, that is, it plays an active role in the unfolding of events" (Barad, 2007: 224). For Barad's space is not a passive background object or container in which humans act (as Newton thought), but rather space is part of the entanglement from which the new e/merges. I diffract here with the architectural layout of the school, and my classroom in particular, to make visible the affect the space has on what is going on inside the classroom in order to show that "neither space, nor time, nor matter is neutral" (Thiel & Jones, 2017: 318). The material discursive apparatus of the school buildings and the classroom produce "ways of being and knowing – or literacies (social and political practices)" (Thiel & Jones, 2017: 321).

My classroom is situated in an area of the school known as the Junior Quad. The six classes are built in a horseshoe shape, and my classroom has large glass sliding

doors/windows looking into the quad. My classroom is indicated by the yellow arrow in the pictures below (see Figure 2.5 and Figure 2.6).

Figure 2.5: Aerial view of the school.

Figure 2.6: Street view of school's Junior Quad. (My classroom is indicated by the arrow).

The two opposite walls of the classroom have large glass sliding doors. These glass panels serve as windows, walls to stick things on, or they can be opened and used as doors. The glass panel in the picture below (see Figure 2.7) faces out into the quad. There is a corridor that runs in front of my classroom on the other side of one glass window. The corridor is a main walkway that links the Intersen Phase (Grade 4 to 6) of the school with the High School. As a result, the volume of pedestrian traffic is high. During the day, there are many other staff, executive staff, parents, support staff and children who use this corridor. The result is often an elevated level of noise throughout the day and the children and I often have an audience and can also be viewed as a kind of surveillance. How the possibility of looking into my class as they walk past works to govern bodies is explored in Chapter One.

While the glass window can act as a barrier, not all of the outside noises, human and nonhuman movements, sunlight etc. are always already part of what happens ‘in’ the classroom. Inside/outside classroom binaries are disrupted. What happens on the ‘outside’ is also already part of what happens on the ‘inside’. Sometimes, I experience the porosity of my classroom and this kind of ‘bordercrossing’ as gentle and undisturbing, yet on other days, this classroom environment annoys me, and I can feel my levels of frustration rising. How the children experience these inside/outside entanglements is uncertain and the influence it has on teaching and learning cannot be determined.

I have the children’s desks arranged in groups, but this arrangement is not popular in the Foundation Phase classes in school. Desks are routinely arranged in rows all facing the smartboard at the front of the class. Teachers in the school have commented that Foundation Phase children must face the board directly; this is to ensure that when children are copying from the board, correct visual processing, eye-hand coordination, spatiality and directionality are maintained. Other teachers have expressed the opinion that sitting in groups encourages unnecessary talking.

Figure 2.7: Inside looking out.

Thinking differently about listening

A critical posthumanist perspective moves away from the humanistic idea of thinking and reflection as inner mental activities inside a human being and as separate from other bodies. In the same way that I do not see my classroom as having a separate inside (e.g., classroom furniture, carpet) and outside (e.g., corridor, quad) with a glass window that is located on the edge (its 'skin'), for posthumanists the human body is also not bounded by its skin (Barad, 2007). Human and nonhuman boundaries are porous and categories that keep insides and outsides separate are man-made (Barad, 2007, 2013; Braidotti, 2013). This has implications for the teaching of comprehension, because where does the thinking take place when we think about a text and philosophise about core concepts as we do in a Reggio Emilia[8] inspired P4C? I will discuss the Reggio Emilia approach in greater detail in Chapter Three. Karin Hultman and Hillevi Lenz Taguchi (2010: 536) suggest that:

> [T]hinking can be understood to take place in-between heterogeneous bodies and agents, rather than being something localised inside the mind of an isolated human. Thinking is to be understood as distributed in networks and assemblages of matter, organisms and discursive meaning in an encounter, rather than being based on recognition, representations or everyday common sense.

We have already seen above how thinking differently about thinking shifts our understanding of the 4Cs of P4C. We cannot distance ourselves from our own thinking as thinkers, that is, make thinking an object of our thinking, because we are always already part of the thinking as a process (Murris & Haynes, 2018). There is no beginning, middle or end to the way new knowledge is created, rather the process is fluid and entangled. It is through the intra-actions between the child-environment-space-time-materials that new connections e/merge that are "productive, potentially transformative" (Burnett & Merchant, 2016: 276).

[8] Reggio Emilia, a city in Northern Italy, is the site of one of the most innovative city-run pre-primary systems in the world (Edwards, Gandini & Forman in Edwards et al, 2012).

The posthumanist perspective as a navigational tool (Braidotti, 2013) has started to shift theory and practice in many disciplines, including education. The ontological paradigm shift creates awareness of how educational encounters consist of material-discursive entanglements of human and nonhuman bodies. The materials are considered as performative agents. Mutual transindividual agency is considered to happen in the entanglement and as a result "newness is produced" (Kuby, 2017: 16).

The theories underpinning posthumanism see the process of thinking in a community of philosophical enquiry as not unilinear or circular, but rather "rhizomatic and provoked by someone or something that raises philosophical questions" (Murris, 2016: 179). In a community of enquiry, the space between teacher and learner is fluid and in constant flux with no fixed boundaries in between human and nonhuman bodies. By problematising and interrogating the meaning of concepts by asking philosophical questions, educators and students connect strands of entangled meanings and concepts and make new endless patterns (Murris, 2016: 186). David Kennedy (2012: 2) suggests that the problematising and the interrogation of the philosophical concepts is rhizomatic because the concepts are contestable.

Posthumanism does not only look at how the human bodies make knowledge together as part of a community of enquiry, but also how the relations and intra-actions through continuous diffractions between the human and the nonhuman, the space, environment, time and materials also create new knowledge. For example, re-turning to the clip, a community of enquiry was forming and be(com)ing. The girl in Figure 2.4 raises her hand and then lowers it again. As a teacher, I often engage in polite listening. I listen to respond to the children in my class and this type of listening encourages the nature/culture and adult/child binaries we are familiar with. Children are often described and treated as 'other' and in educational contexts teachers' responses to children's contributions are influenced by

> social perspectives both on child and on ways of knowing. Such views tend to permeate institutional expressions of authority in ways that can be more or less

> acknowledging or dismissive of children's experiences. (Haynes & Murris, 2013: 1086).

Miranda Fricker (2007) concentrates on epistemic practices through which knowledge is learned, and their social situatedness, which "exposes their ethical and political aspects" (Fricker, 2007: 1). Fricker (2007: 1) states that social "identity and social power are involved in two of the most basic epistemic practices." The two practices include: "communicating knowledge to others by telling them" and comprehending "one's own social experiences" (Fricker, 2007: 1). Fricker claims that there are two types of epistemic injustice that involve "moral wrongdoing to a person in their capacity as a knower: testimonial injustice and hermeneutical injustice" (Haynes & Murris, 2013: 1087). In cases of testimonial injustice, a prejudice for example, social identity, accent or age may cause a listener to attach a "deflated level of credibility to a speaker's utterance, and sometimes this will be sufficient to cross the threshold for belief or acceptance" (Fricker, 2007: 17) so that the listener's prejudice may cause him to miss out on a part of knowledge. Fricker suggests that there are further consequences to testimonial injustice: in the absence of epistemic trust and equality, a person's confidence in interpreting their own social experiences gradually diminishes, and self-confidence as a knower is worn away. Fricker's arguments can be applied to the idea of ageism that are normalised in educational settings and that help to underpin developmentality (Murris, 2013). An example of ageism practice is the habitual disregard of what children say, based on the argument that they are 'only children'. David Kennedy states that child is often "regarded as epistemically incomplete: the child as the naive, the irrational other, the magical thinker" (Kennedy, 1996: 30). Andrew Stables argues that 'living is semiotic engagement', and that because children are fully alive, they are as fully "semiotic engagers" as adults. As a result, "children are not incomplete, unprepared, or lacking purpose" (Stables, 2008: 4).

In order to listen to children's 'voices', we must constantly "question the pigeon-holing of child thinking: as naïve, as other or as mere indicator of a pre-determined developmental phase" (Haynes & Murris, 2013: 1085). Murris suggests a form of listening called "responsive listening" (2016: 137). It is responsive listening that that "requires adults to

think about what a child is saying as well as being fully aware of the other material-discursive elements of the situation" (Murris, 2016: 137). It is important to carefully examine or to listen responsively to the "complex web of verbal and written signs, the illustrations as well as the children's drawings and work, in an effort to prevent epistemic injustice" (Haynes & Murris, 2013: 1091).

Drawing on Fricker (2007), Haynes and Murris make a case for philosophising with "young children [a]s a practice that both exposes forms of epistemic injustice against children as well as showing us possible ways to aim for more empathetic and fair understanding of children's thinking" (2013: 1086). The concepts of responsive 'listening' and 'voice' remain challenging aspects of early childhood experience, yet they "simultaneously carve out new and fairer ways of working" (Haynes & Murris, 2013: 1085) with child. This requires the teachers to take up a responsive listening, "guiding and co-enquiring role, and to make space for fantasy as a meaning-making tool, to impregnate words and pictures with children's own fictional and real-life narratives" (Haynes & Murris, 2013: 1091).
Indeed, assemblages are often more robust when they are notably heterogeneous, coupling words with other kinds of material expression. DeLanda, drawing on De Freitas and Curinga, (2015), suggests that an important part of conversations is the content of the talk, but there are also many forms of bodily expression such as posture, dress, facial gestures that are not always linguistic. Child-body-space-time-materials-environment create new knowledge as part of the conversations and not just between children or between a child and a teacher.

As I diffract with the photograph, I notice that a question that was raised in class has invited and prompted a response from the girl through her raised hand. While the humanist perspective acknowledges responsive listening as an important attitude and aspect of a community of enquiry, the critical posthumanist view argues that the act or process of listening and hearing sounds is a material agent intra-acting with the child and as a result, new knowledge e/merges. De Freitas and Curinga (2015: 257) suggest that:

> Listening is thus a complex material engagement at the molecular level, beneath the level of a sonic unit of meaning, where one absorbs the pauses, the accelerations, fallings away and other bodily performances that produce the sounds.

Intra-actions amongst the human, nonhuman and the resultant listening is a valuable experience for me as a teacher and as a researcher because to think about listening in this way is unusual in educational research. Bronwyn Davies suggest that the listening that e/merges is about being open to affecting and being affected by the sounds, it is about "being open to difference and to difference in all its multiplicity as it emerges in each moment in between oneself and another" (2014: 1). The sound follows the unfolding of intra-actions that are taking place between the humans, nonhumans, space, time and matter and takes seriously what Goodman (2010) calls the ontology of vibrational force. "Sound is not merely a phenomenological experience-vibrations passing through matter at frequencies – it depicts a set of social relations" (Wargo, 2017: 394).
Inspired by Barad, Lenz Taguchi (2010: 61) points out the difference thinking about listening differently makes. Being and knowing cannot be separated and as a result:

> we emerge through intra-actions with the material reality around us, this must have consequences for how we teach, perform, and evaluate learning processes… is at all possible to teach without being in a state of listening dialogue with the children as well as with matter, artefacts and environments.

Affecting and being affected

As discussed above, the notion of developing 'caring thinking', valued in P4C as one of its objectives, made it possible for them to engage with the difference between *emotion*, *feeling* and *affect*. Drawing on Spinoza's concept of affect, Buser (2014: 232) writes that affect may be described as an "experience of affections of the body by which the body's power of acting is increased or diminished, helped or hindered". From this, it can be

understood that awareness and thought become acts where bodies are in continual process of affecting and being affected in relation to other bodies, both human and nonhuman.

In the video footage discussed above, the girl uses movement to conduct a silent communicative exchange with other bodies and hands in the space. Hackett and Somerville (2017: 376) argue that “sound and movement are communicative practices that always occur as more complex entanglements of relations with more-than-human worlds”. Often the gesturing, movements and sound are not always about “transmitting information or intentionally designed signs”, but instead they are about embodied and “sensory experiences in which communication about and in place occurred through the body being and moving in place” (Hackett & Somerville, 2017: 374). Olsson (2009) explains that because the thought is attached to movement of the body that it therefore cannot be reduced to emotion.

MacLure (2013) points out that the use of words to represent bodily experience can obscure the experiences themselves. Watching and transcribing this short video clip, I struggled with the inadequacy of language and the way in which the words needed to be arranged in grammatical order, in linear patterns, in the sequences of sentences, creating therefore partial, unsatisfactory accounts (Hackett & Somerville, 2017), in this case, of the young girl’s intra-action in the space of the carpet in the classroom. I struggle to articulate an analysis of this event. But rather than being frustrated by my lack of control, I have come to realise that posthumanism does more justice to the complexity of literac(y)ies research (especially in terms of explaining movement) than previous research conceptual frameworks. For example, Jon Wargo (2017: 396) explains the turn to posthumanism as being able to “capture the messiness that often leaked off the page and was muted in my more reductionist analysis (e.g. analytical coding by theme, topic or code occurrence)”. According to Hackett and Somerville (2017: 384), literacy, especially print literacy and writing, but also orality, takes on a logical linear sequence of meaningful narrative, but when movement is included, this linear sequence is disrupted. The chronological, sequential ordering of time is not possible as movement and vocalization sound

simultaneously. It is also difficult to move away from the traditional anthropocentric and logocentric stance when that has always been the way I have thought, being taught as a student, the way I have taught others and the way I have researched, particularly in thinking about how children come to understand what literacy learning is specially in school spaces (Kuby, Gutshall Rucker & Darolia, 2017). Finnegan points out the common assumption across multidisciplinary theories of communication that messages are first constructed in the brain, then communicated through the body. In contrast, Sheets-Johnstone (in Hackett & Somerville, 2017: 388) suggests "thinking in movement", arguing that "thought can originate in the body, not just the brain." The proposition that thinking can originate in the moving body opens new possibilities for understanding young children's e/mergent language and literac(y)ies practice as being generated directly and "spontaneously through multiple bodies coming into being in the world (rather than children's being in the world providing inspiration for thoughts that may then lead to literacy practices)" (Hackett & Somerville, 2017: 388).

Posthumanism opens up possibilities to observe and listen differently and to move away from judgement and interpretation. For example, it was tempting to theorise that, for example, her gender caused her to withdraw her hand using social constructionism as a theoretical framework. While the hand movements were not the same as what the other hands were doing, her intra-actions with the timespacebodies reconfigured new movements and new knowledge e/merged. Barad (2007: ix) explains that "memory does not reside in the folds of the individual brains; rather memory is the enfolding of space-time-matter written into the universe, or better, the enfolded articulations of the universe in its mattering". This girl's movement and resulting new knowledge e/merged by resisting psychologising the event, and instead by tracing the material-discursive entanglements: with/in/on the carpet, her memories of previous enquiries, habituated movements when wanting to speak in class, internalised school discourses, wanting to please me, not wanting to be different from the others and so forth. Her eye-arm-hand movements were intra-acting with the established rules that had been orally communicated in previous intra-actions and much more that is not necessarily visible. The circular seating is not mere background to what is happening, because everyone can clearly see each other, and this

visibility is part of the material-discursive entanglement. Space plays an active role in the event, including the glass window and the corridor.

Many scholars interested in the philosophies of Deleuze and Guattari and critical posthumanism, draw on the monist philosophy of Spinoza. For example, Brian Massumi (1995) also speaks of the body in terms of its capacity for affecting and being affected. These are not two separate capacities, but rather work simultaneously. When a body affects another body, it is in turn, opening itself up to being affected and in "a slightly different way than it might have been the moment before" (Dahlberg & Moss, in Olsson, 2009: xxiii). As we have seen above, affect is not just emotion, because it cannot be "reduced to personal feelings and emotions in the everyday sense. Feelings and emotions are just one very partial expression of affect" (Dahlberg & Moss, in Olsson, 2009: xxiii). Affect is not something that is given but is experienced in time and as duration. Affects increase or diminish, aid or restrain the body's power to act. Affect is about what the body can *do*. Affects are the "productive organisation of encounters increasing our capacity to act and be in the world" (Springgay, 2011: 67). It is the seeing the world from a perspective of e/mergence, potentiality and connections – as a complex set of assemblages that continuously connects, bifurcates, combines and transforms" (Dahlberg & Moss, in Olsson 2009: xxiv).

The other bodies-arms-hands were affected by the space and were invited to participate with hands offered into the space as described above. In turn, the bodies-arms-hands affected the girl and through this intra-action, her body positioning/movement/experimentation changed.

The space created by the circular seating of the community of enquiry, the rules, the picturebook, the invitation to ask questions, the carpet, the glass window invited the girl to put up her hand, but then she withdrew although she did not take up the offer – she responded in a different way; the space had been affected by the other bodies in the class and in turn affected the girl (without assuming here linear causality). Massumi (2017: 16) talks about the body's movements as having a "kind of depth that stays with it across all its

transitions-accumulating in memory, in habit, in reflex, in desire, in *tendency" (*Massumi in interview with Zournazi, 2002).

Liselott Olsson (2009: 6) identifies the movement as a potentiality, a way of experimentation and new knowledge emerging and becoming. Olsen echoes Massumi's explanation of hope and potentiality and says:

> In the middle of this particular time and space, they can bring back some hope to us, a hope that is directed nowhere else but into the present moment. Going back and picking up the different styles can give us access to a hope that really is nothing more than a trust in the moment. This trust consists of a conviction and belief in things *already* finding themselves in movement.

From the point of view of bodies joining other bodies the "important thing becomes to seek to open for potentiality in every situation, in relation to *every body*, not in relation to everybody" (Olsson, 2009: 5). There was potentiality, hope, a becoming and a micromovement of the hand. There was a potentiality for new knowledge because "when children learn, everything becomes movement and experimentation…nothing is wrong, and everything is potentiality" (Olsson, 2009: 6). Massumi (2017: 14) talks about the hope and the desire in each micromovement:

> This level is stirring with micromovements. I call these formative, but not yet fully formed movements "bare activity." … these are ebbs and flows of desire, tendency, fear, hope, self-interest, sympathy, tensings for action and easings into relation.

The potentiality e/merges from navigating the movement. It is about being involved or immersed in an "experience that is already underway. It's about being bodily attuned to opportunities in the movement, going with the flow" (Olsson, 2009: 6).

Re-turning to the maze

Re-turning to the classroom and the questions that the children had shared with the others based on the picturebook *Tusk Tusk* (2006), we read through the questions together and discussed each one. I watch how I encourage the children to listen to the questions and how their questions can be linked together through similar ideas or coming up with abstract concepts. When all the questions are read out and discussed, they are reviewed and grouped according to similarities and displayed on the board. In restrospect, from a posthumanist perspective, rather than grouping the questions according to similarities, I could have discussed the differences between the questions instead, how they work and why that matters.

As I continue to watch the video footage again and again, I notice that the children have the opportunity to elaborate on or explain how they came to their question. This process does take time, but the time spent on developing clear and complex questions is what is generally regarded in the P4C field as a necessary skill for the children to learn through practical experience. Jana Mohr-Lone says that “devoting time to listing and analysing the student’s questions lets the students know that asking questions is itself a valuable practice” (Mohr-Lone, 2011: 8).

After the questions have been posed and discussed, I suggest to the children that they should vote (see below). The reason for this is that it helps ensure that children are more motivated to do the enquiry, but also to disrupt the adult/child binary – so dominant in teaching as well as educational research. Haynes and Murris (2013: 1090) propose that, “[i]t is *their* curiosity that drives the philosophical enquiry, not that of the adult.” There are a number of ways that the children can democratically choose or elect a question, but during the intra-ventions, my Grade Three children elected to vote for their favourite question by indicating their choice with a magnetised token stuck next to the question of their choice. The votes for each question were then counted and the question with most tokens was accepted as the question with which to start the philosophical enquiry.

The question that had the most tokens was the last question (see Figure 2.3)

“How do you get lost?”

Ethical considerations

According to Massumi’s reading of Spinoza, morality and ethics are used in specific ways. Morality is concerned with the idea that there is the possibility to judge, on the basis of a pre-determined system or code, what are positive and negative values in any action” (Olsson, 2009: 79). Ethics, on the other hand, is about focusing on the “question of what a body can do and by looking for the potentiality in every action” (Olsson, 2009: 79). This focus would problematise the traditional value system that says teachers, as the authority figures, establish the rules for moral behaviour instead of being able to join the children in a collective construction of new values that are connected to that particular situation and the particular people involved.

Drawing on the Spinozian differentiation between morality and ethics, Massumi (2003: 7) states that:

> to move in an ethical direction from a Spinozian point of view, is not to attach positive or negative values to actions based on a characterisation or classification of them according to a pre-set system of judgement. Ethics in this sense is completely situational. It is completely pragmatic. And it happens in between people, in the social gaps. The ethical value of an action is what it brings out in the situation, for its transformation, how it breaks sociality open. Ethics is about how we inhabit uncertainty together.

This statement implies a different way of ethics and politics. Instead of working within already existing and functioning ethical structures, a Spinozian sense of ethics implies a politics of belonging, using the potentiality or possibility of every situation.

Much of the ethical guidelines governing this study have been taken from the criteria as stipulated by the ethical guidelines for research with human participants (School of Education, UCT, 2013). I took the following steps as the researcher. An ethics application form was completed before the research started and submitted to the School of Education Ethics Review Committee of University of Cape Town. The Committee has issued consent and approval of the research study (See Appendices for the Ethics Approval Letter).

Before the start of this project, I explained the research process and what was required of the children with the details of their involvement. It was made clear to the children that they were under no obligation to take part in the research. If they chose not to participate or wished to withdraw at any stage, they would in no way be penalised and arrangements had been made for them in another class while the research took place. Each child and parent received a letter outlining the process and asked for their consent (See Appendice B, C, D and E). The likelihood of any child not wanting to be involved was doubtful as they had all been involved in a P4C sessions before and seemed to enjoy being involved in the process. However, they were given the option of not participating or withdrawing from the project. Of the 23 children in the class, all 23 agreed to take part in the research study and they all participated in the P4C enquiries as well as the optional activities that e/merged as the project progressed. Because the process is e/mergent and therefore to a certain extent unpredictable, I met and worked with my supervisor at regular intervals to review and discuss any ethical issues that may arise as the research progressed. For example, an outing to a shop or internet research might e/merge as part of the project that the community of learners may wish to explore. At the very start of this research, an unexpected turn was the fascination with the question generated during the ‘thinking time by two children, “How do you get lost?” This question quickly became a focal point and the children chose to become entangled with this question and not the usual or expected questions about peace, or love, or hate, or racial tensions, that I had anticipated.

Letters of information outlining the intention of the research project were sent to the principal of the school, the parents/guardians of the children and to each child outlining the research instruments I had been drawn to and for which I required consent. Letters of consent were obtained from the principal, the parents/guardians of the children and the

children. Consent was for all the pedagogical documentation and other data gathering including the use of video-taping, which was only used to document the movements of the human and nonhuman bodies and has not been shared on any public forum. Separate consent has been sought from the children and their parents/guardians for the showing of video-clips (e.g., for a presentation at a conference). The consent forms for the children have been designed to be as user-friendly as possible and also explained orally to them in class with plenty of opportunities for them to ask questions (See Appendices B, C, D and E for copies of letters of information and consent). To ensure anonymity, the real names of the children or school have not been used in the thesis or any other publications. Pseudonyms have been used when presenting and diffracting with the data and always kept safely (password protected) in my computer. The children involved in the study have the right to withdraw consent at any time without incurring any penalty, such as a lowering of marks. The school's name and the children's names and identities have been kept confidential at all times and in all academic writing about the study. The data, any recordings, transcripts, field notes and artworks are stored in a secure place that only I, the researcher, have access to, in case there is a need to access this data for further academic research or an academic presentation at a later stage (for which separate consent will be sought). The principal of the school also received a letter outlining the process and was informed of the research process that was to be conducted at the school (See Appendix C).

In this chapter, I explored how, in the community of enquiry the space is fluid and in constant flux. By problematising concepts, the children and myself as human bodies with nonhuman bodies, like the space-time-materials in and outside the classroom, intra-act and connect strands of entangled meanings and concepts and create new endless knowledge. The problematising of concepts and the creation of new knowledge has an impact on the ways literac(y)ies and comprehension are taught in schools. Through the diffracting with the data, it was suggested in this chapter that thinking takes place in and in-between bodies rather than an isolated, localised activity inside the mind of an individual. This was illustrated by the example of the girl raising and then lowering her hand during a community of enquiry.

In the following chapter, I turn my attention to the pedagogical approach followed in schools in Italy and how this pedagogical approach affects the teaching and learning of literac(y)ies.

Chapter 3 Doing comprehension ‘properly’

In this chapter I discuss the pedagogical approach of some preschools in the North Italian city of Reggio Emilia and their use of pedagogical documentation. I argue, that by adopting this approach to early childhood education, children’s philosophising can be ‘projected forward’ rhizomatically. I show through how the concept ‘lost’ was projected forward rhizomatically in my Grade three classroom through adopting a Reggio Emilia inspired Philosophy for Children approach. Through a diffractive reading of these two intra-active pedagogies a *new* way of doing comprehension has e/merged (Murris, 2016, 2017), which I put to work in this thesis.

Reggio Emilia

Reggio Emilia, a city in Northern Italy, is the site of one of the most innovative city-run preprimary systems in the world (Edwards, Gandini & Forman, 2012). With a strong desire for change and a new, fair world free from oppression, injustice and inequality, the citizens of Reggio Emilia rebuilt their city and community after the devastation of the Second World War (Hendrick, 1997; Thornton & Brunton, 2015). This wish for change encouraged co-operative efforts amongst the citizens to provide various services and also to help redress the inequalities in society. It was the women of Reggio Emilia in particular, who became the influential force driving the development of new approaches to early childhood services in close collaboration with Loris Malaguzzi, then a high school teacher. The municipal preschools of Reggio Emilia originated through their hope for a new form of education that would ensure that future generations would be brought up *not* to tolerate injustice and inequality (as Italians citizens had allowed during Mussolini’s fascist regime in Italy during the Second World War).

Malaguzzi and a group of mothers identified that children were key to the future and created a new early childhood programme that is based on the principles of respect, responsibility, and community. The Reggio Emilia approach involves a child-centred curriculum led by the interests of the children themselves. Children are encouraged to explore and discover, in a supportive and enriching environment that includes the material environment, such as the architecture of learning spaces, and outdoor spaces. The principles advanced in the Reggio Emilia preschools in Italy are internationally recognised as high-quality early childhood educational provision (Moss, 2019). The strong image of child encourages children to see themselves as capable, creative, confident learners, communicators and contributors, with endless possibilities e/merging (Dahlberg, Moss & Pence, 2013; Lenz Taguchi, 2010; Dahlberg & Moss, 2010).

Part of the uniqueness of the Reggio Emilia approach is the use of documentation of children's learning experiences as routinely practiced in the classroom (Katz & Chard, 1996; Edwards et al, 2012; Gandini, 1993), which I will discuss in greater detail later in this chapter. Coupled with this, is the idea of listening to the child responsively and giving the child a voice that is 'heard'[9] by the teachers and other adults or a hundred ways of making their knowledge visible, that makes the Reggio Emilia inspired pedagogical approach so special.

The role and the continual involvement of the parents in their children's education is a fundamental part of the Reggio Emilia approach. This idea alone is rather contradictory to Groveview School, where I teach and carried out the research. At Groveview, the parents are asked to be off the school premises by 8 o'clock in the morning (so learning can start[10]) and the school gates are only opened at 1 o'clock for collection purposes. Parents are not encouraged to be part of their child's daily school routine. Parental involvement is limited to assisting their child with homework activities after school or being spectators at sporting and cultural activities in the afternoons. Generally, parents are only invited onto

[9] As I will argue later in Chapter 4, the notion of voice is reconfigured in posthumanist research as not emanating from an individualised human body – the notion of a 'body without organs', which as I will argue below also includes nonhuman bodies such as wetland.

[10] It is ironic that learning is seen that only happens in schools and without parental involvement.

the school property, during the day, to be part of special awards assemblies or for parental interviews where the academic progress of the child is discussed, usually without the child present.

According to the principles of the Reggio Emilia approach, there are three components that play an integral part in the child's education, namely the *child*, the *community* (including parents) and the *environment as the third teacher*. Again, this is different to the principles that seem to guide Groveview School. For example, although situated on a protected wetland, this ecosystem is seen as part of the scenery or as mere backdrop to the teaching. The Foundation Phase children seldom go to the wetland (a body without organs[11]) as a space that humans can learn from and with/in. In educational research we also are not aware of or pay attention to the fact that we are always already entangled with the wetlands, even when we are in our classrooms.

Social constructivists celebrate how in Reggio Emilia the child is seen as an active researcher, co-constructor of knowledge and is a social being with rights (Malaguzzi, 1993; Hewett, 2001; Gandini, 2012). The teacher is a collaborator and co-learner alongside the child and takes on the role of facilitator and guide in a Vygotskyan fashion. The Reggio Emilia approach acknowledges that knowledge is "constructed continually...in a dynamic, active, and often social context" (Gandini, 2012: 324). In the Reggio Emilia schools, the children's discussions and questions form the basis of the curriculum and their daily work. They have access to a wide range of adults who treat the children's questions and enquiries with respect, while offering their expertise and experience when required. There is a strong sense of connection, communication and interaction amongst educators, children, parents and the community. The education of a child is a difficult and complex task and the responsibilities of this task cannot be taken in isolation by family or school. Parents are aware that educating a child takes much solidarity and support, much sharing of ideas, encounters, plurality of views and above all different competencies (Gandini, 2012). Members of the team of adults working with the children include

[11] See footnote 1.

atelieristas and *pedagogistas* and their invaluable expertise is necessary to co-create the curriculum they help to bring into existence.

The *atelierista* are educators with a background in the visual arts. The *atelierista* supports the teachers in 3 or 4 schools (Vecchi, 2010) in the “curriculum development and they support and develop the child’s expressive languages as part of the complex process of knowledge building” (Edwards, Gandini & Forman, 2012: 135-136). The *pedagogista* acts as a consultant, resource person and curriculum co-ordinator to support the work of the teachers and to facilitate the relationships between the teachers, administrators and the other stakeholders (Edwards, Gandini & Forman, 2012). The *pedagogista* is in constant dialogue with the teaching staff in several schools about pedagogical documentation and offers suggestions to “ensure the theoretical and practical integrity” (Edwards, Gandini & Forman, 2012: 139).

Of course, in South Africa we do not work with a system of *atelieristas* and *pedagogistas*, but as a teacher I have tried to enact some of the core principles. In the Foundation Phase at Groveview School, it is the teachers who are responsible for doing art with their classes. I was planning on incorporating the art component in a later session, which I explore and discuss in Chapter Four. However, part of the one hundred languages of the Reggio Emilia inspired pedagogy is creating the opportunities for the children to incorporate other ways of communicating their ideas. As a way to intra-act with a different medium, I had decided to ask the drama teacher, Mr Smith, to work with the children during the drama periods. The drama time allocated to the Grade Three children was half an hour per week. Mr Smith and I agreed that he would be in my classroom whenever possible to observe, participate in and intra-act with the children during our P4C enquiries. In this way, he was aware of the work the children were creating and the entanglement of ideas that were e/merging from the philosophical discussions.

I had been introduced to the Reggio Emilia approach at the beginning of my doctoral studies and I was intrigued as to how various aspects of this unique approach could be used in my Grade Three classroom. While I was reading the book, “The Hundred Languages of Children” (Edwards, Gandini & Forman, 2012), I came across the poem by

Loris Malaguzzi, translated by Lella Gandini entitled '*No Way. The 100 is there*' (Edwards, Gandini & Forman, 2012). Not only was I struck by the apparent simplicity of the words, but the ideas and imagery of the poem resonated with me at a deep level. The poem describes how the child is rich with potential and purpose, yet the schooling system prevents the child from exploring and creating and becoming.

'One Hundred Languages' (and a thousand more)

Throughout this chapter, I have diffracted parts of the poem through the text thereby creating a new interference pattern that disrupts power producing binaries.

No way. The 100 is there.[12]
The child
is made of one hundred.
The child has
a hundred languages
a hundred hands
a hundred thoughts
a hundred ways of thinking
of playing, of speaking...

Picking up the threads of Chapter Two, the Grade Three children had voted for the question that they would most like to explore. This question was:

"How do you get lost?"

[12] *LORIS MALAGUZZI Translated by Lella Gandini (Edwards, Gandini & Forman, 1998).*

In order to give the Grade Three children a different opportunity to explore this question and switch languages through drama and *a hundred ways of thinking, of playing, of speaking...* I asked Mr Smith to facilitate a drama session with the Grade Three children, where they explored the question, they had generated imaginatively and through dis/embodied movements.

After Mr Smith had given his instructions, the children moved into small groups of two or three children. Mr Smith videoed their dramatisations while I was also part of the apparatus as I paid attention to the human and nonhuman bodies, listening to their conversations and making fieldnotes of the work that was e/merging. I discuss aspects of the small group work that e/merged in more detail in Chapter Four.

The child has
A hundred languages
(and a hundred hundred hundred more)
But they steal ninety-nine.
The school and the culture
Separate the head from the body.
They tell the child:
To think without hands
To do without head
To listen and not to speak
To understand without joy
To love and to marvel
Only at Easter and Christmas.

Usually, the drama class in the Foundation phase at Groveview School is about retelling or acting out stories or exploring different body movements. Because drama, in a way, is kept

separate from the other subjects like Literacy and Numeracy, it is as if …the school and the culture separate the head from the body. I was interested to see how the Grade Three children had diffracted with and become entangled with the question *"How do you get lost?"* through drama. Up until this point, I had never tried something like this before, of exploring, creating new knowledge using a philosophical question through the dramatic arts. I was curious to watch the video footage of their work. Some children had decided to work inside the drama class, while others had chosen to work outside on the playground. While I stayed inside the classroom observing and working with the groups, Mr Smith followed the children outside to record their work using a video-camera.

When I watched the video footage later that evening (through the lens of the camera), I was 'back' at school walking on the field with Maria and Marco, two of the children that had paired up to work together. I hasten to add though that watching the video was not like traveling back in time, because it was never there for the taking (see Chapter Two), but it is a re-turning to a time that was real, but not closed and fixed in the past. I had chosen to initially watch the video without sound so as to make it easier for myself to notice the children's expressions, body movements and their intra-actions with the environment, and not focus predominantly on the language. The atmosphere Maria and Marco are a part of seemed to be subdued as they wandered around the field. They seemed to be talking to one another but any form of the required dramatisation of 'being lost' did not seem to be happening. In fact, the slump of their shoulders and the slow movement of their bodies seemed to indicate they were more 'lost in their thoughts' and also lost in the process.

Figure 3.1: Lost in thought

In the video, on their trip back to the drama class, they saw Mr. Smith and the camera and increased their pace to meet him in the middle of the field. In the footage, they have a discussion with him and the video camera. I turned up the volume and proceeded to continue watching the clip with the accompanying audio, eavesdropping on their conversation. It seemed as if they were also lost in the process because they were looking for assistance and clarification of the instructions. Below is the transcript of the conversation between Mr Smith-the video camera-Maria-Marco-sounds-time-playground-bodies. Re-turning to the transcript and diffracting with the transcript-text-spaces-fonts, I was interested to see how Marco had explained the difference between the epistemological and ontological concept of lost in his conversation with Mr Smith, the video camera and Maria.

Transcript of: Dramatisation of 'How do we get lost?' - 16 October 2016

** italics – movement, sounds, materials, time, space*

Maria and Marco walking side by side on sports field. Wind is blowing and traffic from highway can be heard. Mr. Smith and video camera filming two children on the field. Maria and Marco approach Mr. Smith. Maria lifts her arms shoulder height, palms facing upwards.

Maria: Mr. Smith, we have no single clue what to do.
Marco faces Maria, right hand in his pants pocket. Left hands gesturing his idea.

Marco: I'm saying that we had to go like in a mall. You…You think you know what shop it is, but then you just like don't know. You just like…acting almost.
Hands close to chest, playing with fingers. Looking at nails.

Maria: (*Talking over Marco)*
But Mrs. T is saying that we must**…**um…know where we are but we are lost. We don't know how to get to the shop, we dunno where we are and we dunno how to get out of this…
Shouts from other children can be heard. Wind blowing.

Mr Smith: Well think about this…What have you been talking about in class?

Maria: Um…death, loss, lost, lost in places, mind lost…
Fingers touching each other, counting/indicating each topic.

Mr Smith: Mmmmm…So it's to tell the story of where you actually start being lost.

Marco: Oh…

Mr Smith: Ok. But remember she was talking about the easy ones. 'Oh, I lost my toy.' But what were the harder ones you discussed?

Maria: Um…um… I'm sorry for your loss…like someone…
Fingers makes the gesture of thumb across her neck to indicate death.

Maria: Yeah, but loss and lost are the same thing. Isn't it?

Mr Smith: Is it…?
Maria repeats the gesture of thumb across her neck to indicate

death.

Maria: Death and you know…loss.

Marco: Lost is like you dunno where you are going, and loss is like when someone is dead. That's not the same thing. Lost you find your way, you come back. Loss you can't come back – it's a bigger thing.

Marco faces Maria, Left hand gesturing his idea. Turns body slightly face Mr. Smith.

Marco: But I said we must just do the shop thing. Everyone will get what we are meaning.

Maria playing with fingers, doesn't look at camera, Marco or Mr Smith.

Mr Smith: Try it out.

Mr. Smith and the video camera turn away and focus on another group on the playground.

A hundred always a hundred
ways of listening
of marvelling of loving
a hundred joys
for singing and understanding
a hundred worlds
to invent
a hundred worlds
to dream.

A hundred always a hundred ways of listening... not only to the human bodies, but also to the nonhuman – like the video camera brings something new into existence. By listening and doing justice to the human and the nonhuman in this study, makes it possible for me to diffract the poem through the event and as a result, I am able to pay attention to minute details.

Listening to Marco and to the video camera, through the video footage, give his explanation of the difference between being lost and loss, I was intrigued and would have liked to have explored and listened to his idea of loss being "a bigger thing". Diffracting with the transcript, I wonder at Marco's idea, I trace some of the entanglements I am already part of and I am entangled with ...understanding a hundred worlds and I would like to hear his reasoning as to why/how for him loss could be a bigger thing. I am entangled with/in that conversation as I re-turn again and again to this moment in the video. It is data that glows for me but, in a way, it had also become lost. As I watch the clip over and over again, I experience it as a lost opportunity. This piece of data diffracts with and affects me – it is only by re-turning to the footage on the screen that I 'found' this sentence. But I also now question if I would have heard it if I had been behind the video camera, or would I have turned around to film another group I wonder? The video-camera does not simply record what is, or was there, but its material facility to go over and over the footage again and again brings something new into the world (Murris & Babamia, 2018). Acknowledging the role of the material in this event makes it possible to regard my re-search as an act of world-making and to understand knowledge construction as a kind of material-discursive 'worlding' (Haraway, 2016). Worlding is defined by Donna Haraway as the "co-operative and conflictual ways of 'world-making' in which different species, technologies and forms of knowledge intra-act"[13]

Reggio Emilia practitioners and theorists view "fosters children's intellectual development through a systematic focus on *symbolic* representation" (Edwards, Gandini & Forman, 2012:7; my emphasis). My thesis is that this approach also recognises the significance of child-initiated multimodal ways of learning that are *material*. The child is encouraged to communicate through "movement, painting, sculpture, and computer animations" (Edwards, Gandini & Forman, 2012: 7) that is both discursive (including symbolic) and material. Although there is some emphasis on the child being able to control the various media, it is not done for the sake of "adultlike performance" (Edwards, Gandini & Forman, 2012: 7), but rather to give the children "a number of ways to make their own thinking

[13] WORLDING THE BRAIN! Symposium held in Amsterdam at the School of Cultural Analysis. March 17, 2016

visible" (Edwards, Gandini & Forman, 2012: 7) through a variety of material-discursive media.

Unlike more recent posthuman theorists (e.g., Barad, 2007; Haraway, 2016; Lenz Taguchi, 2010; Murris, 2016; Giorza, 2018), Reggio Emilia practitioners and theorists tend to regard knowledge as socially constructed (Malaguzzi, 1993; Hewett, 2001; Gandini, 2012; Stremmel in Edwards et al, 2012), although Vea Vecchi (2010: 48) stipulates that Reggio Emilia is not bound to one particular theoretical framework and continually evolves as it intra-acts with new ideas and practices. So, key in the Reggio Emilia philosophy is that knowledge is constructed and communicated through multiple forms or means, through what Loris Malaguzzi (as we have seen above) calls the "100 languages of children" in his famous poem with the same name (Edwards, Gandini & Forman, 2012: 7). Carlina Rinaldi explains that in the metaphor the "number hundred is arbitrary and chosen as a very provocative statement giving different languages not only the same dignity but also the same possibility to communicate and connect with each other" (Rinaldi cited in Dahlberg & Moss, 2006: xviii).

Re-turning to the video-data, Marco and Maria express their being lost through the language of drama differently from when they discussed these ideas orally in the previous session. As a matter of *fact*, the idea that loss is "a bigger thing", is brought into existence by the opportunity to dramatise the concept that e/merged in the enquiry, and in particular, through and with the performative role of the video-camera. Learning is a 'worlding' process. Barad (2007: 91) explains that learning is not about:

> about making facts but about making worlds, or rather, it is about making specific worldly configurations - not in the sense of making them up ex nihilo, or out of language, beliefs, or ideas, but in the sense of materially engaging as part of the world in giving it specific material form.

Hence, it is not the case that the video-recording is objective and my disappointment about the fact that I could not ask Marco what he sees as the difference between 'loss' (as in the

case of death), and 'loss' (as in being lost), is merely a subjective experience. Concepts such as 'subject' and 'object', 'subjective' and 'objective' no longer have meaning if subject and object are inseparable non-dualistic wholes, as argued for by quantum physicists (Barad, 2007). Objectivity is "about being accountable to the specific materializations of which we are a part…by being attentive to fine detail" (Barad, 2007: 91).

The distinction between 'being lost' and 'loss' was created through my research intra-ventions as direct material engagement and participating in (re)configuring the world (Barad, 2007: 91) and not by "standing at a distance and representing" the world (Barad, 2007: 49). I had been *performing* in a nonhuman centred way in order to see: I 'saw' what was happening between Marco and Maria *through the video-camera* that measured by *doing* not seeing (Barad, 2007: 51). These performative practices are not only material, but also *discursive* and always already entangled with our figurations of child and childhood. Through the technology a desire had been created to want to know more, to ask for the why and to invite Marco to clarify his reasons for the distinction *in order to project the concept of loss forward* (*progettazione*[14]). So my desire is not about a lack (of knowledge) but is a way of intra-vening (to perform an 'agential cut') in order to move forward affirmatively and constructively. Still, diffracting through the video data, I wonder what was my curiosity about and how benign is my desire to demand from my learners to give reasons for their beliefs, thereby emphasising rationality, binary logic and individual thinking processes? Also, even in our communal work together, what was I missing by relying so heavily on the oral and written work of the children in communities of enquiry, over and above the material-discursive?

The child has a hundred languages, a hundred hands, a hundred thoughts... and

as we have seen part of the learning process involves inviting the children to work with a range of languages, (especially the visual languages), because children learn through their

[14] The term is used to evoke the idea of a dynamic process or an open and enquiring approach. With an initial hypothesis from the provocation, the process is open to changes of direction and adjustments as the actual work progresses. Progettazione or project work grows in different directions with no predetermined outcomes decided before the journey starts.

bodies, sounds, and the “languages of drawing, painting, modelling, and so on…the expressive or poetic languages are languages that are in tune – in an emotional, affective and cognitive relationship with the children’s way of knowing and with each other” (Vecchi, 2010: 56). The hundred languages of children, then includes various media such as clay, visual art, movement, drama and music as a means for these worlding processes.

Figure 3.2: Art contained.

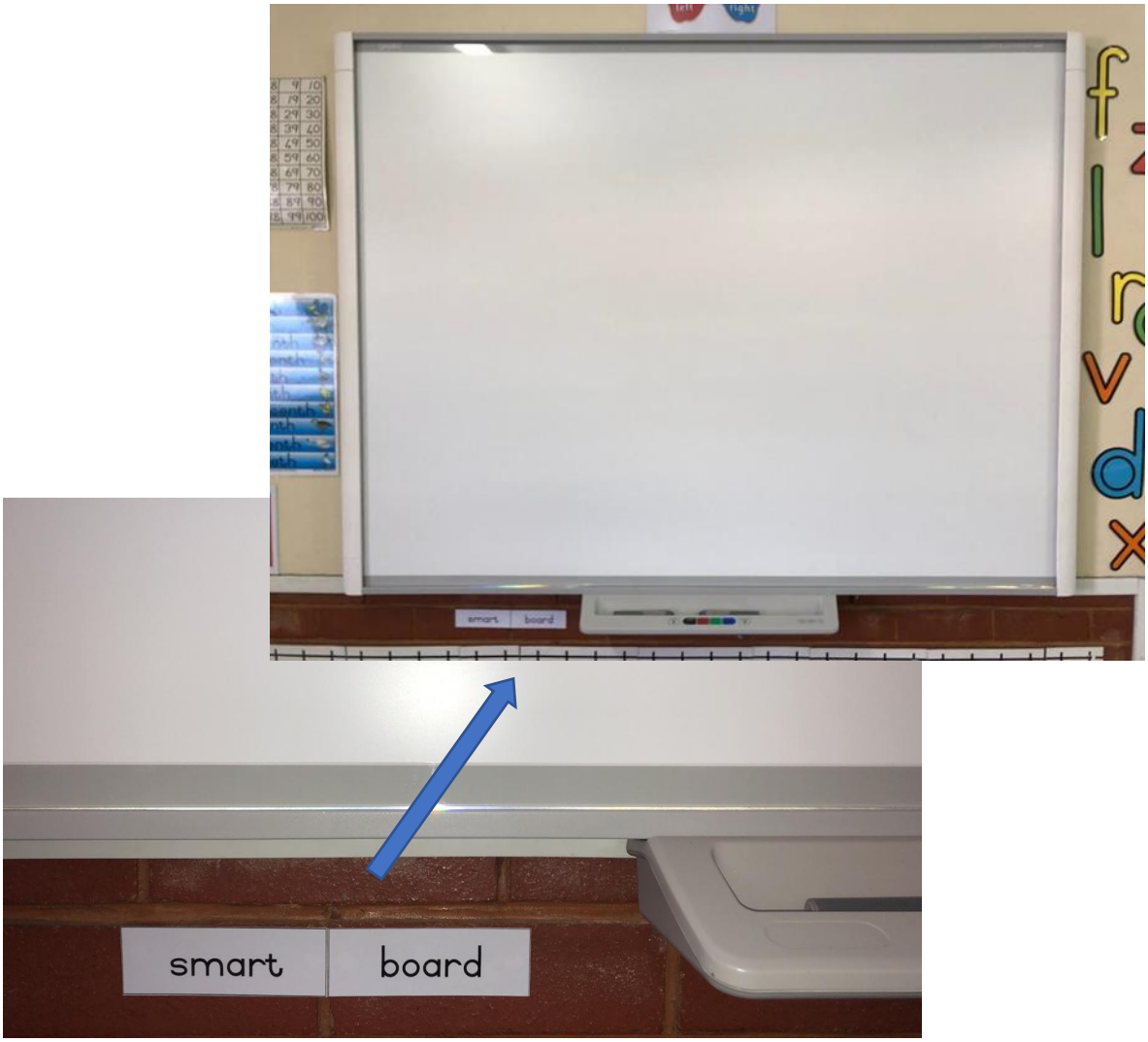


Figure 3.3: Smartboard

Figure 3.4: Books waiting...

Figure 3.5: Waiting to be fed…

Italian early childhood educator Tiziana Filippini is an experienced *pedagogista* and respected author on Reggio Emilia. She worked for many decades in and with various preschools in the city of Reggio Emilia. Filippini explains how “digging down deeply into meaning” (1998: 133) of concepts is enriched through the ‘switching’ of different languages or media. This includes talking, as a way for the child to gain new or different perspectives on an existing concept under investigation, or to generate new concepts that move an enquiry forward. When I met Filippini at a workshop[15], she gave a striking example of how the switching of languages helps children to see things from a “different slant; even discover something fresh about it” (Filippini, 1998: 133). She explained that if a child was shown a picture of a bicycle and asked to describe the bicycle, they would be able to explain the structure of a bicycle. It has two wheels and handlebars and perhaps a bell, or pedals help the wheels move, or they may comment on the colour of the bicycle, and perhaps a saddle is needed for the cyclist to sit on etc. But, if a child is asked to draw a bicycle or build a bicycle from clay or demonstrate how the bicycle works, then they discover something new. For example, they are now aware how the pieces of the bicycle are joined together, how the wheels, pedals and brakes work in collaboration - small intricate details that may have gone by unnoticed before. In this way, it is the experiencing of the bicycle through the different languages that the child comprehends the concept ‘bicycle’ differently and *relationally*. The concept bicycle is not simply a sign for a thing in the world but stands for an infinite set of relations between the bike and the human, e.g. sitting on its saddle, and the tyres in touch with the road surface and the pressure of the weight on the tarmac and so forth. It is the digging down deeply into meaning through various media that helped drive the process forward and for the Grade Three children to enrich their concept of lost. Not only was there the oral discussion (the community of enquiry) centred around lost but the children were exploring how to communicate their understanding of the concept through another medium, that of dramatisation.

[15] This workshop was organised by the NRF *Decolonising Early Childhood Discourses Project: Critical Posthumanism in Higher Education* on 2016 at the University of Cape Town.

The concept of knowledge needs to be redefined, according to Vecchi, and should be combined with “words such as *trans-disciplinary, co-participation, solidarity, humour, tenderness, grace* and then not least, *beauty*” (Vecchi, 2010: 17). Candace Kuby and Tara Gutshall Rucker (2016: 40) draw on Barad (2007) when they explain that the concept of knowledge itself is a material practice of entanglement with/in an e/merging world. As the world is not fixed, the intra-actions within and as part of the world (knowing, thinking, theorising, observing etc.; Barad, 2007: 90) are neither fixed, nor stable and are in a constant state of flux. Hence, the diffractive methodology of switching of languages is also always becoming, never final or finite. As we have seen, it can involve the use of oral language as in P4C, but inspired by the principles of Reggio Emilia, children can generate and further develop concepts rhizomatically (Murris, 2016). This diffractive practice involves the use of the creative arts using different media in order to explore various aspects of the concepts in question (Gandini, 2012).

Driving the process forward through documentation

In January, at the start of each academic year, I would decorate my class by sticking up educational posters (see Figure 1.4), putting labels on to furniture as a way to encourage incidental reading (see Figure 3.2; 3.3 and 3.4) and I would stick manufactured borders of apples, stars, or other themes to all of the edges of the pinboards to create a frame in an effort to display the children’s artwork. The artwork, although completed individually by each child, was usually a teacher-designed, representative image (see Figure 3.2). As the artwork was completed, I would display the finished product on the bordered bulletin boards or hang them from washing line which was strung across the classroom.

As part of my administration duties, I am responsible for keeping the continuous assessment of each child’s academic progress up to date as an academic record. The continuous assessment is a record of their academic abilities measured against criteria stipulated in the CAPS documents over each term. These formal records are kept and used as part of the report card issued to the parents giving feedback on the child’s

progress. These documents, the official academic records, schoolwork and artworks, are some examples of, what seems to me, a superficial and a solely teacher-based representation of what the child is doing in the classroom.

A principle of the Reggio Emilia approach – closely related to the hundred languages metaphor - is the concept of *pedagogical documentation* (Foreman & Fyfe, 2012), which refers to the process of *making work visible* and thereby "subject [it] to dialogue, interpretation, contestation and transformation" (Dahlberg quoted in Edwards et al, 2012: 225). Pedagogical documentation is used as a means of making the children's different ways of knowing or understanding visible to the viewer (that includes the children themselves) by "paying close attention to children's work and making visible their learning...through careful and detailed documentation, which is founded on the pedagogy of listening*"* (Stremmel, cited in Edwards et al, 2012:143). I draw on Olsson's idea that children "actually display a veritable taste for creative thought and that what they really do is to go on a hunt for that which glimmers" (2009: 231), but that they also have a subtle, finely tuned way of learning and relating to not only humans, but also to nonhumans. We are able to access this way of connecting through careful and response-able listening to their questions, ideas and the way they construct problems.

The pedagogical documentation that e/merges in the form of observations, descriptions, explanations and interpretations, occurs as a result or as part of the intra-actions between the children and the material-discursive environment. Pedagogical documentation is important for comprehension because each intra-action generates something new. With each new observation or interpretation based on intra-actions with the material-discursive, the child is afforded the opportunity to enrich her thinking by expressing new theories or ideas or discovering gaps or limitation on her thinking. The pedagogical documentation is not a re-presentation of images of the final project, nor is it about the child's academic abilities or their capacity as an individual, but rather the learning that is made visible through the documentation is concerned with the relationality that has made the learning possible.

While interest in the Reggio Emilia approach focuses on many of its features discussed above, the unique contribution it makes to educational practices is the “use of documentation of children’s experience as a standard part of classroom practice” (Katz & Chard, 1996; Edwards et al, 2012; Gandini, 1993). Although documentation, in the form of record keeping and observations, has been encouraged in early childhood practices (Katz & Chard, 1996), documentation in Reggio Emilia practices focuses “more intensively on children’s experiences, memories, thoughts and ideas in the course of their work” (Katz & Chard, 1996: 2).

However, pedagogical documentation is not only descriptive, but *enhances children’s learning* as can be seen by typically including examples of children’s work at several different stages of completion in publications and at conferences (Katz & Chard, 1996; Cagliari, Filippini, Giacopini, Bonilauri & Margini, 2012). Photographs showing the work in progress, transcripts of the children’s discussions, explanations and comments about the intention of the activity can be used in the documentation, which is then, for example, displayed in hallways or the classrooms for children, parents, teachers and other adults to read. Loris Malaguzzi says that through the process of documentation, the children “become even more curious, interested and confident as they contemplate the meaning of what they have achieved” (Malaguzzi, 1993: 63). In my classroom, I took photographs of the children’s work and videos of the children intra-acting. Diffracting with Malaguzzi’s idea above, the children would look at the work that was displayed, but they diffracted with enthusiastic interest with the visual map of ‘lost’ (see Figure 3.6). They would gaze at the visual map stuck to the wall, talk to friends about what had been written and add to it when a new thought e/merged. I would experience a small bubble of excitement. In this simple way, I was learning to release the teacher control and invite and involve the children in driving the process forward.

So the material-discursive documentation is entangled with the learning process; it is not simply a (discursive) form of assessment of learning that has already taken place. By documenting and displaying the work, the children’s work is taken seriously and

“encourages in them the disposition to approach their work responsibly, with energy and commitment, showing both delight in and satisfaction in the processes and result” (Katz & Chard, 1996: 3). In other words, pedagogical documentation contributes to the quality of teaching practices by enhancing the children’s learning and by taking the children’s ideas and resultant work seriously. There is a contribution to teacher planning and the evaluation with children as well as parent appreciation and participation. It is crucially a way of *listening* to children.

Teachers and the other children in the class, become aware of the participation of each individual child through the use of pedagogical documentation as the pedagogical documentation highlights the findings, experiences and hypotheses of the children. It is when teachers, and children plan together with openness to one another’s ideas, the activity is likely to be taken with greater interest (Katz & Chard, 1996). However, pedagogical documentation is not just observing what the child has done and keeping records noting the child’s strengths and weaknesses (Forman & Fyfe cited in Edwards, Gandini & Forman, 2012), rather pedagogical documentation in Reggio Emilia seeks to “uncover the children’s belief about the topics to be investigated...Their analysis reveals the reasons behind the children’s interest, the source of their current knowledge and their level of articulation about its detail” (Fyfe cited in Edwards, Gandini & Forman, 2012: 279). As already said, pedagogical documentation is a powerful way of listening to children. Carla Rinaldi explains the relational character of listening in Reggio Emilia inspired practices. She explains that listening means “being open to differences and recognising the value of another’s point of view and interpretation. Thus, listening becomes not only a pedagogical strategy but also a way of thinking and looking at others” (Rinaldi, cited in Edwards, Gandini & Forman, 2012: 237). Rinaldi believes that as the child communicates their mental images or hypothesis to others, they “represent them to themselves, developing a more conscious vision” (Rinaldi, cited in Edwards, Gandini & Forman, 2012: 237). Children are able to modify, enrich and deepen their understanding when they move from one form of language, or experience, to another and by reflecting on these shifts (Forman,1994; Rinaldi, 2012).

Through the material and teacher's documentation of the children and their teacher, the learning and knowledge-creation is made visible. The process usually involves the teacher supporting the conceptual work being done by the children through responsive listening to the children, making notes or taking pictures and/or videos. Barad asks that the teacher is response-able for their "observations, descriptions, interpretations and explanations and dare to see the ambiguities" (Dahlberg, Moss & Pence, 2013: 155). It is the willingness to be open to surprises, the unexpected that is so important. The pedagogical documentation is considered a "living record of the pedagogical practice" (Dahlberg, Moss & Pence, 2013: 156) in the classroom and brings an intensity or "forces and energies" (Murris, 2017: 13) to the work being done by the children.

As an experienced teacher, I feel confident in keeping the documents, as discussed earlier, up to date. However, I was feeling lost and was not sure about how to go about creating the rich pedagogical documentation that underpins the Reggio Emilia approach. I was unsure as to how my notes, photos and video footage as well as the material created through the intra-actions could be used to assist in showing what new knowledge had been created, or to display the existing and new entanglements that were e/merging. While I am aware that this process of creating, intra-acting with and diffracting through/with develops over time, I was very reluctant to move out of my comfort zone and just try. I needed to constantly remind myself to be open to surprises and dare to see the ambiguities. I drew on the ideas that it is through the response-able observations in my notes and through the video clips that I experienced a continual re-turning motion between data created and my diffraction with the data that became the pedagogical documentation. It was the experience of using the children's ideas, thoughts, drawings that nudged me in the direction of keeping a different kind of record to the usual teacher-based ones.

In her posthumanist critique of the Reggio Emilia approach, Lenz Taguchi claims that the approach is both logocentric or language-centred, as well as anthropocentric or human-centred (Lenz Taguchi, 2011: 39). As a result, the materials or non-human bodies "are still put in the background and understood as passive and handled by active children and given meaning only in what the children say about them" (Lenz Taguchi, 2011: 45). She

states that while the children in the Reggio Emilia approach “collaboratively negotiate the space of learning” (Lenz Taguchi, 2011: 46) as opposed to the teacher deciding on the actions, processes, “materials, words and phrases to use, both the children and the documentation can be understood to be *performative agents*” (Lenz Taguchi, 2011:46). Lenz Taguchi goes on to explain that while the children’s learning is constructed by their active participation in the actual learning event, all “varieties of contributions are valued in the collaborative negotiations that emerge between all matters involved” (Lenz Taguchi, 2011: 46). It is Lenz Taguchi’s particular description of pedagogical documentation that I will draw on as the foundation of the methodology for this project. But unlike Lenz Taguchi, I will also draw on Philosophy with Children (P4C) and draw on a diffractive reading of the two approaches through one another by creating a “superposition” – an interference pattern that affirms both and has created a new practice that disrupts power producing binaries, such as nature/culture, adult/child, inner/outer, social/physical (Murris, 2016, 2017). Karin Murris suggests that both the Reggio Emilia and the P4C approaches are like “living organisms that shape themselves according to the various psychological, sociological and philosophical theories that the theorists bring to the practice” (Murris, 2016: 152). She argues that by reading the two approaches diffractively, “new diffraction patterns or waves emerge that include, and do not reduce, one of these intra-active pedagogies to the other but affirm both. The superposition created by the diffraction is not critical, but adds force to both” (Murris, 2017: 5).

Trees and roots

Deleuze and Guattari (1980) suggest that the traditional way of classifying knowledge or concepts can be compared to an arborescent or tree-like structure which organises knowledge into categories or classes by establishing and “identifying criteria through which the relationships between all things are illuminated” (Kennedy, 2012: 4). This strict arrangement of all things is based on order, control and clear boundaries by enforcing a binary logic of “hierarchical and nesting classification” (Kennedy, 2012: 4) with clear lines of what is to be included and excluded.

Concepts form the scheme of beliefs that make up the school curriculum and the classification or arrangement of concepts is already "historically and culturally constructed" (Murris, 2017: 15). Often, as a teacher, I tend to teach children how to classify concepts and the distinction between the various concepts as if the concepts were fixed, permanent and unproblematic. Concepts can have a tendency to be stable or fixed when the concepts are "absorbed in a dominant or traditional way" (Adkins, 2015: 19) thereby "reproducing existing hierarchical, nesting classifications" (Murris, 2017: 14). In a school environment, thinking is usually seen as a process of going in circles or a guessing game between the adult/ authority and the child. This circular thinking Deleuze calls 'orthodox' (Deleuze, 1994), and the possibilities for creative thought are blocked by constantly recognizing and reproducing re-presentations of the concept knowledge that is already known. Connected to such an image of thought, learning and knowledge is about thinking 'correctly', giving the right answers and about reproducing knowledge that already exists, and so knowledge is seen as stable, fixed and permanent.

As a teacher-adult, I assume that, because the concept of 'lost' is common and central, the understanding of the concept is the same for all of the Grade Three children as it is for me. According to Deleuze, concepts are a 'toolbox' not the building blocks needed to scaffold knowledge and so the interrogation of the concept is so important so that the concept knowledge is not seen as permanent and stable, but rather that it is contestable and can be both challenging as well as challenged by our experience and by the experience of others.

As an alternative to the arborescent structure, Deleuze and Guattari suggest a web or a system that is like a rhizome root system. As in a ginger root, the connections in-between things in a rhizome are different from the tree or arborescent structure which consist of knowledge structures that are stable, hierarchical and linear. In comparison the rhizomatic structure uses non-hierarchical structures. Deleuze and Guattari suggest that the concepts are arranged or classified not as a hierarchical, vertical structure but rather connected

rhizomatically because the rhizomatic system is with “no beginning or end; it is always in the middle, between things” (1987: 25).They go on to explain that:

> the tree imposes the verb ‘to be’, but the fabric of the rhizome is the conjunction, ‘and…and…and…’ This conjunction carries enough force to shale and uproot the verb ‘to be’. Instead of starting from ‘the beginning’, they proceed from the middle, through the middle, coming and going rather than starting and finishing.

A rhizomatic system of ideas, “of relationships, of social organisation, of economic and political organisation” (Deleuze & Guattari, 1987: 25), by starting in the middle, is able to emphasise the lateral over the vertical and resists the hierarchical and nesting classification of the tree-like structure.

Concepts should not be seen as fixed or permanent ideas, rather they are continuously becoming because they are so rich and complex, in that they are made up of many parts (Deleuze, 1987, 2014). The idea of the rhizome creates the possibility of seeing that the common, contestable and central concepts are guided by the principles of “connection and heterogeneity” into “collective assemblages” (Deleuze & Guattari, 1987: 7). When given the opportunity to explore concepts, as in a community of enquiry, the concepts are continually both challenging and being challenged by our experience and by the experience of others. In this way concepts are de- and re-territorialising, connecting with other concepts and then re-entering experience (Kennedy, 2012: 2). There is a sense of movement and a fluidity between the entangled ideas, bodies, time and space about a concept.

David Kennedy suggests that the community of enquiry, as discussed in Chapter One, offers an opportunity for a community to problematise the meaning of concepts like truth, justice, nature, human, animal, life, knowing and believing etc because there is a deterritorialization of concepts from their “imprisonment within ideologically locked-down network of concepts” (Kennedy, 2012: 2).

The rhizome system is the impulse of “difference, multiplicity, the plural and holds the distinctions in loose and provisional assemblages” (Kennedy, 2012:4). Instead of arranging the concepts above or below one another, the rhizome offers an alternative to the over-simplified generalisations and strict hierarchical ordering of concept knowledge found with the tree-like understanding of concept knowledge. The rhizome also offers the possibility of a sideways move – and sets up “asymmetrical but related connections with the concept from which it broke away” (Kennedy, 2012:4).

Re-turning to the concept of ‘lost’ and by focusing on the philosophical enquiries and the visual mapping of the concept ‘lost’ is an example of the ‘sideways move’ suggested by Kennedy (2012: 4). The visual map demonstrates how the knowledge created by the children is rhizomatic, fluid and moving in indeterminate directions. Instead of the strict hierarchical ordering of concept knowledge, it is the diffractive methodology that moves rhizomatically in continual variations leading in unknown directions, including unpredictable underlying “factors, and opening up a space for human and more-than-human bodies” (Murris, 2017: 5) to also create and produce affect and intensities. By doing so keeps the analysis and knowledge production on the move. Knowledge production is considered “both material and discursive and includes the more-than-human” (Murris, 2017: 5).

Small events of silence

Looking at ‘slivers’ of events (agential cuts), allows the opportunity for recognition of how processes of comprehension may connect with an old process of knowledge production or even perhaps create something new. Throughout this study, I have focused on small snippets of an event or an event that did not seem to be too significant at the time. The reason for choosing and diffracting with small events or snippets of events “concerns the ambition to try to really draw as much as possible out of what seems to be a tiny little event” (Olsson, 2009: 119). This is how one needs to work if choosing to work from the

point of view of the event since, “underneath the large noisy events lie the small events of silence” (Deleuze,1994: 163).

Deleuze and Guattari (1987, 2014) use the concept of event to problematize the idea of fixed, predetermined and permanent knowledge. Drawing on Deleuze and Guattari, Olsson (2009: 53) states that:

> Sense is the unconditioned production of truth in an event. Sense is capable of keeping events open-ended, complex and fluid. Sense is related to problems and learning and culture because all of these things are seen as fluid processes of production and construction that e/merge before solutions, knowledge and methods.

Starting from the event, my focus is on how all of the bodies involved in the event construct and produce sense and problems in/through the processes of learning. With this in mind. As a way of looking at an event, we should not see knowledge processes that are stable and fixed as evidence of learning, but rather, Olsson (2009: 119) suggests, we look at:

> the learning processes, look for and construct how the involved bodies join a problematic field. Do not look for methods, look for and construct how the entire culture surrounding the entering of a problematic field proceeds; take into account thoughts, speech, actions, but also material and environments.

Moreover, according to Olsson, when teaching and learning literacy, learning must be treated as impossible to guess, plan, organise and control or evaluate according to predefined standards. This presents a real challenge in today’s traditional way of teaching and learning literac(y)ies, as we have seen how much importance is placed on the achievement of predetermined goals. (Olsson, 2009: 117).

In this study, I was following the rhizomatic systems during these moments of the event that came to be of significance for seeing how the processes of comprehension are continuously de/reconstructed in my Grade Three classroom.

Reggio Emilia inspired Philosophy for Children Approach

This study uses a Reggio Emilia inspired P4C pedagogy (Murris, 2016, 2017). The methodology involves not only the pedagogy of P4C, the Community of Enquiry, but also follows the principles of Reggio inspired practices, where the children generate and experience concepts rhizomatically through the ongoing processes of pedagogical documentation. Murris (2017) reads these two rhizomatic pedagogies diffractively through one another and states that the method is "affirmative, creative, intuitive and non-representational" (Murris, 2017: 4). It is through the diffractive reading of the texts, the theories about concepts and the "neologism 'intra-action'" (Murris, 2017: 4) that offers us a non-representational way of taking into account the "entanglement of bodies, texts, relationships, data, language and theory that we are just beginning to understand and that presents the possibility of much productive material" (Mazzei, 2014: 745).

By diffractively reading the two approaches through one another, Murris' analysis moves rhizomatically in continual variations with indeterminate directions. This approach, which includes causal factors, creates a space for bodies, both human and more-than-human, to produce affect and intensities which keeps knowledge production fluid and on the move. As such, knowledge production is seen as both material and discursive and includes the more-than-human. Murris' approach produces a new interference pattern or a practice of knowledge production that undoes the power-producing humanist binaries of mind/body, child/adult, nature/culture, knowing/being. The new interference pattern does not occur by subverting one approach over the other or by identifying similarities as in a reflective analysis, rather it is by affirming and acknowledging each approach by paying attention to the differences that matter. Murris states that with her diffractive reading, she is not looking for any similarities or differences between concepts, nor is she making comparisons or identifying themes. Instead, Murris is guided by the questions "how 'objects' and 'subjects' and other differences matter and for whom?" (2017: 5). It is through these and other

questions that may e/merge that “new pedagogical ideas of working with concepts is created” (Murris, 2017: 5).

As mentioned above, the focus of my research is to investigate the application of the new interference pattern created by Murris (2017) as a research methodology. Drawing on Murris, I am not trying to theorise the diffractive methodology but rather I try to read the theory with/through the practice of teaching and learning literacy.

They tell the child:
To discover a world already there
and of the hundred they steal ninety-nine.
they tell the child:
that work and play
reality and fantasy
science and imagination
sky and earth
reason and dream
are things
that do not belong together.

As we have seen earlier in this chapter, the concept of exploring ideas rhizomatically, suggests that there is no linear progression to knowledge acquisition. There is no beginning, middle or end to the way new knowledge is created, rather the process is fluid and entangled, like a rhizome root system, although Deleuze and Guattari stress that the rhizome is not a metaphor.

Using a critical posthuman orientation, I investigate how the intra-action in-between the human and more-than-human (e.g., a picturebooks, furniture, art supplies, insects, space and time) intra-act with each other in the intra-active process of producing data when the children in my class comprehend a text. It is the idea that the intra-active “relationships between living organisms and the material world” (Dahlberg & Moss, 2006: xiv) can alter

ideas and create disturbances or differences that matter politically and ethically. The superposition that is created - ‘intra-active comprehension’ - comes about as a response to the need of a term to describe the rhizomatic and intra-active processes of the children-creating-with-more-than-human-materials-time-space. It is through the intra-activity of this superposition that new knowledges e/merge about the teaching and learning of literac(y)ies. The term intra-active comprehension has been explored in detail in Chapter Four.

Mapping lost and stepping back

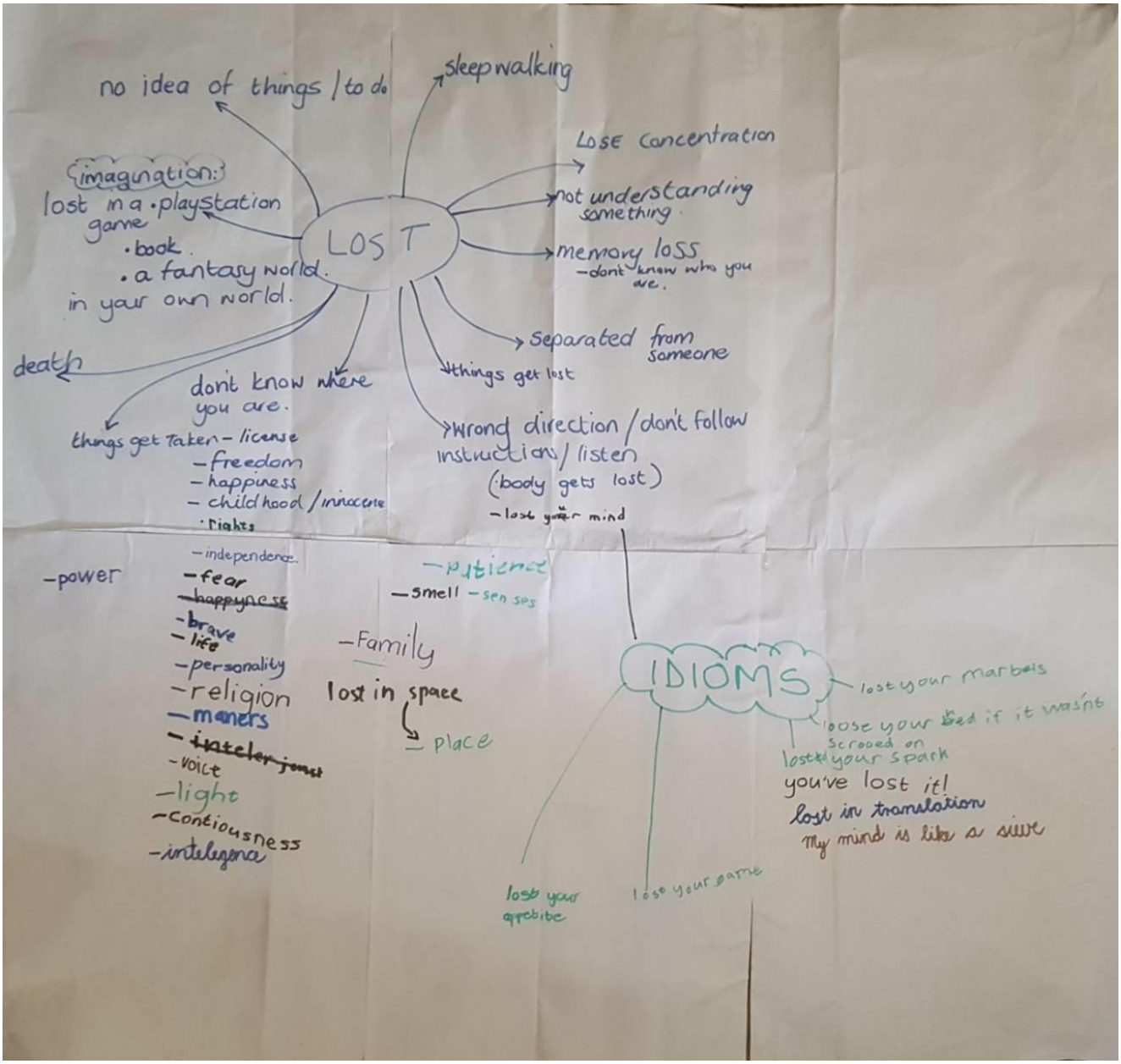


Figure 3.6: Mapping lost.

The concept of ‘lost’ illustrated on the visual map (see Figure 3.2), is a good example of how concepts are made up of many entangled parts and the sideways movement of related connections with the concept ‘lost’ from which it broke away. Olsson suggests situating the investigations and the constructions of the questions in a meaningful context, “where it can be further worked upon” (2009: 18). Each attempt by the Grade Three children to explore and to share where had ‘they heard the word ‘lost’? In what context? What could we lose? Do only things get lost?’ resulted in many more, richer “connected and heterogenous” (Deleuze & Guattari, 1987: 7) criteria of the concept. While the ideas generated by the Grade Three children are rhizomatically connected, each ‘part’ could escape in a different direction from the page. The children generated approximately six categories of the concept ‘lost’. For example – lost was explored through:

Separation – losing someone in a shop or loss of a toy
Death – human and more-than-human like pets
Knowledge – confusion, loss of understanding
Imagination - ‘lost in your own world’, and ‘lost in your thoughts’
Embodiment – loss of a body part, kidnapping, memories
Justice – loss of rights, freedom, religion, power, independence
Ontology – lost in space, time, matter.

Stepping back and looking at the visual map (see Figure 3.6), there is the sense of difference, multiplicity, and the plural distinctions of ‘lost’ held in a loose and provisional assemblage as described by Kennedy (2012). In this way, the material-discursive entanglement of making some of their imaginative ideas visible with/in the concept map produced new ideas of the so-called abstract concept ‘lost’ in everyday contexts. So when the children are given the opportunity to explore the concept playfully and were able to examine the concept of ‘lost’ in everyday life, and they are able to use it more flexibly.

As the children thought and felt their way through other examples where they had heard or used the word ‘lost’, they would then use words to add to the concept map, creating a rich, complex web of the concept. This is evident in the different writing styles that can be seen

on the paper. To work in this way, the focus has become less on the individual child and "more of what takes place in between the children – what kinds of thoughts, speech, actions, interests, questions and desires preoccupy the children at the present moment?" (Olsson, 2009: 14). The outside world was not kept on the other side of the glass window, but flowed through, around and amongst the bodies as the children diffracted with each other's ideas.

This means that within the rhizomatic structure, becoming, or 'and…and…and', has replaced the verb 'to be'. And so the ideas from the children in my class are always fluid, moving and being entangled with other bodies, both human and nonhuman. The children are not bounded, fixed entities, learning in isolation, as the poem says as separate bodies and heads. Viewed from a rhizomatic perspective, the process of comprehension or thinking with practice is seen as an ongoing and connective activity where a variety of modalities and products are made, assembled and transformed in a way that goes beyond the traditional prescribed methods of doing comprehension 'properly'.

Using the concept of pedagogical documentation to drive the project forward (*progettazione*), I re-turned to the visual map of 'lost' and the question of 'how do we get lost?'. Reading the map and diffracting with the ideas and concepts that are connected with/through one another intra-acting with the paper-ink-hands-community of human and more-than-human (Braidotti, 2018), I re-membered the book, *The Lost Thing* by Shaun Tan (2010) and the following day, I showed the video of the picturebook[16] to the Grade Three children as a way to continue exploring the concept. I chose to show the video to the children before reading the picturebook as it is a different medium or provocation because of the moving images and the text being read by a different voice.
At one level, *The Lost Thing* (2010) (see Figure 3.7), is about a boy who discovers a bizarre-looking creature while out collecting bottle-tops at a beach. The boy, having guessed that the creature is lost, tries to find out who owns it and where 'it' belongs. The boy and the creature are met with indifference by everyone else, who barely notice the

[16] The video of Shaun Tan's *The Lost Thing* (2010) is freely available on the internet. https://www.youtube.com/watch?v=ilc4pBTAys4) retrieved online 3rd October 2017.

creature's presence. Each is unhelpful in their own way; strangers, friends and even the boy's parents are all unwilling to entertain this uninvited intrusion into their day-to-day life (Figure 3.8). Against his better judgement, the boy feels sorry for this sad and unfortunate creature, and he tries to find out where it belongs.

Figure 3.7: Being lost on the beach (*The Lost Thing*, 2010).

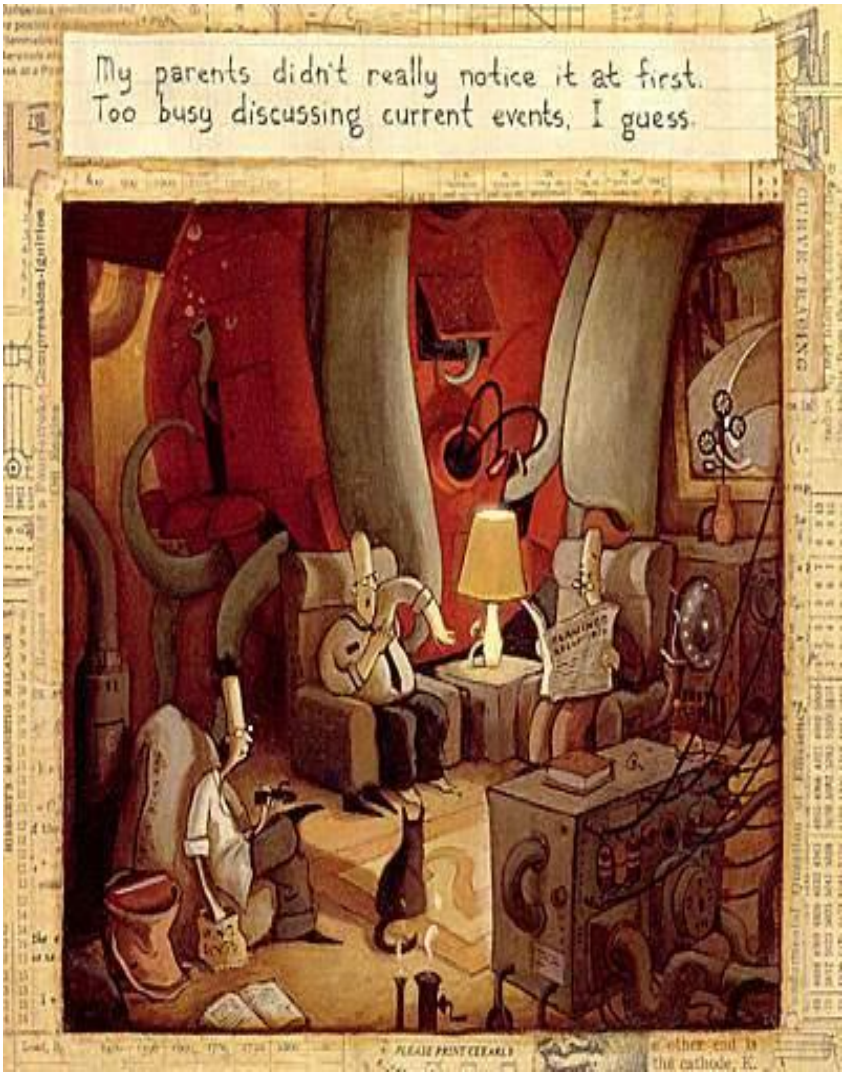


Figure 3.8: Indifference about the Lost Thing *(The Lost Thing, 2010*).

Transcript of: The Lost Thing (2010) Community of Enquiry - 6 November 2016

**Italics – movement, sounds, materials, time, space*

Children on carpet, legs folded, eyes looking at smartboard which will act as a screen. Bodies turned towards smartboard screen. Lights off, classroom darker.

Me: Remember we were talking about the idea of being…. Lost?
I have found this video and it is based on the book by the Australian author, Shaun Tan. It is called “The Lost Thing.”
Now when we read a book, you listen for concepts-you can do the same thing with movies. As you watch the video, see if you can identify any concepts.

Video ends and there is a quiet amongst the group for a minute or two.

Then bodies start to squirm. Bodies stand up and stretch, hands move to heads, bodies twist. Voices indistinct, feet shuffling, muffled movement noises.

Children move and sit around the edge of the carpet; edge of carpet marks the places where the children sit so that their bodies form a circle.

[5 minutes later in transcript]

Me: Were you able to pick up any concepts?

Figure 3.9: Getting lost in the video *(The Lost Thing by S. Tan, 2010).*

Picking up concepts

As described above in the transcribed segment of the entangled event I had asked the children to create abstract concepts from the film.
Sara Stanley, a very experienced P4C facilitator and author (But Why, 2004; Why Think, 2012) suggests that children should be encouraged to create philosophical concepts directly from the provocation such as a picturebook. This process of creating concepts is beneficial as “allowing this time for collaborative and shared understanding of conceptual identity in itself leads to philosophical dialogue, allowing the children to explore different ideas about the meaning of that concept itself” (Stanley, 2012: 155). I had incorporated this idea into my own practice. Identifying a concept the children are interested in helps to motivate the children to desire asking questions about the text.

The idea of desire (put forward by Olsson and inspired by Deleuze) is not based on a lack or in need of, rather desire is seen as a positive force – “a force that creates new compositions” (Dahlberg & Moss, 2009: xxiii). The assemblage of desire is not an individual thing, nor can it be reduced to feelings or emotions of a personal event as these events take place in-between bodies. According to Olsson, desire and the force or movements the event produces “takes place in-between people in a continuously changing and polyphonic way” (Dahlberg & Moss, 2009: xxiii). As this is fluid and rhizomatic, there is no planning or controlling the event. It is as if a machine has been put into motion, creating difference which can trigger new self- organising and self-producing processes. Following the idea of desire, a sense of movement from a “perspective of emergence, potentiality and connections” (Dahlberg & Moss, 2009: xxiv) e/merges.

Socrates, the ancient Greek Philosopher, is widely recognized for asking questions from a position of self-confessed ignorance rather than from a position of assumed knowledge (Matthew, 1999). Asking questions from a position of ignorance can undermine the confidence and according to Murris (2017: 130), “shake the certainty with which people take for granted the meaning of abstract concepts we use in our world”. Because these

abstract concepts are common and familiar words, there is an assumed certainty about their meanings by adults who have become so used to them. Young children who are still in the process of acquiring the meanings of concepts, such as 'being lost', are therefore in an advantageous position. Their freshness and lack of familiarity with established meanings of such concepts disrupt the idea that young children have a deficit when thinking in enquiries. On the contrary, it demands a particular kind of responsive thinking from me as an adult, with an openness that was unfamiliar to me, before I was introduced to P4C and Reggio Emilia.

As discussed earlier in this chapter, by interrogating these abstract concepts, the meanings become contestable based on the individual person's lived experience: lived experiences start to 'leak through' the 'cracks' of the concept (Murris & Haynes, 2018: 11). In other words, meanings are always entangled with the materiality of living a life. According to Gilles Deleuze and Felix Guattari (1997), the exploration of concepts is an essential part of philosophical practice because they offer a fresh and *different* way of looking and thinking about problems, created by the children and provoked by the picturebook. Different in this context is not about separation or lack or as something that is negative.

Importantly, I resist in my practice to only value the role of the human in enquiries, but also foreground in my teaching and research the "material-discursive relationships, differences that exclude or include; in other words, differences that matter" (Murris & Haynes, 2018: 77). Thinking differently about 'being lost' has the potential to create other ways of be(com)ing, 'lines of escape', into the world, thereby deterritorialising "material process of bodies and actions", that is, producing "movements by which we leave the inhabited territory and break loose of habits" (Olsson, 2009: 147). By the time this research project was being carried out, the Grade Three children could identify and play philosophically with abstract concepts in literacy lessons with little direction or prompting from me. So, for example, in this intra-active comprehension lesson, after approximately 25 minutes, the Grade Three children had identified a number of concepts after watching the story *The Lost Thing (2010).* (see Figure 3.9 and 3.10*)*.

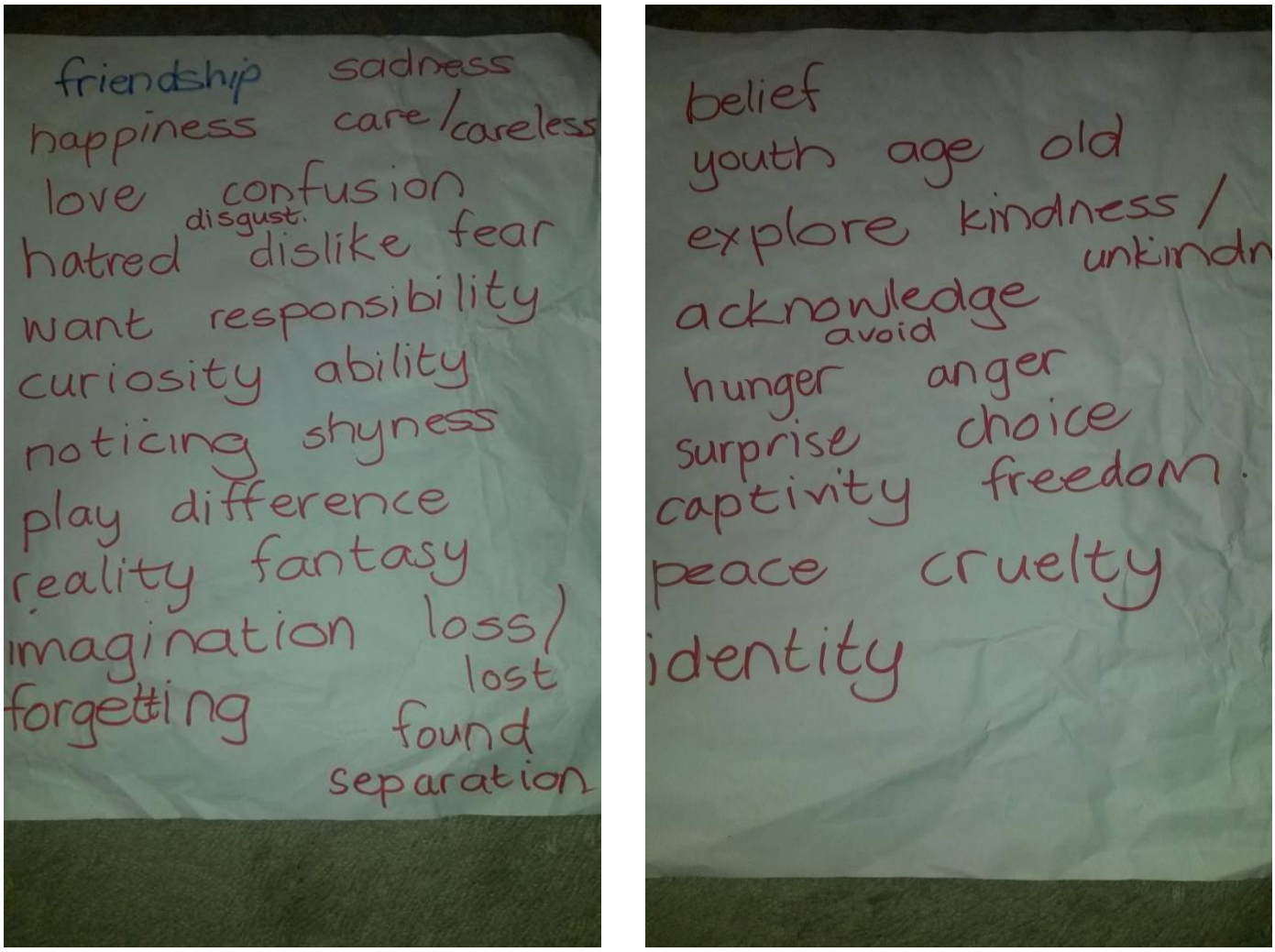


Figure 3.10: Abstract Concepts identified children based after reading and watching *"The Lost Thing" (Tan, 2010).*

Questions that will be generated by the community are based on the philosophical concepts identified by the children. The questions provoke the children to intra-act or diffract with the meaning of philosophical concepts that are *central*, *common* and *contestable,* and *connect* with lived experiences (the 4Cs of P4C). Philosophical concepts are *central* concepts, because they inform how human beings think of themselves, other people and things. We use such concepts in everyday language, hence they are also *common*. Philosophical concepts are also *contestable* concepts in that they are abstract and encompass many instances or examples and their meanings are 'fuzzy' at the edges and their meanings depend on the situation or context of the question. Not only is there disagreement about their meaning, but there is often disagreement about the value of these types of questions.

As discussed earlier in this Chapter, the methodology underpinning the research was to read two different approaches, namely Philosophy for Children (P4C) and a Reggio Emilia inspired approach through one another. By reading the two approaches through one another, a superposition is created with new interference patterns e/merging. This is a "practice of knowledge construction that queers (an undoing of identity) the power-producing binaries of humanism: mind/body, nature/culture, child/adult, language/reality, knowing/being and individual/group" (Murris, 2017: 535).

This diffractive methodology questions or problematises binary concepts between "adult/child, nature/culture, and language/reality" (Murris, 2017: 545), by *not* looking for similarities or differences, themes or comparisons. Rather by being guided by the question 'how does the concept work?' as opposed to 'what is the meaning of the concept?' It is through this diffractive intra-action in-between the various bodies that conceptual knowledge constructed in a community of enquiry, like the visual mapping of the concept 'lost' that new pedagogical ideas of working with concepts is created.

By deterritorialising or producing movements by which we leave the inhabited, habitual territory and break loose of represented habits (Olsson, 2009), a new idea of what conceptual knowledge should be is produced. By acknowledging that the child is co-

creator of producing new knowledge, the child is positioned as part of the "world they share with other human and more-than-human others and explore intra-actively through material-discursive research and experimentation" (Murris, 2017: 545).

So, does this mean that philosophical enquiry are merely linguistic and human-centred tools for understanding the world at an ontological distance? Murris explains how P4C can be conceptualised using posthumanism as a navigational tool. Quoting David Kennedy (2012: 233) she refers to the philosophy curriculum as a "living thing, an emergent whole in ongoing reconstruction, because the concepts that form its nodes of intensity are in constant proliferation and reconstruction". Murris (2016: 181) explains the implications:

> So deterritorialisation is part of the ontoepistemology of philosophy with children that moves in a horizontal manner, like a rhizome, through and across the disciplines, bringing the whole back to its parts, and at the same time problematising the whole. Concepts are not abstractions *from* the world, but an active force *of* this world.

Moreover, this ontoepistemological shift also implies a different ethics. Posthuman teaching-research and research-teaching practices disrupt the "power producing binaries like teacher/learner, adult/child, individual/society". These binaries are man-made categories, produce power differentials that include and exclude and structure what counts as 'real' knowledge and worthwhile learning (Murris, 2016). Murris' posthuman understanding of P4C and Reggio Emilia practices trouble in particular ageist practices in teaching and learning (Murris, 2017:117). Posthumanism positions the knowing subject as part of the world and not separate from it. Therefore, the challenge is to find other, more tacit ways of experiencing the world that also accounts for nonhuman experiences.

The picturebook *The Lost Thing* (Tan, 2010) was read and shown to the children because the philosophical concept of 'being lost', which had sparked their interest. According to Kuby and Crawford (2017: 29), "literacy instruction must shift to embrace intra-active and/or unexpected processes". The idea of unexpected processes draws on Deleuze and

Guattari's poststructural rhizomatic theory (Deleuze & Guattari, 1987) and as we have seen their idea of a rhizome, a root tuber that spreads underground in various, unpredictable ways without a definite beginning or ending, but rather a multitude of starting points. Once the children had diffracted with the provocation, generating concepts and other ideas, they were encouraged to ask their own questions as starting points for philosophical enquiries. As part of the enquiry, their ideas were listened to, also through the writing on the paper (concept map) and responded to by the others in the community.

As discussed in Chapter One, on page 42, the concept of 'community' is stretched in posthumanism (Braidotti, 2018: 21) to not just include myself and the other children in the class as tends to be the case in P4C, but also the "non-human agents…the technological elements…the earth-others…the non-human inorganic agents" (Braidotti, 2018: 21). This includes objects like the glass window (Chapter One), the texts, hands, pens and questions (Chapter Two). With Braidotti's notion of community, it was not only myself and the children, but their questions, thoughts, silences and words, the video camera, paper, pencils, the classroom and the carpet and…and…

This ability to respond, "intra-acting responsibly" (Barad, 2007: 219, 391) brings an ethics to the practice of literacy comprehension that is different from the usual approach to teaching comprehension. Guided by concepts the children find important to enquire into, the children are able to ask the questions, which makes a philosophical approach to the teaching of comprehension very different from mainstream teaching.
The concept of exploring ideas rhizomatically, briefly suggests that there is no linear progression to knowledge acquisition. There is no beginning, middle or end to the way new knowledge is created, rather the process is fluid and entangled, much like a rhizome root structure.

The intra-active pedagogical intervention involved using Murris' diffractive reading of two rhizomatic approaches through one another, namely the Reggio Emilia inspired pedagogy and Philosophy for Children. What e/merged are new diffraction patterns that included, and do not reduce, one of these intra-active pedagogies to the other. The concept of a

“superposition” (Barad, 2007: 76), is where two approaches are combined to create new diffractive patterns, without one approach being subverted by the other. Each approach draws from and at the same time contributes to the new diffractive pattern or superposition – like waves coming together in a sea.

As part of my research I investigate how, as part of the event, the intra-action in-between the human, more than human, the book, other materials in the classroom and space and time takes place. I focus on the intra-action in-between the bodies to find out how the children in my class comprehended a text using a critical posthuman orientation, included in the intra-actions, is myself as a researcher and my recording devices. It is the idea that the intra-active “relationships between living organisms and the material world” (Dahlberg & Moss, 2006: xiv) can alter ideas and create disturbances or differences that matter epistemically, politically and ethically. The superposition created came about as a response to the need of a term to describe the rhizomatic and intra-active processes of how the children creating-with-more-than-human-materials in spacetime. It is through the intra-activity of this superposition that new knowledge e/merges. I have termed the superposition, ‘intra-active comprehension’. The term intra-active comprehension has been explored in detail later in Chapter Four. Looking back at the chapter, there was much new that e/merged. This research produces ideas which are suggested or offered as for post developmental curriculum construction. A new pedagogical practice of working with/through concepts e/merged, thereby deterritorialising what conceptual knowledge is.

I also implemented the diffractive reading of the two approaches, and I have read the theory through/with practice. It is by reading the theory through/with practice diffractively, there is, according to Murris (2017: 5), a “deliberate focus on the material-discursive force of the embedded and embodied life experiences of the originators of these approaches to teaching and learning and the salient implications for a particular conception of child”.

By creating new knowledge using a philosophical question through the medium of dramatic arts, philosophical enquiries are put at the heart of deterritorialising knowledge, and also assisted in contesting the binaries created. In this way, room is made for children

as knowledge producers, rather than knowledge consumers, instead of the teacher as a 'fully-human' sophisticated language speaker of age as the sole producer of knowledge" (Murris, 2017: 3).

The reading texts, theories about concepts, and the use of the concept of intra-action diffractively through one another, a non-representational way is offered of "considering the entanglement of bodies, texts, relationships, data, language, and theory that we are just beginning to understand and that presents the possibility of much productive potential" (Mazzei 2014: 745). By focusing on certain events or things, like hands, windows, the carpet, spaces and clocks (see Chapter Four, Five and Six), that do the work of making the reader feel and think differently not only about pedagogical practice, but also that it is the perpetual entanglements in-between the human, nonhuman and more-than-human that affords the possibility of much productive potential. It is also by acknowledging the role of the material in the events described and transcribed makes it possible to regard my research as an act of world-making and to understand knowledge construction as a kind of material-discursive 'worlding' (Haraway, 2016).

Representational or traditional methods of research situates the researcher (or the subject or the teacher) at a distance from the world, with so-called 'objective', detached access to this world with the mind through cognition. In this chapter, I am already entangled with the lived experiences of each body, the spaces and the matter as both the teacher and researcher.

... And thus they tell the child
That the hundred is not there.
The child says:
No way. The hundred is there.
- Loris Malaguzzi

Chapter 4 We Created This…

At the time that I was unravelling the knots of the entangled data that had been created through the philosophical enquiries and the work that e/merged from the drama lessons explored in Chapter Three, the Grade Three children had just completed a week of International Literacy Bench Marking Assessments, where the taught literacy skills were being assessed, especially their ability to comprehend various texts. Re-membering this time as a Grade Three teacher, I was under enormous pressure to 'perform', that is, I had to make sure that the children in my class would do well in these tests. I knew that I would be judged on these results – that it would be seen as a 'reflection' of my quality as a teacher.

By drawing on Anna Tsing (2017), Lisa Mazzei (2013) and Deleuze and Guattari (1987) in this chapter, I will argue that comprehension needs to be taught rhizomatically. I will provide an example of my ongoing collaborative philosophical work with the children and Shaun Tan's picturebook *The Lost Thing* (2010).

Teaching and learning literacy in South African schools

Current approaches to the teaching of literacy in South African classrooms are proving to be unsuccessful in achieving the standards set by the international benchmark tests like PIRLS. The Progress in International Reading Literacy Study (PIRLS) 2016 is an international comparative evaluation of reading literacy of Grade 4 (9-year-old) and Grade 5 (10-year-old) students. PIRLS is a trend study and as such, the design and methods used have been carefully developed and used to permit the measurement of changes over time. South Africa has participated in three rounds of PIRLS, namely 2006, 2011 and 2016 (Howie, Combrinck, Roux, Tshele, Mokoena, & McLeod Palane, 2017).

South Africa's participation in both PIRLS 2006 and PIRLS 2011 indicates a very low level of achievement in reading literacy.

At both Grades 4 and 5, the average performance of learners was well below the international average of 500 points in both grades. A change in the national design for PIRLS 2011, which in turn, also impacted on the design for PIRLS 2016, was made due to the low achievement results in PIRLS 2006. PIRLS 2016 was conducted in 50 countries and with 11 benchmark participants comprising 340 000 learners from 12 000 schools in 2015/2016. It is one of the largest, most complex and influential assessments of reading literacy internationally. In South Africa, 18 092 learners from 349 schools in Grade 4 (12 810 learners) and Grade 5 (5 282 learners) participated in the assessment. In South Africa, for PIRLS 2016 at the Grade 4 level, a decision was made to assess the learners with a less difficult assessment, called PIRLS Literacy. PIRLS Literacy is designed by the international study centre with the assistance of the national centres. Processes similar to those of PIRLS were followed in the design and development of PIRLS Literacy, but developed as a shorter, easier test and at a lower cognitive level than that of PIRLS 2016 (Howie, Combrinck, Roux, et al., 2017). The Grade 5 students wrote the PIRLS 2016 assessment.

For South Africa overall, the results were very low (320 points) compared to the international average (500 points), with South Africa achieving the lowest results of the 50 participating countries and significantly below all other participating countries. Despite the slightly lower score in 2016, there was no significant percentage difference in achievement for South African students between 2011 and 2016. Fewer students were able to reach an elementary level of reading and attain the Lowest International Benchmark in 2016 (22%) than in 2011 (24%) with almost eight out of 10 students not reaching the Low International Benchmark. In other words, 78% of South African Grade 4 children cannot read for meaning in any language compared to 4% of students internationally.

In 2011, approximately a quarter of English and Afrikaans speaking children achieved some level of reading proficiency, demonstrating a literal understanding of a plot by

making a few inferences and connections across texts[17]. While there was no significant percentage difference in achievement for South African students between 2011 and 2016. this low result indicates an inability to identify and comprehend explicitly stated detail when reading literary texts. When reading informational texts, not reaching the Low International Benchmark also implies an inability to identify and comprehend two or three pieces of information from within the text, and to use subheadings, text boxes and illustrations to locate parts of the text when reading informational texts.

Children are considered competent readers when they begin integrating ideas and information across a range of texts, while providing text-based support for inferences. In South Africa in 2011, only approximately 10% of English and Afrikaans speaking children achieved this competency level[18].
Only 1% of Afrikaans speaking children and 3 % of English-speaking children are considered advanced readers, where they are able to assimilate information across a wide range of challenging texts while providing full text-based support for their answers[19] (Howie, Venter & van Staden, 2006, 2012; Aitchison et al, 2015). Of concern raised in the PIRLS 2016, is the drop at the top of the achievement distribution with fewer learners reaching the highest international benchmark, Advanced (0.2%) and High (1.7%), meaning very few students are able to read at a more advanced level.

The Curriculum Assessment Policy Statement (CAPS) (DBE, 2011) was introduced as the new revised curriculum in 2011 in response (partly) to the low literacy standards in comparison with other nations. The main thrust of CAPS is to raise standards by being more prescriptive than the Outcomes Based Education (OBE) curriculum also known as Curriculum 2005 or C2005.

[17] Conference Presentation by Aitchison, J., Bloch, C.,Dixon, K., Green, W., Henning, E., McKay, V., Metcalfe, M., Murris, K., Nel,C., Pretorius, L.,Spaull, N., Strydom, B., Taylor, N., Verbeek, C. at the 10th RASA/9th PARFA Conference on 3rd September 2015, UCT. Cape Town.
[18] See 1 above

The design and implementation of the C2005 was considered inconsistent. The main concerns raised by critics of C2005 included the lack of adequate teacher training especially for Foundation Phase teachers because most of the teachers in South Africa were underqualified, or otherwise ill-equipped for the demanding task of successfully implementing C2005 (Jansen, 1997; Garson, 1998). Teachers were also required to develop their own learning programmes (Jansen, 1997; Taylor, 2001) and as a result, the "learning outcomes are under-specified in terms of their knowledge content" (Taylor, 2001:5) – the lack of content knowledge acquired by learners is regarded as one of the major flaws of OBE. The necessary learning support materials were in short supply and the time frames of content delivery were ambiguous (Jansen 1997; Taylor, 2001; Chisholm, 2003).

In contrast, the objective of CAPS is to restructure and improve the shortcomings of C2005. With the introduction of standardised learner workbooks as part of CAPS, which are prescriptive with regards to the curriculum implementation, there are many didactic guidelines included that instruct the teachers on what to teach with regards to language (Language Overview Document, DBE, 2011).

The Outcomes Based Education curriculum (OBE) implemented by the post-apartheid government has clearly not been successful in raising or improving the levels of literacy achievements in South Africa. Concerns over the literacy findings were also raised in the National Education Evaluation and Development Unit (NEEDU) report of 2012.The National Education Evaluation and Development Unit (NEEDU) is a unit which is independent of that part of the civil service responsible for the administration of schools and reporting directly to the Minister of Basic Education. The Ministerial Committee recommended that NEEDU should provide the Minister of Education with an authoritative, analytical and accurate account on the state of schools in South Africa and, in particular, on the status of teaching and learning. This unit supplied a list of recommendations to be followed in order to address "what is regarded as a lack of basic literacy and numeracy skills" (Murris, 2014: 24).

According to the NEEDU Report, the basic skills for literacy should be well established by Grade Three. In order for these skills to be considered consolidated, the child should be proficient in applying the “complex set of skills or abilities to understand and use the dominant symbol systems of a culture” (NEEDU, 2012: 24). The report defines ‘full literacy’ as:

> ...the ability to approach printed material with critical analysis, inference and synthesis; to write with accuracy and coherence and to use information and insights from texts as the basis for informed decisions and creative thought (NEEDU, 2012: 24).

While the results of the NEEDU report suggest that the educators’ poor subject knowledge and subsequent poor subject delivery at every level of the school system is far more widespread than anticipated, the most striking feature of this report is the low literacy achievement. Moreover, not only are the reading scores low, but there is insufficient time allocated to the explicit teaching of comprehension skills which is indicated by the low thinking and reasoning scores by South African learners. A claim by the NEEDU report suggests that these scores are a result of teachers accepting learners’ low performance as critical thinkers (NEEDU, 2012:40-41). This low performance could be improved if teachers asked more demanding questions of the learners requiring inferential and interpretive thinking and reasoning (NEEDU, 2012:40-41), which I will explore later in this chapter.

There are serious problems with South African children achieving a very low level of success in the reading literacy assessments as discussed above (eg Taylor, 2001; Spaull, 2012; Pretorius 2014). However, other scholars (see Janks, 2011; Prinsloo, 2016; McKinney, 2006, 2018) who have a more poststructuralist orientation express concerns with the implementation and subsequent results of the international standardised tests. The *Reconceptualising Early Childhood Education (RECE)* movement gained momentum in the 1980s, and draws from an array of more critical, feminist, postcolonial, postmodern and Indigenous perspectives in their work. Urban and Swadener (2016), on behalf of the

RECE movement expressed their concerns with international standardised testing. They stated that the:

> dominance of a narrow interpretation of developmental psychology and child development theory privilege particular sets of beliefs or forms of knowledge that typically reflect western or Eurocentric traditions and values. Historically, on a global scale, the privilege of western onto-epistemologies (*ways of knowing, doing, and being*) have created power for certain groups of people, and continue to oppress others.

They argue that evidence that draws large-scale standardised assessment and comparison of young children does not question the belief that scientific truths could be 'discovered' about any individual or group of children and then applied to all children, regardless of the culture, language, belief structure, or physical life circumstances. The international standardised assessments underestimate the complexity of local practice, embedded in diverse historical and cultural contexts. But the standardised assessments actively contradict the “rights of children, families and communities to meaningful participation in all matters concerning and affecting the upbringing and education of young children” (Urban & Swadener, 2016, no page).

In South Africa, Prinsloo states that there are limitations to the international standardised assessments, like the PIRLS. He claims that these assessments work with limited concepts of both literacy and language and are “neither sensitive enough nor grounded enough in actual classroom literacy practices to be of any use beyond pointing to what we all already know in broad outline – schooling is a problem in South Africa” (2016: no page). Part of the larger problem facing South Africa’s educational system is characterised by systemic inequalities between the public and private schools (see Introduction), the extensive inefficiencies and by the national curriculum that are dull instruments.

The international standardised assessments are designed to focus on the comprehension skills of retrieving information, inference, interpretation and evaluation of the given

information. The assessments are based on the presumption that these literacy skills are generally context-free, “individually-based but uniform and universal mental processing activities” (Prinsloo, 2016: no page). The assessments also claim that the comprehension skills can be reliably tested and comparisons made across diverse socio-economic, cultural and linguistic contexts. The assessments claim that they can provide a reliable basis for drawing conclusions about the children’s ability to “read for meaning” (Prinsloo, 2016: no page).

Meaning or understanding is also coded into the types of texts in the assessments. For example, the materials used, the picture resources that have particular social meaning, and the wider social background that informs the kinds of textual production. Understanding is always a development of co-construction between the child and text, where the comprehension is at least to a degree, shaped by the meanings that the children bring with them, influenced by their background, their lived, embodied experiences and their interests. Simultaneously, research done at the University of Stellenbosch, has indicated that 20% of South African children do very well in a whole range of tests in literacy skills, language and mathematics. But 80% of South African children do not achieve well at all. This percentage ties in with larger social divides between socio-economic status of households, between private and public schooling systems, and between children who attend schools as first language English- speakers and those who attend as second-language English speakers in an environment where performance in standardised English is considered the norm. The international standardised tests implemented do not make allowances for the complex local literacy practices that takes place in the classroom.

Creating problems

In Chapter Three, I had used the drama period for the children to dramatise their concept of ‘lost’. This was a new experience for me as usually I would have given the children a more traditional task which used the teacher generated questions and answers-based activity, found on the internet (as shown later in this chapter).

Prior to my introduction to Reggio Emilia and Philosophy for Children, I probably would have let the children watch the video and then handed out pre-printed worksheets of questions with ruled lined spaces for their answers. We would have read the questions together and I would have modelled the correct and appropriate way of answering a comprehension question. The children would have gone back to their desks and answered the questions, working quietly and on their own. At the end of the allocated time, the children would have handed in the worksheets, I would have marked them and recorded the marks for assessment purposes. Over the next one or two days, I would have returned the worksheets and we, as a class, would have discussed the *correct* answers to the questions. Once we had gone through the activity, it would have been considered finished and we would have moved on to the next comprehension activity. The way in which traditional comprehension is taught in many schools across South Africa (and elsewhere) involves the child adapting herself to solving predetermined problems with a single correct answer. This kind of learning is “nothing more than a question of imitation and reproduction” (Olsson, 2009: 117). I believe that the interest or immersion and connection in/with the activity by the children would have been a superficial one. The traditional way of doing comprehension follows a formula, the material is read through together as a whole class, the text is discussed and if there are any words that need an explanation, the teacher provides the correct answer. Once this is completed, the whole class reads through all of the questions and then the first two or three questions are used by the teacher to model the correct answering technique. The children then complete the questions in their books or worksheet, which is subsequently marked by the teacher. The

formula is a pre-scribed, predictable and linear step by step process without any surprises or experimentation possible.

However, since my introduction to intra-active posthuman pedagogies (see, e.g., Lenz Taguchi, 2010), I do not believe that teaching is linear. There is no beginning, middle or end to the way new knowledge is created, rather the process is unpredictable, messy, fluid and entangled. It is through the intra-actions between the child-environment-space-time-materials that new connections e/merge that are “productive, potentially transformative” (Burnett & Merchant, 2016: 276). By problematising and interrogating the meaning of concepts by asking philosophical questions, for example, What does it mean to be lost?, teachers and students “connect strands of entangled meanings and concepts and make new endless patterns” (Murris, 2016: 186). David Kennedy (2012: 2) suggests that problematising and interrogating philosophical concepts is a rhizomatic process, because the concepts:

> [R]un across and through the disciplines, in various combinations, with various emphases, and with various emergent connections. Thus, they afford multiple entries for emergent philosophical reflection...

Children seem to enjoy the process of constructing problems which is a different and exciting way of approaching children’s learning. According to Olsson (2009), children in preschools in Sweden have begun to work more and more with the construction of problems rather than the solving of predetermined problems. The idea of inventing a problem before a solution is found creates a space for “experimentation, movement and the unexpected” (Olsson, 2009: xxiv). The real challenge is to see that it is the *processes* of learning that are important, whereby the *movement* of learning is impossible to “predict, plan supervise or evaluate according to predetermined goals” (Olsson, 2009: 117) as is the case with standardised systems of testing like PIRLS.

The idea of children constructing their own problems fits with the pedagogical approach of Philosophy for Children, where the children express problems through the careful

construction of their own questions. These problems are inspired by a picturebook or other provocation rather than having to find the correct answers to predetermined questions decided upon by the teacher. This is the case most of the time when teachers read picturebooks to their learners. Olsson states that when children are having to match the correct answer to the corresponding question, they do not create anything new and "the whole process of creating and inventing will then be closed down" (Olsson, 2009: 117).

What is comprehension?

A universally accepted goal of primary education is the mastery of reading comprehension, since reading comprehension provides the basis for most learning that takes place in secondary school (Sporer, Brunstein & Kieschke, 2009). Meaning-driven theories of reading, place comprehension at the centre of the reading process. Although the teaching of reading tends to be linear, reading itself is seen as a cyclical, rather than linear process, involving the use of visual, perceptual, syntactic and semantic processes which all contribute to and assist comprehension (Cambourne, 2002; Block & Duffy, 2008).

Comprehension is generally understood as the strategic process in which readers use cues from the text in conjunction with their existing knowledge to make predictions, monitor the predictions and construct meaning from the text. It is a "fluid process of predicting, monitoring and re-predicting in a continuous cycle" (Block & Duffy, 2008: 29). Comprehension is a continuous cycle, involving skills that are entangled in the process of creating concepts.

According to Parker and Hurry (2007), there are three strands of comprehension that can be identified: a literal, inferential and evaluative element. The first strand (literal) includes both surface and a propositional understanding of the text. Secondly, engaging with a text from an interpretive aspect, a child must be able to apply inferential skills in order to create knowledge and the third, evaluative aspect involves a personal response from the reader.

Comprehension is a critical part of the reading process and yet, learners continue to struggle with applying comprehension skills as seen in benchmarking assessments. South African literacy expert Elizabeth Pretorius argues that South African children are “often not given the opportunity to go beyond the immediate, literal meaning of information or shown how to do this when they read” (Pretorius, 2014: 70).

Depending on the medium of instruction at the school, reading skills in South African schools are developed during the Foundation Phase (Grades 1-3) of schooling using home language readers (Pretorius, 2002). A great deal of emphasis is placed on encouraging the “child’s decoding skills, but this is often done in a superficial, haphazard and decontextualised manner” (Zimmerman & Smit, 2014: 1). Teachers assume that the children will be able to comprehend when they can decode, but little attention is paid to reading comprehension, therefore the transition from decoding syllables or words to meaningful reading strategies using extended texts does not happen easily (Pretorius & Currin, 2010; Zimmerman & Smit, 2014).

A common strategy for teaching comprehension in South African schools is to present learners with pre-set questions based on the text. These questions are predetermined as part of a textbook or prepared by the teacher and the children usually answer them in the written format. These questions seldom adequately address inferential or higher levels of questioning (Klapwijk, 2015). However, I argue that comprehension is much more than this superficial task, which usually in schools does not require children to reason or to think creatively. Teaching comprehension strategies in this manner are “often decontextualised and taught explicitly using excerpts of text from existing books or specially made up texts” (Roche, 2015: 31), and do not encourage open-ended speculative questions that require thinking with others about things that matter to the children. This pattern of ‘question and answer’ has the effect of forcing the children into a position of guessing what the correct answer is (according to the teacher or the textbook). The questions have a specific correct answer, therefore there is no room for children’s own ideas about a text. Added to the restrictive question and answer pedagogies used in South African schools (Murris, 2016: 178-179), generally what is understood by teaching comprehension in literacy is that the meanings of the concepts embedded in the text have straightforward meanings.

By concentrating on specific comprehension strategies as being part of the language lesson (Klapwijk, 2015), children are not taught how to ask their own questions about the text or to explore the meaning of concepts – these are already given and assumed. Cris Tovani (2000: 86) has pointed out that children "who ask questions when they read, assume responsibility for their learning and improve their comprehension". Rather than answering questions with a predetermined single correct answer, it is the skills of a deeper or richer reading of texts and the comprehension strategies that "include drawing inferences, asking questions and constructing mental images and visual representations" (Murris, 2014: 8). However, richer reading requires comprehension skills and attitudes that are not always evident but need to be taught explicitly. Mary Roche (2015) writes that while comprehension skills are faithfully taught in schools, the fundamental reason of comprehending, which is being able to understand something in order to critique it, is often neglected. Children are understood to be thinking critically when they are not only able to read the modalities of texts, but, according to Leander and Boldt (2012: 12) also:

> [A]re able to use these designs in relation to redesign; or in other words to use the texts to design their own practices, activities and texts. From this perspective, it is not enough to simply access the power; rather, new literacy learners also need to critique, resist, challenge and change discourse.

Being able to assess critically is essential, so that children are able to "question the assumptions made in the text; so, they can challenge the ideology inherent in the text; so they can live an examined life; so they can have agency" (Roche, 2015: 29). So, considering these ideas about comprehension, how should comprehension be taught according to the curriculum?

Comprehension and CAPS

In the Curriculum Assessment Policy Statement (CAPS), the languages programme is integrated across the curriculum in oral work *and reading and writing* (DBE, 2011: 6). In

Grades One, Two and Three, reading takes place in the reading and writing focus time. This is when Foundation Phase children are supposedly taught to be effective readers through prescribed, focussed lessons. Time is set aside for lessons covering different strategies for reading like guided reading, shared reading, independent reading and the instruction of phonics skills (DBE, 2011). Part of the language programme is the concept of comprehension. As Dreher (2003: 25) has pointed out, in order to teach reading effectively, readers "need to be engaged in appropriate-level, high quality texts that foster enthusiasm and critical thinking". Now does CAPS recommend such texts?

The CAPS documents recognise the importance of thinking and comprehension skills in literacy as a foundation for children's learning. This is evident in the different skills stipulated as requirements in the documents. For example, in the Language Overview Document (DBE, 2011), learners must be able to demonstrate that they are able to speak with confidence during class discussions by "expressing feelings about a story or poem and give[s] reasons" and "participate[s] in discussions, and report[s] back on the group's work" as well as being able to "answer open ended questions and justif[y]… answers" (DBE, 2011: 23).

But, as discussed in the beginning of this chapter, South African children appear to experience difficulty in engaging meaningfully with various multimodal texts on a critical and a creative level. The problem might be that while CAPS suggests that children should learn to be able to 'read' and interpret the visual cues in a story or other print media (DBE, 2011: 26), very little information or input is given regarding the nature, place, function and timing of asking and developing inferential and interpretive thinking and reasoning skills (Murris, 2014: 24).

Their vocabulary is extended by the children being able to "make up their own rhymes" and to "tell a story that has a beginning, middle and end" (DBE, 2011: 23). Particular listening skills are developed by being able to "listen to complex sequence of instructions and respond appropriately" as well as to "listen without interrupting, showing respect for the speaker asking questions and commenting on what was heard" and to "listen for the

main idea and detail in the stories" (DBE, 2011: 23). This particular CAPS document also states that the learners should be able to "use visual cues to predict what the story is about", "identif[y] key details in what was read", "answer[s] higher order questions based on the text read" and "interprets pictures and other print media" (DBE, 2011: 26).

However, the current curriculum allocates no specific time for encouraging deep thinking and reflection among children. The particular epistemology assumed in the CAPS curriculum goes against the idea that children can be positioned as thinkers and can make meaning of texts on their own terms as, for example when children engage with texts as members of a community of enquiry in Philosophy for Children (P4C). Although, according to CAPS, children should, for example, be expressing feelings, give reasons, justify answers and answer open-ended questions (DBE, 2011: 23), the teacher is positioned as the one who poses the questions. Moreover, as is clear from the examples set out in the CAPS documents above, these questions are not open-ended, thought-provoking, or produce something new or unexpected rhizomatically which requires imaginative and creative thinking, because the teacher already has the answers s/he wants the learner to reproduce. In other words, these questions are *rhetorical* questions. They are what Brodie (2007) calls 'test' questions, as opposed to 'authentic' questions. In other words, in dominant approaches to the teaching of literacy, there is no, or very little, room for children's own questions that go beyond the meaning supposedly 'in' the text and known by the teacher. Nor, is there opportunity to read *against* the text which is what critical reading should be about (Murris, 2013; Short 2011; Roche, 2015).

The CAPS documents ensure that the prescribed literacy curriculum enacts a narrow, technicist and prescriptive way of teaching literacy. In an Italian context, *atelierista*, Vea Vecchi (2010) argues that because of the hurried superficial content that is delivered, schools have weakened the sense of wonder, excitement, the interests and the emotions of the children. Vecchi (2010: 27) argues that in today's world there a sense of "violence towards dreams" by removing the necessary aesthetic dimension from education. This includes the "aesthetics of actions, of intelligent perceptions and of time and rhythm; aesthetics that develop together with reasoning and emotion" (Vecchi, 2010: 27).

In other words, literacy education is much more than the teaching of decontectualised skills as expressed when literacy is defined as the ability to decode, encode and make meaning using written text and symbols (Larson & Marsh, 2015). However, there is a need to account for the multiple ways in which meaning is made, which includes aesthetics and the material world (including the digital world). The increased attention paid to other modes of meaning making in literacy, has encouraged a growing awareness and understanding that literacy can be communicated via media other than print-only texts (Anstey & Bull, 2009; Baddeley & Eddershaw, 1998; Kress, 2000; Larson and Marsh, 2015). The idea that literary understandings can be communicated in a variety of ways suggests that there are different forms of literacy (see, e.g., Bouwer cited in Eloff & Ebersohn, 2004: 85). Nowadays, the plural form of "literacies has become prevalent in educational policy, practice and research, as it signals engagement with the rich range of multimodal texts and artifacts that are at the centre of contemporary life" (Larson & Marsh, 2015: 5), including "visual, audio, spatial, behavioural and gestural" (New London Group, 1996: 64).

The idea of 'literacies' and 'multiliteracies' has had implications for how we educate children (Leander & Boldt, 2012; Larson & Marsh, 2015; Burnett & Merchant, 2016). This includes, paying attention to the way in which children comprehend and process various literacies - both written and visual texts. However, in the CAPS documents, there is little evidence of incorporating these new understandings about the teaching of literacies and of children's abilities to make and communicate new knowledge in multimodal ways.

How do we do 'proper' comprehension?

There is a large body of knowledge about reading strategies and comprehension skills which emphasize that comprehension of a text is a process which involves the reader in actively constructing meaning (Parker & Hurry, 2007). For the reader, this means intra-acting with the text through a combination of personal, situated, embodied knowledge and experience as well as information within the text itself, and the individual's evaluative or

comprehensive responses. Drawing on Louise Rosenblatt's (1938) work in language development, Parker & Hurry (2007: 301), point out that:

> The reader brings to the work personality traits, memories of past events, present needs and preoccupations, a particular mood of the moment, and a particular physical condition. These and many other elements in a never-to-be-duplicated combination determine his response to the peculiar contribution of the text.

CAPS as the revised curriculum and response to the 'failing' of Outcomes Based Education (OBE), is in many ways a return to the teacher centred curriculum that was in place before OBE and entangled with it (Du Plessis, 2005). Many schools are now again encouraged to use transmission or instruction models of teaching in which the teacher 'transmits' information to the students through workbooks with its focus on content transmission. This is not different from other contexts. For example, Mary Roche (2015) argues that also in the UK, classrooms are largely monological with the dominant monologue being that of the teacher. It is a widely agreed that we live in a society of performativity and one of audit culture (Shore & Wright, 1999; Ball, 2003; Roche, 2015) and it is because of society's need to assess and determine achievement levels, that it is considered necessary that comprehension skills can be "itemized so as to be considered teachable and measurable" (Roche, 2015: 31).

As explained in the Introduction of this thesis, as part of my data creation, I informally interviewed an experienced Grade One, Two and Three teacher from each grade in the Foundation Phase at Groveview School. The Grade One teacher (Teacher C) has 15 years' experience, the Grade Two teacher (Teacher H) has 14 years' experience while the Grade Three teacher (Teacher K) has 25 years of experience. The questions asked included:

> Are there any strategies or ways in which you teach comprehension explicitly?
> How do you assess/establish if a child had understood or comprehended the text?
> How are the comprehension activities/tasks set out?

How is comprehension linked to child's personal or lived experiences?

My analysis of the answers from the various teachers interviewed, showed that direct oral questioning by the teacher prior to the child answering the questions independently in a written format like a worksheet, was considered to be the most important strategy for teaching comprehension. In response to establishing the comprehension skills of the children, all teachers agreed that asking direct questions about the text was a definite way in which to assess comprehension skills. These types of questions are asked in closed form, requiring a single, correct answer. These questions are generally concerned with the recall of factual information from the text, background information, bibliographical information, questions about the genre of the book or an explanation of a word or phrase.

> ***Teacher C (Grade One)**: You've got to assess how well they understood it [the text] by asking them quite specific questions. Questions that ask about the main character, what did the characters do etc.*

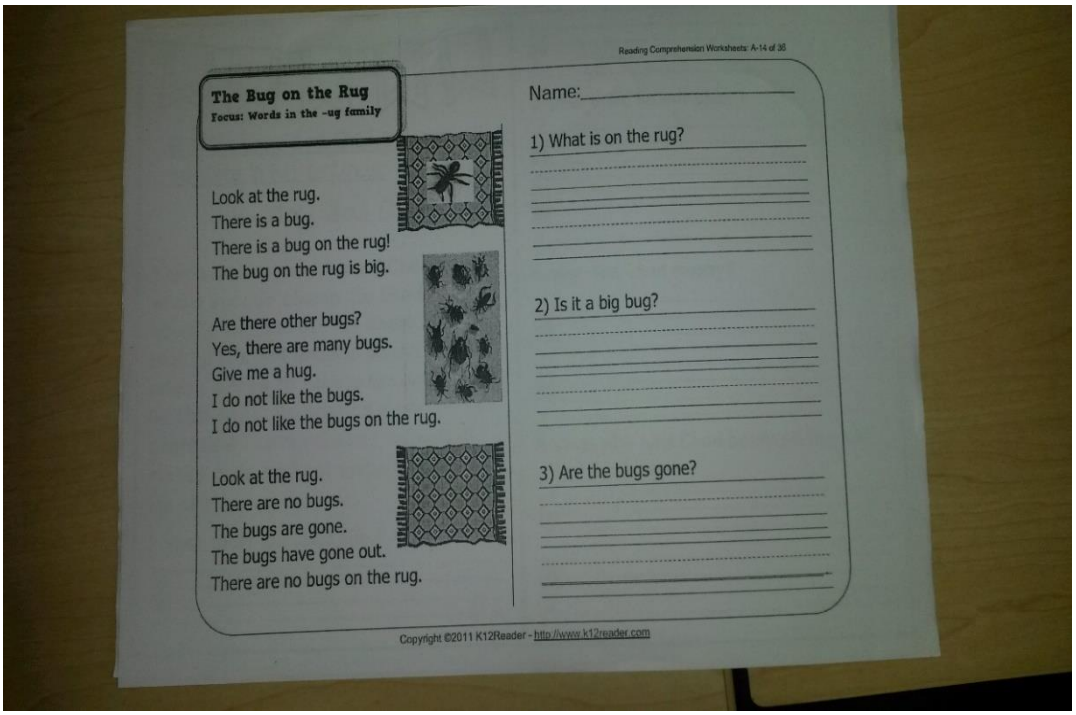
The three teachers at Groveview School are also aware of the importance of developing inferential strategies in the children's comprehension skills. These types of questions include prediction, empathetic responses or a reference to the children's own experiences.

> ***Teacher H (Grade Two)**: To test their level of inferential skills, I ask them questions that require the children to read between the lines. Maybe things like how they would feel if they were in a character's position.*
> ***Teacher K (Grade Three)**: I do a lot of prediction questioning. I ask the children what will happen next in the story. Or I ask them to motivate the characters' behaviour, like asking the reasons why a character behaved the way they did.*

As already mentioned, like many other schools in South Africa, a common strategy for teaching comprehension at Groveview School is to present learners with pre-set questions based on a particular text. These questions are predetermined as part of a textbook

activity or prepared by the teacher and there is usually only one right answer in the written format (Hoffman, 2010; Klapwijk, 2015; Roche, 2015). Drawing on Comber (2003), Mary Roche states that children appear to be “engaged in piecemeal recycled literacies of replication and repetition”, often completing work that includes “filling in the blanks, copying words or phrases and colouring in pre-drawn pictures about the text” (Roche, 2015: 7).

Teachers at Groveview School generally teach comprehension in a similar manner. The children sit on the carpet, facing the teacher, who sits on a smaller chair in front of them. The worksheet is handed out to each child. The teacher and the children read the comprehension together. The teacher models proficient reading strategies, like fluency or using punctuation to develop expressive reading skills. Any words that may not be known or understood by the children are explained by the teacher. The children are then given the opportunity to re-read the text silently to themselves. Once the majority of children have completed the silent reading, the teacher and the children read the questions together and the teacher guides the children through model answers to the questions. There are usually eight to ten questions on the story or text. The comprehension activities are completed every week. The children who finish quickly draw a picture about the story or colour in the pre-printed picture accompanying the text. The teacher marks the answers and records the marks for eachers in the Grade One group (children are between 6-8 years old) focus the comprehension stories on the spelling sound being taught that week. The stories are generally short and incorporate words that reinforce the week’s spelling. (See Figures 4.1 and 4.2).



Reading Comprehension Worksheets: A-14 of 36

The Bug on the Rug
Focus: Words in the -ug family

Name:_____

Look at the rug.
There is a bug.
There is a bug on the rug!
The bug on the rug is big.

Are there other bugs?
Yes, there are many bugs.
Give me a hug.
I do not like the bugs.
I do not like the bugs on the rug.

Look at the rug.
There are no bugs.
The bugs are gone.
The bugs have gone out.
There are no bugs on the rug.

1) What is on the rug?

2) Is it a big bug?

3) Are the bugs gone?

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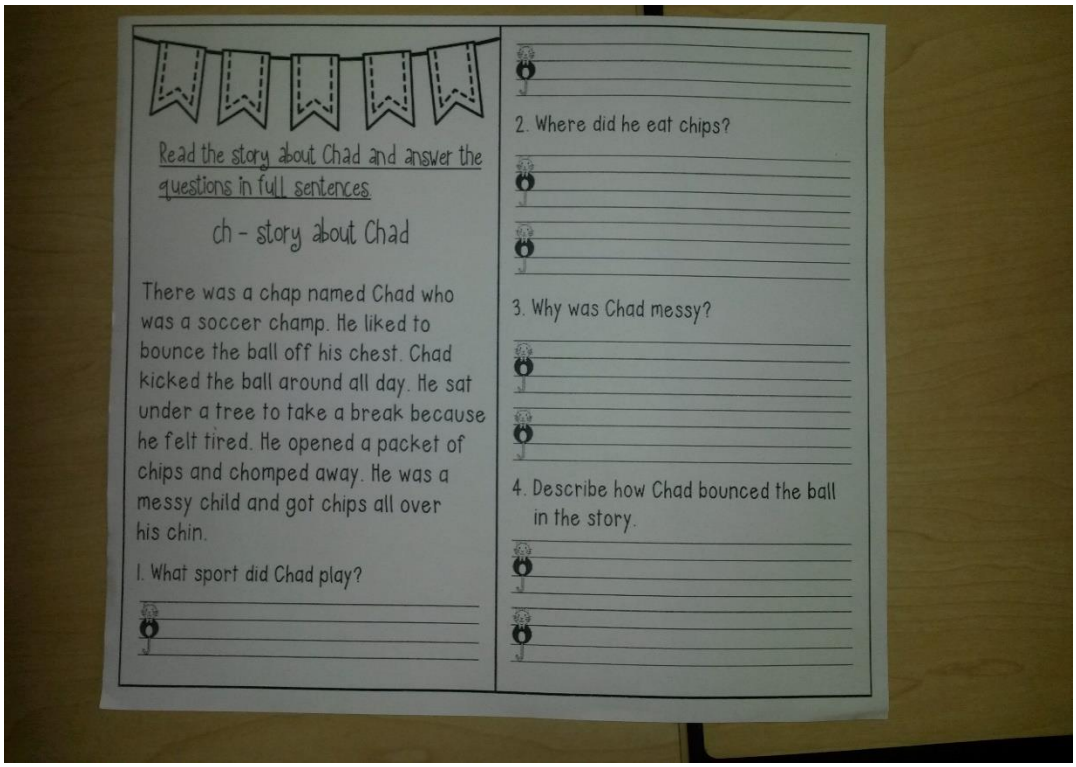
Figure 4.1: Grade One Comprehension Worksheet (July 2017).



Read the story about Chad and answer the questions in full sentences.

ch - story about Chad

There was a chap named Chad who was a soccer champ. He liked to bounce the ball off his chest. Chad kicked the ball around all day. He sat under a tree to take a break because he felt tired. He opened a packet of chips and chomped away. He was a messy child and got chips all over his chin.

1. What sport did Chad play?

2. Where did he eat chips?

3. Why was Chad messy?

4. Describe how Chad bounced the ball in the story.

Figure 4.2: Grade One Comprehension Worksheet (October 2017).

The teachers in the Grade Two-year group have pre-printed books with enough comprehension activities for the year. These books are copied and bound for each child in the grade. The layout of the booklet is designed in such a way that, when the booklet is opened, the story is on the left-hand side and the answers are on the right-hand side with lined space for the answers under each question. According to the staff, in the interviews above, this layout works well as the children are not turning over pages to answer questions on the reverse side. Turning the page over to answer questions causes the child to lose their place in the reading passage. It also prevents the child from copying the correct spelling from the passage. However, the layout of the book causes some difficulty for the left-handed child. The plastic binding causes some discomfort as the child's hand rests on the binding to write the answers and by having the story on the left-hand side, it is covered by the left-handed child's arm, so she cannot see the text without lifting her hand off the page. This often causes the Grade Two reader to lose her place and have to reread the text in order to find and copy the required answer.

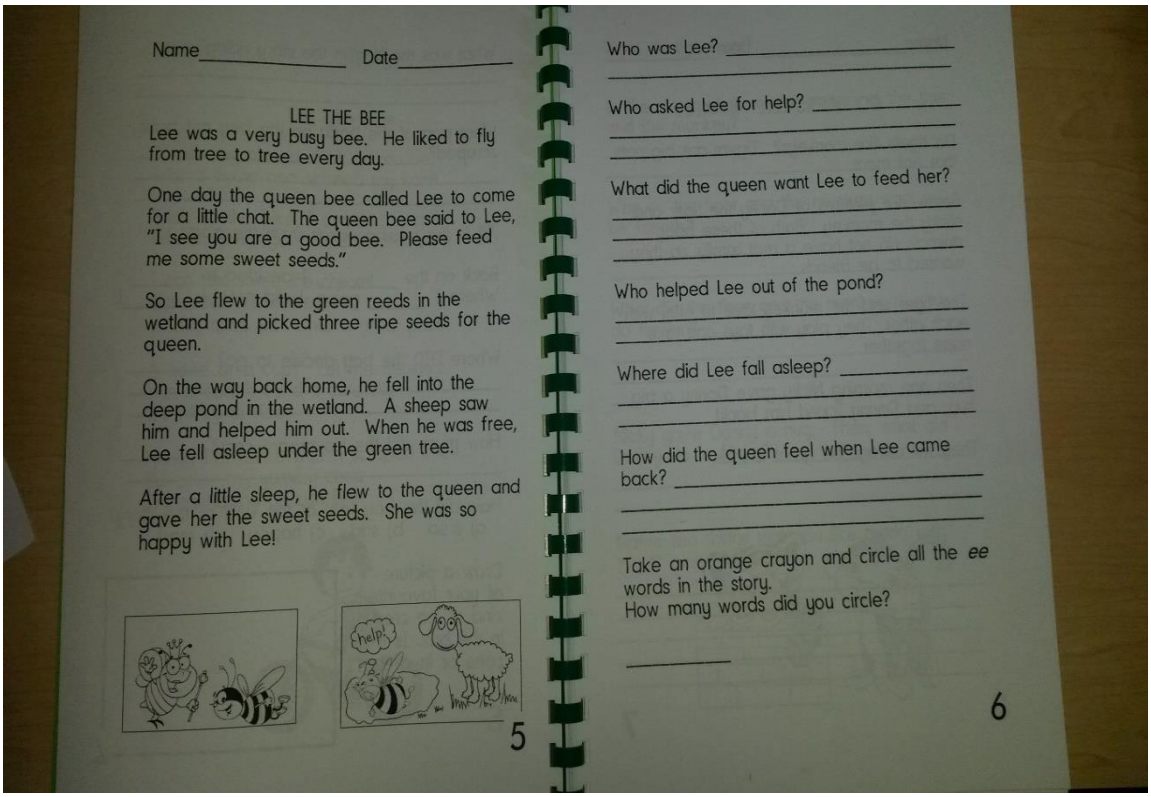
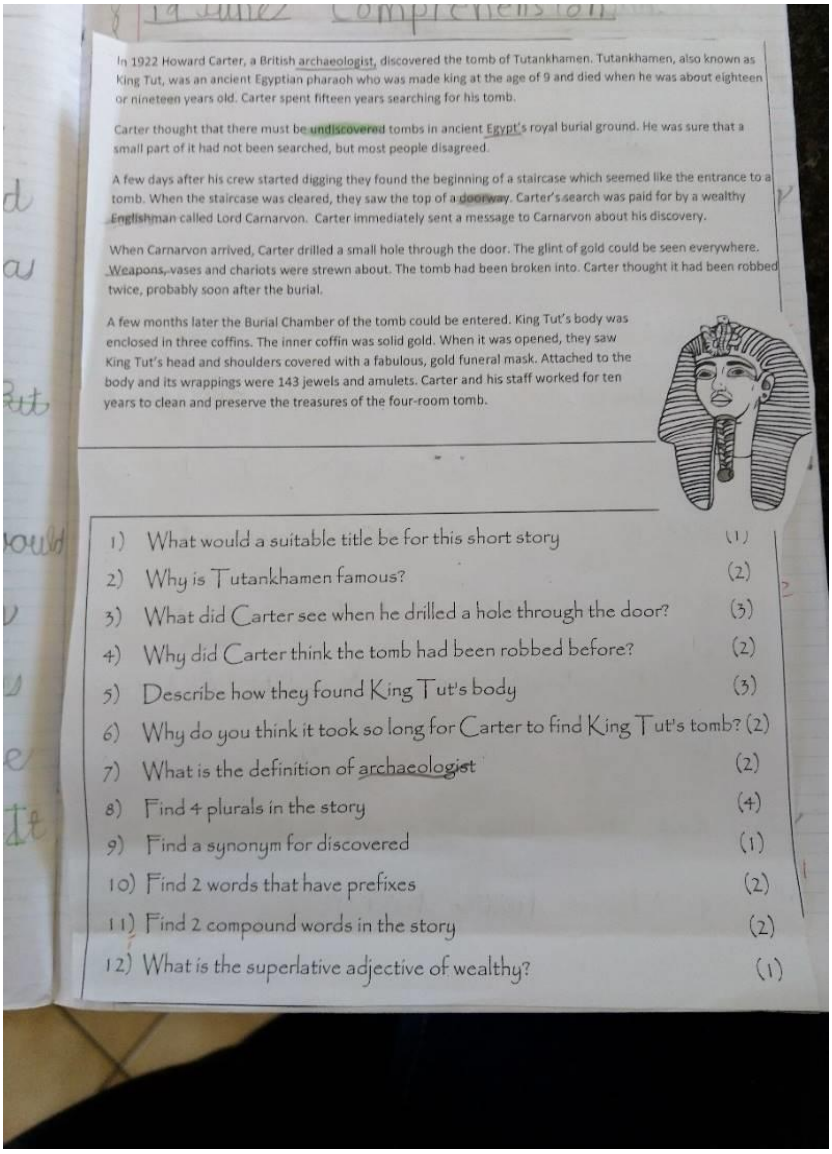


Figure 4.3: Grade Two Pre-Printed Comprehension Booklet (2017).



In 1922 Howard Carter, a British archaeologist, discovered the tomb of Tutankhamen. Tutankhamen, also known as King Tut, was an ancient Egyptian pharaoh who was made king at the age of 9 and died when he was about eighteen or nineteen years old. Carter spent fifteen years searching for his tomb.

Carter thought that there must be undiscovered tombs in ancient Egypt's royal burial ground. He was sure that a small part of it had not been searched, but most people disagreed.

A few days after his crew started digging they found the beginning of a staircase which seemed like the entrance to a tomb. When the staircase was cleared, they saw the top of a doorway. Carter's search was paid for by a wealthy Englishman called Lord Carnarvon. Carter immediately sent a message to Carnarvon about his discovery.

When Carnarvon arrived, Carter drilled a small hole through the door. The glint of gold could be seen everywhere. Weapons, vases and chariots were strewn about. The tomb had been broken into. Carter thought it had been robbed twice, probably soon after the burial.

A few months later the Burial Chamber of the tomb could be entered. King Tut's body was enclosed in three coffins. The inner coffin was solid gold. When it was opened, they saw King Tut's head and shoulders covered with a fabulous, gold funeral mask. Attached to the body and its wrappings were 143 jewels and amulets. Carter and his staff worked for ten years to clean and preserve the treasures of the four-room tomb.

1) What would a suitable title be for this short story (1)
2) Why is Tutankhamen famous? (2)
3) What did Carter see when he drilled a hole through the door? (3)
4) Why did Carter think the tomb had been robbed before? (2)
5) Describe how they found King Tut's body (3)
6) Why do you think it took so long for Carter to find King Tut's tomb? (2)
7) What is the definition of archaeologist (2)
8) Find 4 plurals in the story (4)
9) Find a synonym for discovered (1)
10) Find 2 words that have prefixes (2)
11) Find 2 compound words in the story (2)
12) What is the superlative adjective of wealthy? (1)

Figure 4.4: Grade Three Comprehension passage and questions (June 2017).

The Grade Three children are exposed to a variety of texts, such as cartoons, non-fiction and fictional articles and stories and answer their questions in an exercise book.

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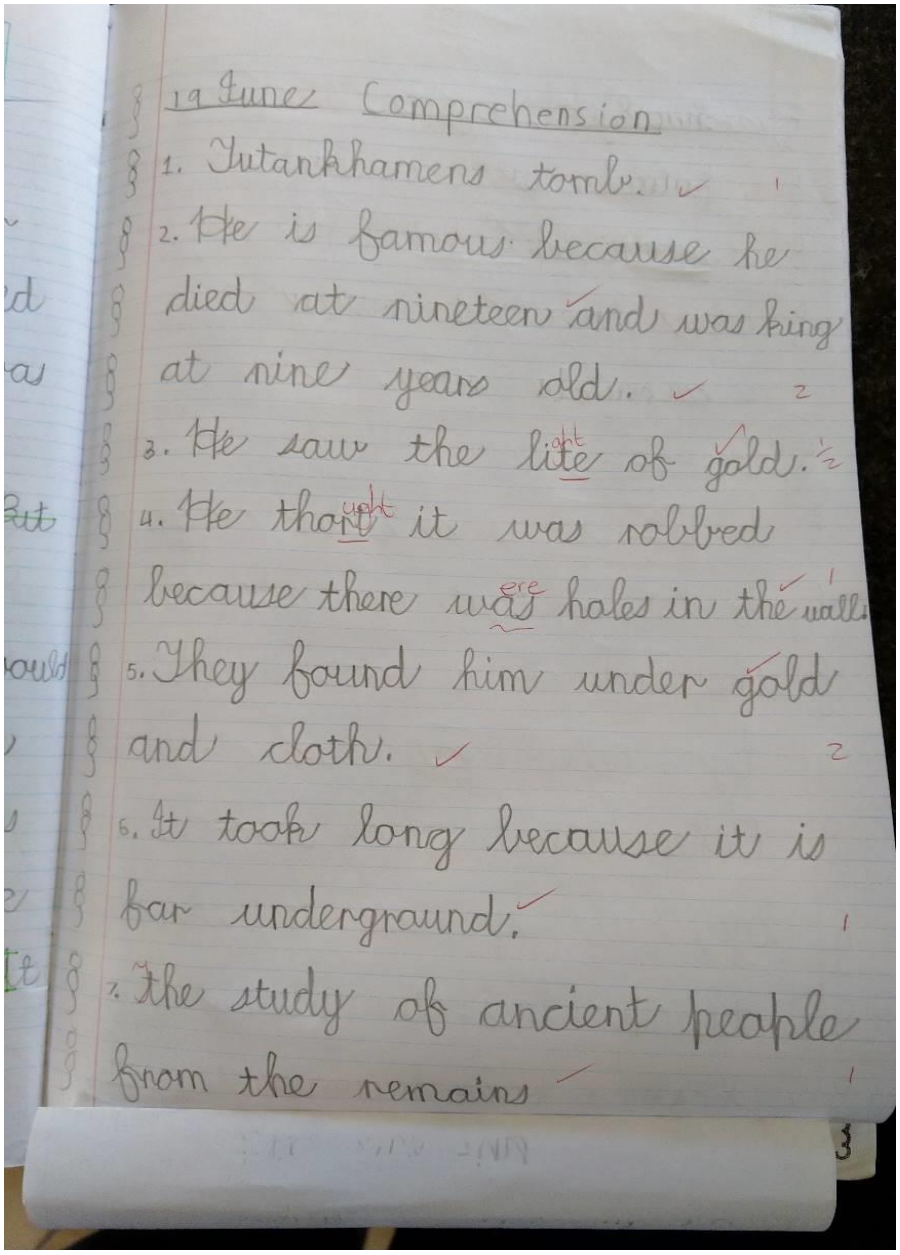

19 June Comprehension

1. Tutankhamens tomb.
2. He is famous because he died at nineteen and was king at nine years old.
3. He saw the lite of gold.
4. He thort it was robbed because there was hales in the wall.
5. They found him under gold and cloth.
6. It took long because it is far underground.
7. The study of ancient people from the remains

Figure 4.5: Grade Three Comprehension Answers (June 2017).

The Grade Three comprehensions are set according to the Grade Four criteria of 60% of the questions are 'lower order thinking questions' and 40% of the questions are considered 'higher order thinking questions' according to the Revised Bloom's Taxonomy[20] (Anderson & Krathwohl, et al, 2001). While the Grade Three teachers are aware of the 60 / 40% rule, very often there are no higher order thinking questions visible in the comprehension activities. The Grade Three teachers also add in language or grammar questions to test language content, for example: plurals, synonyms, compound words. The range of questions asked by the teachers is wide and does develop the children's literal and interpretive comprehension of the texts, however all too often the children take on a passive role when reading texts as the teacher reads the text to the children and generally starts by reading through the questions with the children, with very little discussion about the text or the vocabulary that may need some explanation. The texts are often theme-based and often do not have any meaningful connection to the child's own experience.

This pattern of 'question and answer' has the effect of forcing the children into a position of guessing what the correct answer is in the teacher's 'head', as the questions most often have a specific answer. For example, this is evident in the text of Figure 4.4 and Figure 4.5.

In such a situation, children are positioned as having nothing of value to say or anything new to add to the pool of existing knowledge. Children are expected to answer these pre-set questions on their own, writing the answers on the lines provided or in their exercise books. Once completed in an allocated time, the children then hand in their written work to be marked and evaluated by the teacher. This type of comprehension activity is usually completed weekly or at least fortnightly.

But the teaching of comprehension should involve much more than this teacher generated activity. Children have not got the opportunities to ask their own questions, as a result,

[20] ***Bloom's Taxonomy*** — an ordering of cognitive skills. This taxonomy had permeated teaching and instructional planning for almost 50 years before it was revised in 2001 by Lorin Anderson and David Krathwohl.

there is not really the opportunity to listen to and intra-act with their ideas and to learn from and with them as a teacher. Because of this limitation, there is little opportunity to connect with what they already know and what their ideas are. Although socio-cultural approaches to literacy do take into account of children's prior knowledge (Larson & Marsh, 2014), in practice this often means asking questions to find out 'where children are' in their understanding, so they can be scaffolded to what is regarded as 'deeper', more 'mature' (often symbolic) readings of texts (Haynes & Murris, 2012; Murris, 2016). The acquisition of the required knowledge of concepts is through the handing out of abstract definitions that have little to do with how these concepts are lived and experienced.

For example, in the Grade Three comprehension (see Figure 4.4), the idea that someone can be famous just because of being king at the age of nine, or that it makes sense to bury a dead body with jewellery that Tutankhamun would not be aware of himself as a dead body, nor can be seen by others, could generate many philosophical questions. Fascinating stories like these offer rich opportunities for the children to ask their own questions by drawing on their own experiences and theories of being famous, death, dying and what it means to be rich. Unfortunately, in constructions of literacy education adults' understandings of texts are the norm by which children's readings are found wanting (Murris, 2016).

Furthermore, such instrumental literacy practices reduce stories to be mere instruments and supposedly to have only one (correct) meaning. And it does not do justice to multimodal means of knowledge construction and communication, nor to the lost aesthetic dimension in education, art educator Vecchi is arguing for (see above). Picturebook art is often children's first introduction to visual art. I will argue in later chapters, that good picturebooks are full of ambiguity and complexity and can therefore not be used in more traditional comprehension activities that presuppose one correct meaning of abstract concepts or one right answer to questions they raise (Haynes & Murris, 2012). Teaching comprehension strategies in this manner are "often decontextualised and taught explicitly using excerpts of text from existing books or specially made up texts" (Roche, 2015: 31).

Moreover, I will also argue *for* the use of certain carefully selected picturebooks, *because* of their complexity and the aesthetic and other responses they provoke. The main reason for this is that they affect readers in unexpected ways that cannot be predicted and are difficult to plan for if literacy (as I will show) is allowed to escape from its current conceptualisation in terms of its narrowly defined literacy skills and knowledge transmission, which do not invite children to offer their own imaginative ideas.

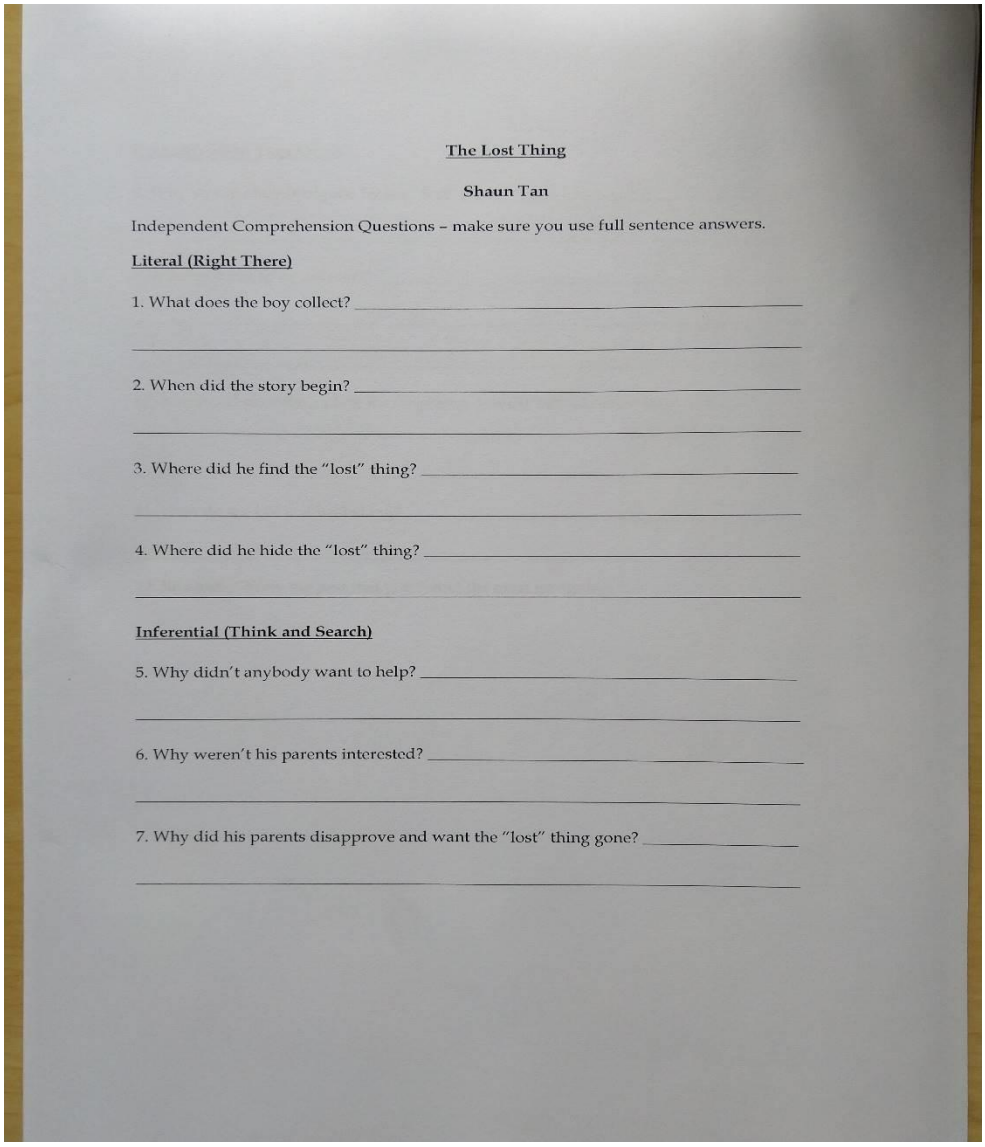
Added to the restrictive question and answer technique imposed on the Groveview learners, generally what is understood by teaching comprehension as part of literacy is that the meanings of the concepts embedded in the text have straightforward meanings. Tests, curricula, worksheets and so on, assume that the meanings of these concepts can be found in the book itself and if not, children should turn to definitions in dictionaries and the internet. However, more than 'extracting' the so-called literal meaning of the text is needed for meaning making. According to Roche (2015: 31), teachers should be trying to not only teach these literal knowledge and skills, teachers should also "develop habits of mind and attitudes/values/dispositions". It is not only at Groveview School that this restrictive technique of teaching comprehension exists. Internet searches asking for comprehension questions based on Shaun Tan's book *The Lost Thing* (2010), immediately yields lists of pertinent links. One of the initial pages displayed in my computer screen includes a link to an activity of pre-set questions and answers based on the book and film *The Lost Thing (2010)* (see Figures 4.6, 4.7 and 4.8).

'The Lost Thing' comprehension

I have included a copy of the activity for the children to answer and followed by a memorandum with the correct answers below. When I showed this activity to the teachers at Groveview School, the general consensus was that it was considered to be useful, because it covers a range of questions from the literal to the evaluative according to the criteria set out by Bloom's Taxonomy.

How is what I am doing any different to the other staff members? Looking through the glass window, my children are not reading the text as a class, nor are we systematically reading the pre-set questions on a worksheet together and I am also not modelling the ‘correct’ way in which to answer the questions. Why does this matter ethically? Why am I doing this and what difference does it make? My research questions work to drive this enquiry forward.

As mentioned in the Introduction, the aim of my study is *not* just to find a *practical solution* for the low literacy achievements in South Africa, but my concern is also of an *ethical* and *political* kind. It is about my response-ability to interrogate the way in which relationality brings literacies into existence. My posthuman focus is not anti-human (Braidotti, 2018), but extends my classroom community of enquiry to also include the nonhuman (e.g., matter) which has made me intra-act differently with the data I created when I was teaching reading comprehension to/with my Grade Three children. It is to the question why matter matters I now turn in my philosophical investigation.



The Lost Thing

Shaun Tan

Independent Comprehension Questions – make sure you use full sentence answers.

Literal (Right There)

1. What does the boy collect? _____

_____

2. When did the story begin? _____

_____

3. Where did he find the "lost" thing? _____

_____

4. Where did he hide the "lost" thing? _____

_____

Inferential (Think and Search)

5. Why didn't anybody want to help? _____

_____

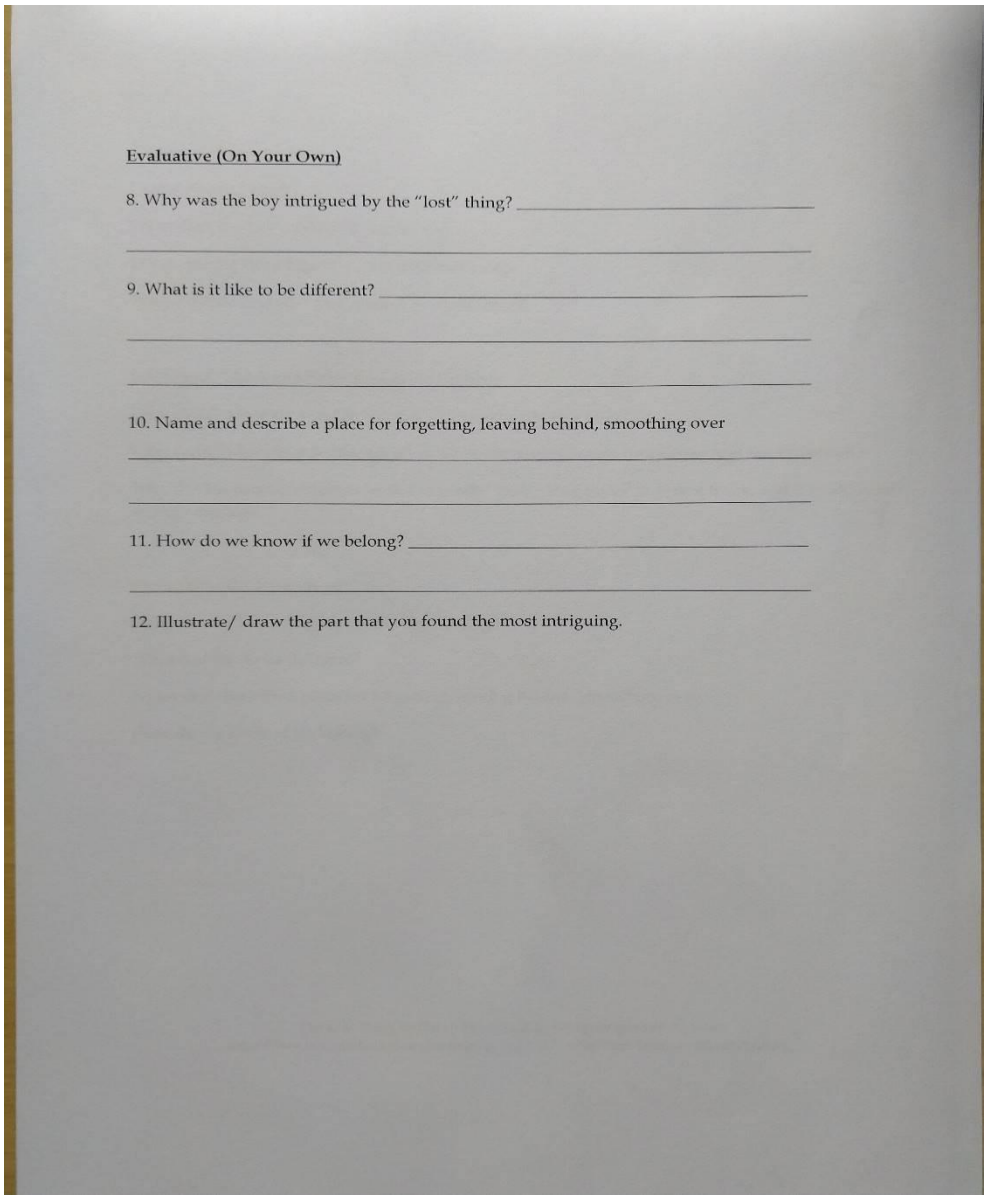
6. Why weren't his parents interested? _____

_____

7. Why did his parents disapprove and want the "lost" thing gone? _____

_____

Figure 4.6: 'The Lost Thing' Comprehension, p1.



Evaluative (On Your Own)

8. Why was the boy intrigued by the "lost" thing? _____

_____

9. What is it like to be different? _____

_____

_____

10. Name and describe a place for forgetting, leaving behind, smoothing over

_____

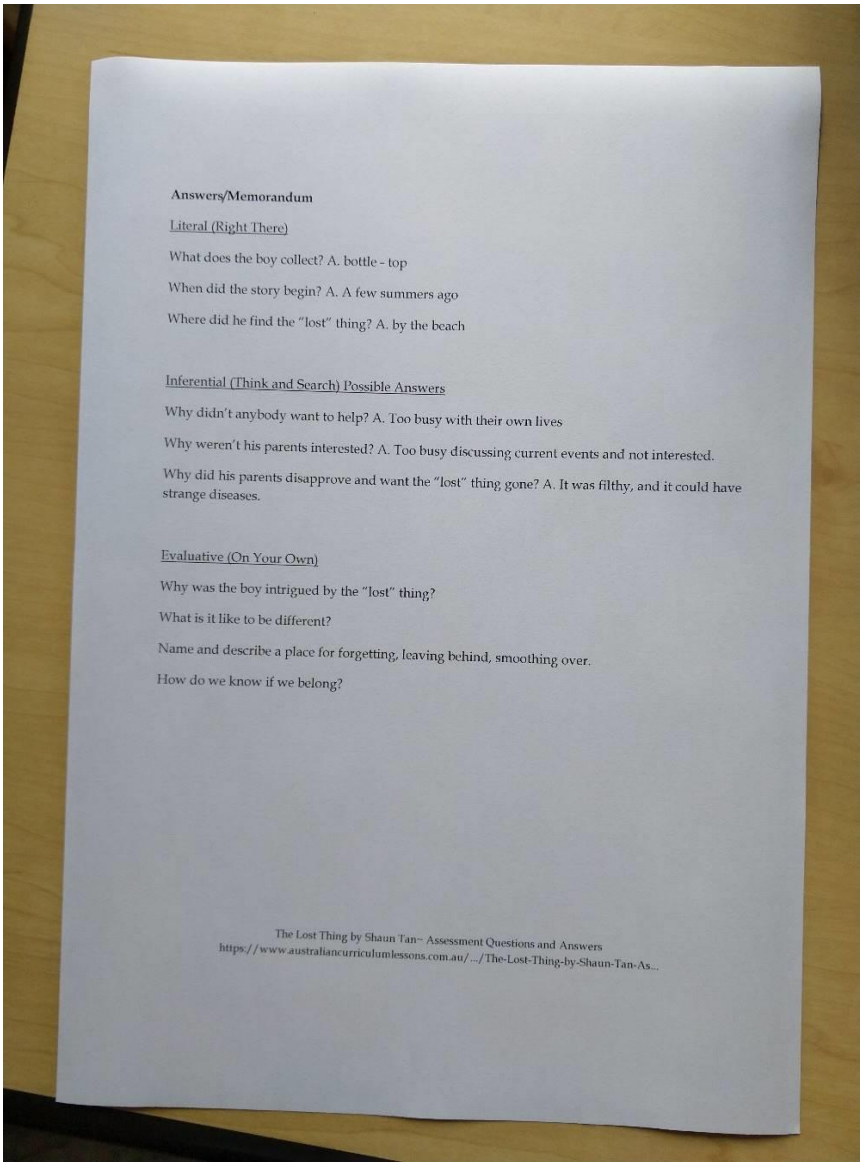
_____

11. How do we know if we belong? _____

_____

12. Illustrate/ draw the part that you found the most intriguing.

Figure 4.7: 'The Lost Thing' Comprehension, p2.



Answers/Memorandum

Literal (Right There)

What does the boy collect? A. bottle - top

When did the story begin? A. A few summers ago

Where did he find the "lost" thing? A. by the beach

Inferential (Think and Search) Possible Answers

Why didn't anybody want to help? A. Too busy with their own lives

Why weren't his parents interested? A. Too busy discussing current events and not interested.

Why did his parents disapprove and want the "lost" thing gone? A. It was filthy, and it could have strange diseases.

Evaluative (On Your Own)

Why was the boy intrigued by the "lost" thing?

What is it like to be different?

Name and describe a place for forgetting, leaving behind, smoothing over.

How do we know if we belong?

The Lost Thing by Shaun Tan~ Assessment Questions and Answers
https://www.australiancurriculumlessons.com.au/.../The-Lost-Thing-by-Shaun-Tan-As...

Figure 4.8: 'The Lost Thing' Memorandum.

Why does it matter ethically that I am doing/teaching comprehension in my classroom differently? Why am I doing this and what difference does it make? My research questions work to drive this enquiry forward. I am concerned about how child is positioned in current literacy practices, which forms part of my second research question, 'how does Intra-active Comprehension reconfigure child in relation to more than human?'

Can comprehension be done differently?

As illustrated earlier in this chapter, by the responses of the three teachers from Groveview School, I probably would have also given a traditional lesson by presenting the comprehension activity based on *The Lost Thing* (Tan, 2010).

As discussed earlier, children seem to enjoy the process of constructing problems which is a different way of approaching children's learning. Elements or signs that connect in an unpredictable manner characterize a rhizomatic process. This process is not "ruled by a plan for definite goals or aims and is exemplified and developed as a practice" with children (Lind, 2005: 257).

Vea Vecchi argues that our minds and bodies exist in connection with each other and knowledge is constructed through the sensations experienced by our bodies which in turn, make us think about the sensations and our bodies. Being afforded opportunities to experience and analyse complex problems through the various modes of communication or "languages" (Malaguzzi, cited in Edwards et al, 2012: 7), our bodies experience a variety of sensations. The variety and intensity of sensations of the intra-actions between the body-text-place extends the creative and imaginative meaning making, which in turn leads to a "greater richness and completeness to thought" (Vecchi, 2010: 18).

Posthumanist Karen Barad argues that meaning and matter are entangled and meaning making cannot be a human only activity or process through language, but rather "neither discursive practices nor material phenomena are ontologically prior or epistemological

prior...matter and meaning are mutually articulated" (Barad, 2007: 152). In other words, meaning is the result of co-constructed processes between bodies, which include both human and non-human bodies (e.g. the materiality of a book, the furniture in the room, hungry stomachs). The implications of including the material and materiality in literacy and the kinds of questions asked during teaching were key to my study. Drawing on the posthumanist perspective, meaning making or creating new concepts or knowledge "emerges as an effect of the intra-activity that takes place *in-between* children and material artefacts" (Lenz Taguchi, 2011: 47).

Intra-activity is different to interactions. Lenz Taguchi draws on Barad and explains that intra-action relates to the "relationships between organisms and matter (human or non-human) which are understood *not* to have clear and inherent boundaries but are always in a state of intra-activity". Intra-activity is different from the familiar concept of interactivity and the relationships between two separate entities. which refers to the "inter-personal relationships between at least two persons or entities that are understood to be clearly and inherently separated from each other" (Lenz Taguchi, 2011: 40).

Intra-active comprehension

The term intra-active comprehension came about as a response to the need of a term to describe, based on critical posthumanism theories, the rhizomatic and intra-active processes of children creating-with-materials-time-space-environment-humans. Barad explains knowing or understanding as a material practice of engagement as part of/with this world as the world is becoming, suggesting that the intra-activity between the child-materials-space-time-environment produces or creates the new knowledge (Kuby & Gutshall-Rucker, 2016).

An intra-active pedagogy assumes that human bodies extend and enrich their knowledge through a direct material engagement with the world – humans are not above or at a distance of the world, but always part of it; the material (including human bodies) are

active participants in knowledge construction. The Philosophy for Children (P4C) (Murris, 2016) and the Reggio Emilia approach (Olssen, 2009; Lenz Taguchi, 2011) can be understood as intra-active pedagogies. Liselott Olsson (2009: 17) says that children want to explore problems that are of interest to them and explains that:

> [C]hildren are capable of and seem to find themselves in a constant quest to go beyond established problems to reinvent them and add new ways of understanding them. It seems that what is important thing for children is to *construct* the problem they are working on.

Deleuze and Parnet (2011: 1) say that it is the effort of working with and understanding the problems or questions posed, that is worthwhile because it is:

> [W]hile you turn in circles among these questions, there are becomings which are silently at work, which are almost imperceptible since movement always happens behind the thinker's back, or in the moment when he blinks.

In response to the traditional comprehension process of 'question and answer' where children's voices (and bodies) are suppressed and ignored, it is through intra-activities between the child-materials-space-time-environment that creative and critical comprehension can e/merge. This is made possible in-between human and non-human intra-actions where, according to Margaret Mackey, "physical exchanges as well as a conceptual and imaginative opening up" (2016: 167) occur.

I return to the question above and ask how is Intra-Active Comprehension different to the 'proper', traditional way of teaching comprehension? I include a piece of transcript from the community of enquiry that the Grade Three children had once they had seen the film, based on the book of the same title, *The Lost Thing* (Tan, 2010). By choosing one documented piece of data, there is a chance to really get into the 'snippet' of data's complex relation to problems. By choosing "one piece of data gives one a better chance of

seeing all the single moments as well as the entire culture involved in the children's way of constructing problems and sense" (Olsson, 2009: 120).

Transcript of: *The Lost Thing* (2010) Community of Enquiry - 6 November 2016, Grade 3 Classroom

Me: Do you want to pick someone?

Justine: Joe…

Fred: My idea links to Tammy's idea.

Me: Oh yes?

Fred: I disagree with Tammy because if the boy was there with the Lost Thing, then the Lost Thing knows him so he will…like…be with him and the creature or machine won't feel lost because he has a friend. Like when the machine was in the city, he didn't know anybody.

Me: But when the machine was in the city, he was with the boy.

Fred: But before…

Me: On the beach you mean?

Fred: Yes!

Me: So, are you saying as soon as you know someone you aren't lost? You might not know your environment or surroundings, but when you have got a friend then you are not lost?

Fred: Yes!

Me: So, can the concept of loneliness be linked to lost? But can't you be lost in a group of friends too?

Fred: Maybe…I guess…I need to think more.

Me: Anybody else want to add before we…Maria?

Maria: I want to disagree with Mario.

Me: Oh yes?

Maria: What if, maybe, the machine thinks like someone is going to help him. So, he stayed in that same spot to wait for someone to help him get back to his… (inaudible)?

Me: So he decided to stay and wait for help? Do you want to say a bit more?

Maria: Mmmmm…well…my mom always says if I get lost in a mall, I must stand still and she will find me. It's easier finding a still person than a moving one!

Me: That's good advice! The Lost Thing was standing still on the beach waiting for someone to find him. That is a likely scenario, Maria. Do you want to pick someone?

Maria: Mmmm…Joe

Joe: Mrs Thompson, I have a question for the 'Odds and Ends'

Me: The Department of Odds and Ends? A question?

Joe: I mean I have an idea about the words Odds and Ends

Me: An idea? Oh yes?

Joe: It says…

Me: Talk to the group.

Joe: It says it in the name…*Odds* is for the *odd* creatures and then the…it ends where…and then it… And then it…like…the *ends* part is the end of their life. The Department doesn't really want the odd creatures in their reality.

Me: Oh wow! That's quite interesting…So you are saying here is a department for odd creatures who don't really fit in and this is space is where they are going to spend the rest of their lives. I have never thought of 'odds and ends' like that…

The definition of the term, 'odds and ends', is given by the Merriam-Webster Unabridged Online Dictionary as being:

a) miscellaneous articles
b) remnants or leftovers
c) miscellaneous small matters (as of business) to be attended to

Joe had diffracted with the material presented, the provocation of the video and book, *The Lost Thing* (2010), and with/through the term 'odds and ends' and had suggested his own definition. It is not an accepted definition according to the dictionary, but for me and the children in the community, it opens up another possibility of intra-acting with/through the

term differently. The question ‘what is meant by the terms odds and ends’ wasn’t even considered as a question in the comprehension activity shown in Chapter Three.

The transcript above is also an example of children *diffracting* with the meaning of words and abstract concepts and therefore the language they use was an example of Joe’s entanglement with the material. He had constructed an argument to explain the definition of the term *odds and ends*. This was indicative of rich thinking and reasoning taking place through his entanglement with the story. Joe, by examining and comparing the illustrations, as well as how he had heard the words being used in other contexts was constructing his ‘own’ meaning or interpretation through thinking with others and the nonhuman (the digital version of the story) was an important part of the phenomenon.

Maria had offered her interpretation of the lost creature’s actions – possibly, it was standing still, waiting to be found. Maria had drawn on her own experiences and advice from her mother and was applying it to the situation in the provocation. These two examples of philosophical concepts could have been explored further to add complexity and richness to the community of enquiry. Susan Gardner argues that it is the facilitator’s role to push for the complexity and for truth. The questions that the facilitator asks are “similar to, though more extensive and ‘deeper’ than those that merely promote ‘good thinking’. One way of thinking of it is as the second why” (Gardner, 1995: 105). Both Joe and Maria had the opportunity to share their ideas and suggestions and then give a second justification so that there is “quality of philosophical thought, relevance and a push for depth in”, what Gardner calls, the “progress toward truth” (Gardner, 1995: 105). Although the notion of ‘truth’ takes up a different meaning in posthumanism (there is no correspondence to a world outside language that gives language its truth value), I appreciate the agential realist position that there is a real world that exists outside language – even if that world is fictional. What are indeed the factors that made this creature lost?

At the time of the research, most of the Grade Three children were able to successfully link their thoughts or contributions to another thought. This has been achieved by

encouraging the children, if possible, to start their response with ‘I agree, or I disagree with...’ This is more complex than mere teaching a particular linguistic convention or behaviour. As is clear from the transcript, the children are beginning to connect their comments and link their ideas to another idea productively. The ideas are taken up by the next member of the community to speak and are either built upon, or an alternative suggestion is given. They are creating new ideas together.

By intra-acting with one another, the materials, the environment and other nonhuman bodies, the Grade Three children are creating new knowledge in a collaborative, creative manner. The advantages of intra-acting with the provocation and creating such complex, rich and entangled ideas is far more beneficial than answering pre-set questions with one correct answer.

At the start of Chapter Four, I discussed how the international standardised testing was not always an accurate reflection of children’s comprehension skills or the way children may make meaning based on their intra-action with the material.
Moss (2006: 135) states that practices in the classroom are

> increasingly dominated by one particularly strong narrative, an Anglo-American narrative spoken in the English language, located in a liberal, political and economic context, and dominated by certain disciplinary perspectives, in particular psychology, management and economics. This narrative has a distinct vocabulary, in which terms such as ‘development,’ ‘quality’ and ‘outcomes’ are prominent.

In order to disrupt this dominant discourse, then the way that comprehension is viewed and assessed needs to change, or in Foucault’s words, “one can no longer think things as one formerly thought them, transformation becomes both very urgent, very difficult and quite possible” (1988: 155). However, the intra-action taking place in-between the children, the picturebook and video, myself and the nonhuman bodies results in a richer experience of the material. The unpacking of the taken-for-granted term ‘odds and ends’

by Joe indicates that there needs to be an openness to thought; and the need to be responsive to what is created in the dialogue between children and adults.

Voices without Organs

This chapter discusses how the posthumanist lens has given me the opportunity to "materialize a different conception" (Mazzei, 2013: 732) of comprehension through/with the data created.

Assemblages or entanglements can be compared to a ball of wool, entangled and knotted, messy and entwined. Trinh Minh-ha describes the messiness of the entanglement as a piece of thread that is "crisscrossed and interlaced by other threads until it breaks with its own linearity" so that only an intricate, "complex, tightly knit tissue of activities and events that have no single explanation" (Trinh Minh-Ha cited in Barad, 2014: 184) are evident. Another useful explanation of an assemblage she offers is that it is an open-ended entanglement of ways of being. In an assemblage, varied "trajectories gain a hold on each another, but indeterminacy matters. To learn about an assemblage, one unravels its knots" (Tsing, 2017: 83). In dropping the thread of the matsutake mushrooms, I pick up another, different thread and try to unravel this part of the knot.

From a humanistic perspective, there is a general assumption that voice is produced and brought into being by a "unique, essentialist subject" (Mazzei, 2013: 733). From a posthumanist viewpoint, the oral data created and the voices of the participants, in this case the Grade Three children in my class, cannot only be thought of as something that comes out of the mouth of a unique individual. Mazzei (2013: 734) states that voice:

> cannot be thought as emanating from "from" an individual person. There is no separate individual person, no participant…to which a single voice can be linked.

Deleuze and Guattari (1983) introduced the concept, the *Body without Organs* (BwO) to enact thinking without a deliberate subject and to "liberate it from its organizing images" (Colebrook, 2006: 121). What becomes important for Deleuze and Guattari is not the meaning that is produced, but instead they are concerned with *how* things work and what is produced in-between the intra-actions of human and nonhuman bodies. Goodchild suggests that it is the exploration of the possibilities of "human relation, and a reconstruction of subjectivity, society and environment" (1996: 2) that is critical for Deleuze and Guattari. It is not what life is, but rather what "it does, the forces that are acting through it, along with its senses and values" (Goodchild, 1996: 29). Deleuze and Guattari label the organism that is an assemblage or entanglement of "forces, desires and intensities" as a BwO. For Deleuze and Guattari, because there is no subject or separate individual, it is this entanglement of desires, forces and intensities that is the "hub of connections and productions" (Mazzei, 2013: 734). It is this hub of connections or BwO, that offers the opportunities for "transformation, proliferation and becoming" (Mazzei, 2013: 734). Goodchild (1996: 203) explains the hub of connections as:

> Desire is the intense body without organs, the immanent plane of abstract machines that are interposed as becomings and mutations in the relations between assemblages, giving them a consistency.

Lisa Mazzei draws on the work of Deleuze and Guattari and offers another layer to the BwO. Mazzei suggests that "Voice without Organs (VwO)" (2013: 733) be used to describe "a different kind of human being that enables one to think voice differently" (2013: 733). This human being is seen as an assemblage or entanglement, or a "knot of forces and intensities that operate on a plane of immanence" (Mazzei, 2013: 733). It is this human being or assemblage that produces a voice that does "not emanate from a singular subject but is produced…in an enactment among researcher-data-participants-theory-analysis" (Mazzei, 2013: 733). Mazzei suggests that the concept of voice can then be considered as an entanglement, an assemblage, or a "complex network of human and nonhuman agents that exceeds the traditional notion of the individual" (2013: 733). This could be considered

a collective voice, but not only of human sounds, utterances, words and sentences, but rather of more than this.

If voice is considered to be something more than sounds or words emanating from a single individual, then the words spoken, and the corresponding words written down as part of a transcript should be de-linked from one another. Instead, voice should be seen as an assemblage or a complex entanglement of connections of "human and nonhuman agents that exceeds the traditional notion of the individual" (Mazzei, 2013: 734). So, the notion of voice is then reconfigured in posthumanist research as not emanating from an individualised, separate human body. At the same time, the BwO is not a separate agentic individual who speaks with a singular voice.

Transcript of*: The Lost Thing* (2010) Art activity - 10 November 2016, Grade 3 Classroom.

**Italics – movements, sounds, materials, time, space*

Me: I am going to use Bobbi. Can you come and gently lie on the papers? The sheets aren't glued together so you need to be careful. Don't spread your arms out too far. Can you position yourself on the paper?

Bobbi gets up and lies on his back on the paper. Papers respond by bending and scrunching under Bob's weight.

Bryn: Mrs T, Bobbi is lucky...

Me: Why?

Bryn: He gets to snooze

Some giggling at the comment. Papers shift position.

Me: Can you put the papers together at the bottom?

2 girl-bodies move forward quickly to assist. Bobbi moves his body up the paper. Paper makes a crinkling sound and moves simultaneously with Bobbi's body.

Me: No, no you are fine.

Holds Bobbi down on the paper by the shoulder
1st girl-body raises Bobbi's legs and the 2nd girl-body rearranges the

papers. Papers move back to original position.
Lots of chatting and wriggling, body positions changing on the carpet. Carpet acts as boundary and keeps bodies firmly in place.

Bryn: Bobbi is human art! He is 3D art! We just need super glue and paint and we can stick him to the wall and say, "**We created this**..."

Arm sweeps to the right of his body as a physical introduction to the imaginary art just created.

Aimee: Mrs T, we are using our senses to jog our memories. Jog our memories...like they are going for a run.

Bryn: Bobbi...you look nervous!

Bodies excited to see the body take shape and watch the shape emerging on the paper. Chattering and laughing, wriggling, fidgeting as they watch the other bodies drawing with black crayon around the body on the paper.

Me: Mario can you draw around the body part that is near you? Look...I am not going too close to his body. Just start here and match up the line where I finished.

Bodies, eyes turn to watch quietly. The black crayon line travels around the body.

Me: Ok...let me hold your foot so we can draw around it.

Holds foot in a way that positions the foot sideways against the paper

Bryn: Like this...

Demonstrates by straightening his legs and turning his feet out.
2 girls closest to him copy his movements
1 girl looks down at her hands as she slowly spreads her own fingers out, copying Bobbi's finger positioning.
2 minutes pass as body outline is completed by other bodies.

Bryn Then Bobbi you can finally be released.

Bobbi gets off the paper
Exclamations of surprise and wonder...whoa, look at that, laughing at outlined body.

Ashton: I didn't think Bobbi was so fat!

Nicci: Look at...his real fingers are much smaller than that. So which one is the real Bobbi?

Me: Ok, we are in our groups. Mmm, we need another group...Bryn and Ntembi and Adrian can you form another group?

Boy-bodies leave original groups and form the sixth group.

Me: Ok-take the piece of body that is closest to your group...

Ntembi: We are dividing up Bobbi! Are you in pain Bobbi?

Me: Using the body part you have taken; can you show how we could use that particular body part to trigger a lost memory?

Hands reach for paper.
Knock on door. Bodies look towards the door.

Me: You can use any media you like to help you. But you have 5 minutes to chat, plan and start and then I will come and chat to each group. Then we will put the picture back together.

Ashton: We will try and stitch him together.

Me: Yip, we will try…

Door opens, wind rushes in, bringing leaves into the classroom and blowing, lifting moving papers on the floor. Wind leaves through opposite open sliding door. Childbodies grab paper and hold sheets to the floor using own bodies and then other materials like pencil cases, glue sticks.

Diffracting with this piece of transcript through Mazzei's concept of Voice without Organs and the notion that voice should be seen as an assemblage or a complex entanglement of connections between the human and nonhuman bodies, I am aware that it is not *only* the children talking and then the final art product that is produced that is considered so important. So, rather than analysing data in a search for meaning or attaching data in the form of words written in transcripts explaining what the children did in the classroom, instead by plugging in to the entanglement, "this methodological approach positions data and voice as agents in their own right" (Mazzei, 2013: 739). In this way, the focus on what the children said or drew would be only one part of the "agential force in the research assemblage that one plugs into…" (Mazzei, 2013: 739).

It is not the individual voices of the children that are only considered, but rather it is the simple phrase by Bryn of “we created this…” that gives importance to the nonhuman bodies that were involved in this activity – the paper and the carpet and the dust and the felt tip pens and the body movements and the....
Therefore, *all* of the forces, intensities and desires like the classroom, the materials, time, spaces, voices, the questions, myself as the teacher and researcher, the becomings *all* plug in to produce to the entanglement that can be called Voice without Organs.
Sylvia Kind suggests that the nonhuman bodies, the materials *live* in the world in multiple ways. Materials can, according to Kind (2014: 865),

> evoke memories, narrate stories, invite actions, and communicate meanings. Materials and objects create meeting places...Materials are not immutable, passive or lifeless until the moment we do something to them; they *participate* in our...projects. They live, speak, gesture, and they call to us.

It was the invitation of actions and the evoking of memories that also e/merged in the entanglement transcribed above. Using Sylvia Kind’s quote from above, it was the use of the materials: the large pieces of paper, the coloured felt tip pens, Bob’s body as a template, the hands drawing around his body, the voices, that all contributed to the invitation of action, for creating something new. At the same time, drawing again on Kind’s quote, when the children, myself, the materials and the objects came together at the ‘meeting place’ (Kind, 2014: 865), that the memories of previous conversations were evoked, re-visited and re-imagined as part of the new entanglement that was e/merging.

Back to roots

As discussed in Chapter Three, Deleuze and Guattari, in *A Thousand Plateaus* (1987), propose moving away from the traditional hierarchical Western model of knowledge construction, which can be understood in terms of an arborescent culture or tree-like logic. When constructing knowledge in a tree-like formation, we tend to organise thinking in

terms of a clear genealogical development. Our thought evolves vertically as a fixed, upright trunk from a single point of origin (just like the oak tree grows from the acorn), and it can be clearly separated from the world around it. Tree-like logic predisposes us to think in dualistic terms or in binary oppositions. The tree 'proceeds by dichotomy'. Tree-logic encourages us to think in terms of an image or a model as a representation of the external world or reproduction of already given internal structure. Teachers and learners are seen as independent entities or subjects and work together to develop blocks of knowledge that are also viewed as separate. The teacher's role is to deliver the knowledge to the learner who assimilates the knowledge according to their diverse capabilities and aptitudes. According to Dennis Atkinson (2015: 44), this pedagogical practice is held in place by controlled curricula, assessment and inspection programmes, and a pervasive culture of audit, all of which presuppose or anticipate known (desired) pedagogic subjects and objects (teachers, learners, knowledge, skills).

The ontological separation of teachers, learners and knowledge facilitates an easy diagnosis of success or failure of the pedagogical process by measurement of performance outcomes through the annual benchmarking assessments. There is a particular stance or conception as to what literacy is all about. This is evident in the skills that are stipulated in the CAPS documents, what skills are seen as being important by the principal, other staff members and parents. But what counts as good or best practice in the teaching and assessing of literacy?

These discourses are set within particular power structures. There is the additional "thrust of institutional power" (Masny & Cole, 2012: 34). As discussed at the beginning of this chapter, the Grade Three children write the IBT assessment (International Bench marking Test) every year in October. This is the first time that the Grade Three children are exposed to this type of assessment and the grade 3 year is geared toward the teachers preparing the children for these annual assessments in both Mathematics and English. Masny and Cole explain in their case study that "prior to the assessments the teachers tend to set aside the official curriculum and pull out the unofficial curriculum with the complete focus on

test-taking" (Masny & Cole, 2012: 34). This practice also happens at the school where my research was carried out.

Deleuze and Guattari (1987), suggest, as an alternative to the tree-like knowledge creation, the image of the rhizome as one which foregrounds connectedness to illustrate how new learning processes e/merge. A rhizome is a flat, horizontal system of roots growing beneath the surface of the ground. Crucially, it doesn't have a centre and it doesn't have fixed boundaries. It is not organised according to a hierarchical principle. It is always spreading, sending out new shoots from its nodes (Deleuze & Guattari, 1987).

We have seen this above in the transcript of the children discussing the creature in the picturebook, *The Lost Thing*, being lost and the definition of 'odds and ends' and in the second transcript using video of '*The Lost Thing'* to drive the art activity. Learning processes that are inclusive of complexity, multiplicity and diversity cannot have a fixed origin, end point or linear trajectory (Osberg and Biesta, 2009: 9). Instead of being linear, the learning process can start at multiple points and move rhizomatically. This process is not linear and progressive or hierarchical, but rather circular and expansive. This means that in every new move or displacement of our understanding the previous move is included and still operating: we add another aspect or complication that makes us understand things in necessarily more complex ways (Lenz Taguchi, 2010). Linking the rhizomatic movement of the learning processes to Barad's terminology of diffraction, the learning processes follows the flow of the diffractive waves that e/merge when different bodies intra-act with one another. Barad writes that diffraction has to do with the way waves, like waves in the sea, "combine when they overlap and the apparent bending and spreading of the waves that occurs when waves encounter an obstruction" (Barad, 2007: 74). Lenz Taguchi (2011) argues that these diffractive waves caused by the interferences or entanglements in-between the bodies transform the learning processes in unpredictable ways. From these entanglements, new connections are created and e/merge. Diffracting with the data created from a possible material-discursive reality implies a resistance against foundational, anthropocentric and privileging points of views, to acknowledge our interdependence and co-existence with other bodies in the world. What is produced as

knowing in the diffractive analysis is consequently a material-discursive reality where that which has considered passive and minor is now seen as active and forceful in its intra-activities with other bodies. Lenz Taguchi explains this as the idea that “diffractive analysis makes us aware of our embodied involvement in the materiality of analysing data” (2012: 278). Using Lenz Taguchi’s ideas from the paragraph above, and in order to map the classroom in terms of its affective capacities, it is necessary to consider the work of the passive, minor intra-actions as well as the three lines, the molar, the molecular and the lines of flight – “both productive and dangerous” (Albrecht-Crane & Slack, 2007: 103).

Molar lines are the rigid lines that institutionalise learning by territorialising, controlling, segmenting spaces and bodyminds in such a way that binary structures are established. Bodyminds are identifiable in their specific roles like teacher or student, adult or child, capable or incapable. David Tyack and Larry Cuban explain that education systems, particularly in the West, have been “segmented along molar lines that are systematised and rigidified” (Albrecht-Crane & Slack, 2007: 103). Due to these lines that have become institutionalised and have become the norm, the lines have become essential features of ‘proper’ or good schooling and are imprinted as such on the public, teachers and children. These features include age-grading, separate subjects of knowledge and the self-contained classroom with a prescribed number of children and usually one teacher (Tyack & Cuban, 1995).

I re-turn to the first video of data created and intra-acted with the footage. The first video of data created and where the transcript of ‘*The Lost Thing’* community of enquiry (see p 182), taken from, I was conscious of the compulsory, gender specific uniforms; the way the children’s bodyminds are positioned on the carpet as they are all sitting in a similar fashion of crossed legs and hands in their laps. At different points in the first video, children are seen to raise their hands in order to, initially attract my attention in order to get my permission to speak. In the beginning of the video, I am drawn to how long I actually speak for, while the children are all quiet and listening, paying attention to the knowledgeable teacher as they have been instructed to do throughout their two or three years of formal

schooling. These are institutionalised, rigid and systemised ways of controlling and segmenting bodyminds in identifying and being identifiable in their specific roles.
In this chapter, I introduced and explained the concept of intra-active comprehension which is different to the traditional comprehension process of teacher generated ‘question and answer’ worksheets where children’s voices (and bodies) are suppressed and ignored (see Chapter Four). Drawing on critical posthumanism theories, the term intra-active comprehension describes the rhizomatic and intra-active processes of children creating-with-materials-time-space-environment-humans. Barad explains knowing or understanding as a material practice of engagement as part of/with this world as the world is becoming, suggesting that the intra-activity between the child-materials-space-time-environment produces or creates the new knowledge (Kuby & Gutshall-Rucker, 2016). Intra-active comprehension also creates the opportunities for me, as a teacher, to of being aware of the possibilities that the material affords when teaching and learning literac(y)ies.

In the following chapter, while staying in the classroom, I turn the lens to the invisible or the things, spaces, time and matter that tend to go unnoticed in a classroom. Objects or things with their own power all *participate* in education. And so in Chapter Five and Six, consideration is given as to how the *nonhuman* elements or bodies directly intra-act in educational encounters with human bodies.

Chapter 5 Silences & Atmospheric Attunements

For more than a century, theorists have written about spaces, places and embodied encounters in various settings which include educational spaces (Thrift, 2009; Bissell, 2010; Buser, 2013). John Dewey writes that the interaction between concrete, architectural surroundings and internal responses in a person gives rise to what he calls a "situation of educative experience" (Dewey, 1998: 39). For Dewey (1998: 41) living in the world means living a "series of situations" that are constantly changing as a person and her environment interact. In this chapter, atmosphere is not an invisible container in which or backdrop against which the entanglements e/merge. I will explore the role atmosphere plays in the ongoing intra-actions in and outside my class.

Accounting for nonhuman agencies means that we have to begin to also consider how the *nonhuman* elements directly participate in educational encounters. Objects or things with their own "thing-power"(Bennett, 2010: xvi) such as chairs, textbooks, classroom spaces, chalk, iPads, pencils, worksheets, books, uniforms, and art equipment all *participate* in education, "they're not merely inert stuff that forms the *background* for a more important 'human' learning experience" (Snaza, Sonu, Trumen & Zaliwska, 2016: xx; italics inserted). Similarly, the spaces and places that human and nonhuman bodies move with/in also play a role in knowledge construction, they are not the mere background to what really matters. The background is not merely 'inert stuff', but a collectively lived and shaped condition that affects and is affected. The notion of 'background' has been given a number of names, for example - context, milieu or atmosphere. According to Gunder, "[w]e live in and through language" (2010: 201). The word atmosphere can be used in a variety of ways which relate to the way teachers, parents and children speak. For example, the word may be used to describe particular moods or a certain state of feeling. At times, the concept of atmosphere or context can get caught up in a logic of explanation; either the background is explained away by reference to something else, for example, there may be

an environment that is warm and relaxed or cold and uninviting, or it is used as an explanation for another event that exists.

However, atmosphere is not an inert context but a force field in which humans, and the nonhumans find themselves. It is not an *e*ffect of other forces rather it is a lived *a*ffect – a capacity to affect and be affected, "that pushes a present into composition, an expressivity, the sense of potentiality and event" (Stewart, 2011: 452). Forces then come to reside in experiences, conditions, things, dreams, landscapes, imaginaries, and lived sensory moments. Stewart (2011: 455) wonders how human and nonhuman bodies become "attuned to the sense of something coming into existence or something waning, sagging, dissipating, enduring, or resonating with what is lost and or promising?".

Atmospheres as an affective force

According to the Merriam-Webster Unabridged Online Dictionary, the definition of affect is to have an effect on; make a difference to or touch the feelings of; move emotionally. The concept is often associated with physical bodily responses like blushing or sweating as well as abstract concepts of hope, fear and other representations of feelings or emotions. However, these definitions using the language of emotions and expressions do not adequately explain the particular qualities of affect. The concept affect used in a posthumanist framework is not an *effect* of other forces but a lived *affect*. Inspiring both Massumi (2004) and Braidotti, (2013), Deleuze (1994: 58) draws on Spinoza, and explains it as:

> A body affects other bodies or is affected by other bodies; it is this capacity for affecting and being affected that also defines a body in its individuality.

It is this idea of a capacity to affect and to be affected that pushes the present into composition, an expressivity, the sense of potentiality and event (Stewart, 2011). As stated above, an atmosphere is not an inert context but a force field in which human and

nonhuman bodies find themselves entangled. It is the how the “situated and embodied affective experiences” between human and nonhuman bodies with the atmosphere “that inform how we construct, know and experience the world” (Buser, 2013: 228). Buser (2013: 228) explains that the concept of affective atmospheres can be defined as the:

> range of collective affects produced through dynamic, relational space encounters- to consider the imperceptible and the affective sensations situated in place experiences and relations.

Thinking about affective atmospheres draws attention to how affects can be “collective” (Bissell, 2010: 272) and be shared in-between different bodies within the atmosphere. Such atmospheres “form part of the ubiquitous backdrop of everyday life”, but a backdrop that is at the same time “forceful and affect[s] the ways in which we inhabit spaces (Bissell: 2010: 272). Ben Anderson (2009: 78) argues that atmospheres as collective affective forces are:

> simultaneously determinate and indeterminate. Affective atmospheres are a class of experience that occur before and alongside the formation of subjectivity, across human and nonhuman materialities, and in-between subject/object distinctions.

The notion of in/determinate affective forces is helpful in expressing how communities of philosophical enquiry affect me as a teacher-researcher. In our everyday speech and aesthetic discourses, the term atmosphere is often substituted with the words such as mood, feelings, ambiance, tone and various other ways of naming collective affects. Also, the referent for the term atmosphere is multiple; eras, societies, venues, outside spaces, artworks, people and a multitude of other human, nonhuman and nonhuman bodies are all “said to possess atmospheres (or be possessed by atmospheres)” (Anderson, 2009: 80). Perhaps, it is the everyday use and aesthetic discourse of the term ‘atmosphere’ that provides the “best approximation of the concept of affect – where affect is taken to be the transpersonal or pre-personal intensities that emerge as bodies affect one another” (Anderson, 2009: 80). The implications of understanding the atmosphere in my classroom

in this way is significant for answering my research questions, in particular the third and fourth sub questions. I asked, ‘How does intra-active comprehension open up opportunities for the child to create new knowledge or concepts?’. I also wonder: ‘How does intra-active comprehension work in order for children to read picturebooks differently?’.

My enquiry so far has made it clear that the posthuman literature on, for example, atmosphere helps me to rethink these questions as they already assume a humanist subjectivity: ‘*the* child’ and ‘children’. I am now reconfiguring child as *phenomenon*: a material-discursive entanglement of human and nonhuman bodies (see also Introduction). It is now becoming clearer to me that I was concerned with researching the *e*ffect of my pedagogical interventions on children’s comprehension of texts. Diffracting with the posthuman literature as I was reading it with/in/through examples from practice, made me aware that the sub question should not be about the effects on ‘the child’ or ‘children’ but more about trying to articulate the *a*ffect of the transindividual and mutual agency of a community of ‘people’ (see Chapter One) that also includes the nonhuman.

This nonhuman also includes the picturebook. Therefore, sub question four, could be rewritten as: How does the picturebook work for communities of ‘people’ to do reading comprehension differently? What I also notice is how rewriting these two sub questions, helps me answer my second sub question: ‘How does Intra-active Comprehension reconfigure child in relation to more than human?’. Child as *phenomenon*: a material-discursive entanglement of human and nonhuman bodies.

As I wrote in the Introduction, in posthumanism, it is not objects, or things or bodies that are ontologically prior, but their relationality that brings them into existence. Therefore subjectivity is not about *a* child, but a *phenomenon* that is always more than a child’s body in space and time. As Barad (2007: 383) explains, phenomena are constituted through intra-active practices with/in/through spaces and times.

There is a tendency in describing an atmosphere or feeling of a place or space in terms of character, the sense of a place, or its identity. As a teacher, co-researcher, 'a' bodymind – a phenomenon in fact – in my intra-acting with the other bodies both human and nonhuman how can I articulate and communicate the buzz, energy and literacy desiring (Kuby & Gutshall-Rucker, 2015, 2016) of a classroom? How can I do justice to the atmosphere of a place or space? As a nonhuman body, I now realise that atmosphere is also a stakeholder in my research ethics. We do not normally include nonhuman bodies in issues of consent as these practices tend to be governed by the human rights discourse. Nevertheless, these new ideas make me re-think what I took for granted when I described the research ethics procedures I have followed (see Chapter Two).

It also does not absolve me from the response-ability to respond to and include the active role atmosphere played as I was researching my classroom. Importantly, it moves the human (teacher and child) from the onto-epistemological centre when researching what is *as a matter of fact* happening during my intra-active comprehension lessons, thereby complexifying educational research by including the more-than-social. So how do I articulate and communicate atmosphere?

A classroom's atmosphere might be described as warm, friendly or inviting. What is interesting about this language and the way of expressing concepts about a place is that it is often an attempt to explore that which cannot be fully articulated or described. When the character or identity of a place is described as warm or inviting, language is being used that is trying to do more than re-present the world, it is trying to find a way to move beyond the purely perceptible, extensive and concrete. As Gunder (2010: 201) indicates, the use of these words often reflects "habitual practice where meanings become taken for granted". According to the website of the school where I carried out my research, Groveview School, the primary emphasis is on "creating school that is considered to have a supportive, guiding and nurturing atmosphere" (Groveview School, 2002). But what does that mean and how did atmosphere work in my classroom?

Situated, dis/embodied experiences, affective thinking

In her book, *Transmission of Affect* (2004), Teresa Brennan talks about walking into a room and “feeling the atmosphere”. She claims that:

> The transmission of affect, if only for an instant, alters the biochemistry and neurology of the subject. The atmosphere or the environment literally gets into the individual. Physically and biologically something is present that was not there before, but it did not originate sui generis: it was not generated solely or sometimes even in part by the individual organism and its genes.

A more complex, affirmative reading of the classroom begins to see that “boundary lines between identities, objects, sensations, times, histories, meanings, interpretations, policies, chronologies, acts, theories and observations are blurred. This can thwart the persistence of essentialist readings of what might be occurring and how” (Knight, 2016: 17). By intra-acting and diffracting with my “data that glows” (MacLure, 2010), I try to move beyond conventional or re-presentational identity of space and place by discussing the classroom atmosphere and in the direction of thinking places ‘without image’ (Deleuze, 1994).

The buzz of the classroom is filled with the sounds of encounters, rising and falling as the human bodies and nonhuman bodies with/in the class intra-act. Stewart (2011: 446) explains it as “the ordinary hums with background noises of ruts and disorientations, intensities and resting points”. A group of eleven Grade Three children are seated on the carpeted floor in a classroom used for their drama lessons. The desks have been pushed against the walls creating an open space in the middle of the room. The stools have been turned upside down and placed on top of the desks, their spike-like legs pointing towards the ceiling. The children wriggle and squirm on the carpet, some crawl to other friends on their hands and knees or chat together, creating a low level of ‘background’ noise, I only hear as I re-turn to the video data. The drama class is generally seen as a class that is

less formal with fewer restrictive rules and regulations. There is a relaxed, happy atmosphere in the classroom and amongst the children.

Figure 5.1: Foregrounding the atmosphere with/in the Drama Class.

Mr Smith (as discussed previously in Chapter One and Two, all names are pseudonyms) and I are also in the classroom. Although always entangled with the human and nonhuman bodies, materials, time and space of the classroom, my role was to be aware of the way in which the children intra-acted with the human and nonhuman bodies, materials, time and space. Mr Smith had agreed to use the drama period so that the children were able to intra-act with the concept of 'lost' through movement, dramatisation and speaking. In this chapter, I pay attention to moments with/in the data as I re-turn to the video recordings. I diffract with the atmosphere that exists, affects, and permeates human and nonhuman bodies - always in a state of be(com)ing with/in my classroom.

Figure 5.2: Listening.

Mr Smith: The story you are going to make today is where lost starts…

(discussion about his instructions…)

Ok does that make sense?

Ummm…

Mr Smith *faces me, sitting behind the video camera*.

Figure 5.3: Waiting for an answer.

Mr Smith: Should we let them get into their own groups or would *you* like to mix them up?
As Mr Smith asks me the question, all of the children turn their heads to look at me, silently, waiting for an answer.
Me: Ummm…
I remember feeling uncomfortable with that question from Mr Smith and I took a few seconds to respond.
Me: Let's pick our own groups.

The children were waiting for a few seconds and as I watch their faces in the photograph it looks as if there is a sense of uncertainty, slight tension maybe, as the children are anticipating my response. My learners tend to prefer choosing their own small groupings. Interestingly, so would I, and as an adult I am not often put in the position of not being allowed to. For me, the atmosphere changed from being a calm, yet slightly excitable one, to one of discomfort and unease. Perhaps, as I re-turn to the data I now project my own discomfort at speaking about the children as if they were not in the room into the data, as of course as researcher I am entangled with the apparatus that recorded the lesson (see

Chapter One). Disrupting objective/subjective binaries in research practices, my entangled relationality with the children also means that it is im/possible to distinguish between what I am feeling and what the children are doing/feeling and how the flow of intensities and desiring in-between the human and nonhuman bodies affects my judgment. I speculate that the children might be affected by my uneasiness and hesitation to take control of the situation because here again, I, as a grownup I am positioned by Mr Smith as the one who makes the decisions. Do the children perhaps think that I do not consider them responsible enough to make their own decisions? What were the children feeling/experiencing and how did this affect them? It is tempting to summarise and to then psychologise the tone or feel of an atmosphere under one central name such as fear or anxiety and assume that an atmosphere's single feel or tone is what gives an atmosphere the capacity to dictate or overshadow a particular situation or environment. However, as is always the case in a classroom, multiple atmospheres are in existence. Anderson and Ash (2015: no page) claim that it is possible that the classroom is "constituted by multiple atmospheres that touch, contact and rub up against one another, rather than a single, overarching or dominant one". I wonder why I did not discuss the grouping of the children with Mr Smith beforehand. Did it mean I had not planned the lesson properly? Also, to what extent was my desire to 'switch languages' from the oral philosophical enquiry to that of dis/embodied dramatic expression *in order to create data for my research* a factor in 'forgetting' such a straightforward agreement with a colleague? What particularly strikes me as I re-turn and re-turn again to the photos in Figure 5.2 and 5.3 is how the girls look into the camera and not at me. As argued in Chapter One, video-recordings are an apparatus, an open-ended performative practice. They are specific material configurations, a "doing, not a thing" (Barad, 2007: 183) and enact agential cuts and are a part of the phenomenon we describe as researchers. Noticing the girl's gaze makes me aware how the very fact of the video-recording of the session is not in the background, but part of the "multiple atmospheres that touch, contact and rub up against one another" (Anderson & Ash, 2015: no page). The possibility of re-turning to the video data again and again, is not a process of uncovering more and more of what was happening in real time, thereby affording accurate description of reality, but a diffractive process of sedimenting the world

in its iterative becoming as it is was never there for the taking in the first place (Murris & Babamia, 2018).

Pockets of Trouble

In her article *Atmospheric Attunements* (2011), Kathleen Stewart describes an event from a novel that she had been reading, *The Garden of Last Days* (2008), where the author, Dubus, talks about "a pocket of possible trouble" (Stewart, 2008: 38). Looking for pockets of trouble is described as an act attending to a space being flattened and opened out. There is a pause, a "temporal suspension animated by the sense that something is coming into existence" (Stewart, 2011: 446). In a situation like this, things 'hanging in the air' are worth describing. Theory becomes a "descriptive method awkwardly approaching the thing that is happening by attuning to it as a thing of promise and contact" (Stewart, 2011: 447).

Figure 5.4: Pockets of trouble.

Looking at this clip, ‘a pocket of possible trouble’ was be-coming. Once Mr. Smith told the children to get into their own choice of groups of three, some Grade Threes quickly scrambled to find other children to form their small groups. Two children did not make any kind of movement to partner with another child or join an already just formed pair. Maria, indicated by a yellow circle (Figure 5.4), sits in the same position as she was during the discussion, but she keeps her eyes turned to Mr. Smith with her lower lip protruding and her mouth twisted slightly in an almost comical expression. Likewise, Marco (yellow circle in Figure 5.4) has also not changed the position of his body on the carpet in order to find a group to join. His back is turned towards the group of boys behind him. He does not look at myself, nor Mr. Smith, but rather faces towards the other small groups of children. His arm rests on his knee of one leg, his hand pointing towards the floor. Neither child has said anything verbally or made any bodily movements.

Other children’s bodies have formed tight groups, some children are sitting almost on top of their group members. The children who have found a group to work with, use their knees, arms, hands to touch one another and form closed communities, physically demonstrating an exclusion of the two children who are not part of the small groups. While the children forming the groups chatted and wriggled and touched one another, the two children Maria and Marco sat quietly. Rather than competing with one another, these affective forces (of enthusiasm and of hesitancy and uncertainty) existed alongside one another without “direct collision or competition” (Anderson & Ash, 2015: no page). Within this entanglement, there was no clear dominance in which one atmosphere overrode or cancelled out the other. Anderson and Ash (2015) give an example of a hospital waiting room, where some patients are calm and cheerful, while others are more hesitant, anxious or nervous. These atmospheres ‘‘emanate’’ from a group, a collective assembling of ‘‘human bodies, dis-cursive bodies, nonhuman bodies, and all the other bodies that make up every day situations’’ (Anderson, 2009: 80). As with the groups of Grade Three children and Maria and Marco, Anderson and Ash explain that the atmospheres emanating from the various bodies and objects the room touched but did not mix or fuse together. Rather, they existed as discrete phenomena. The sound waves and intonation of the various

voices may have affected the bodies of Maria and Marco, causing them to remain quiet or wriggle slightly, but it did not override the atmosphere of hesitancy that was exuded.

In and out of Atmospheric Spaces

During the school day, human traffic moves in and out of different spaces all day long from classrooms to corridors, down sets of stairs, through doors and across playgrounds and parking lots. At the same time, the clothes, shoes, suitcases and sports equipment travel with the human bodies. Entangled with the human and the nonhuman bodies, is the dirt travelling on knees, dust moving with scuffed shoes, the grass stalks and leaves stuck to jerseys and in hair, sweat travelling down faces, backs and arms.

As teachers, most of the time, our attention is directed towards practical matters involving what we plan to do with/in spaces – sleep, work, play or simply pass through on our way to somewhere else. We tend to focus on human bodies, rather than paying attention to how the way we intra-act is always already entangled with the space. Theorists of affect note that the lack of conscious attention in our anthropocentric theories and practices to how these spaces affect us, does not in any way reduce the impact such spaces have on us. Because the spaces we inhabit, move through, and intra-act with, have become routine or familiar, they have become almost invisible. Human bodies tend to be unaware of the affect of places and spaces on how, for example, their mutual agency is implicated in knowledge construction. Even worse. We are not even aware that we are not aware of the places and spaces we intra-act with, not even aware that we are missing something. In response to this lack of cognizant attention, Bennett (2010) calls for different ways to create new procedures, technologies and “regimes of perception that would enable humans to consult nonhumans more closely, or listen and respond more carefully to their outbreaks, objections, testimonies and propositions” (Bennett, 2010: 108).

After the instructions about the activity were given by Mr. Smith, the children divided themselves into groups and then started to work on their dramatisation of their ideas, ‘the

start of lost'. Some children opted to work inside the classrooms while others chose to leave the classroom and work outside on the sports field. The drama class' doors open out onto the sports field, so children have the opportunity to move freely between the two spaces without disturbing the other classes.

Figure 5.5: Outside on the playground, looking towards the drama classroom.

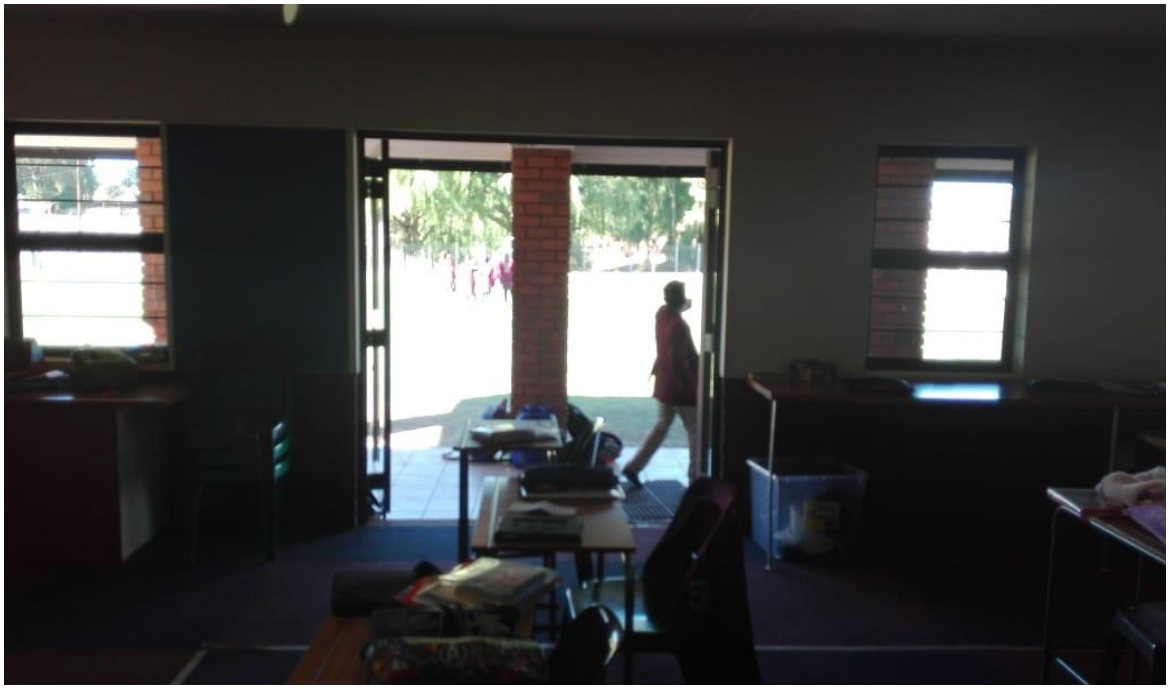


Figure 5.6: Inside the drama classroom looking outside.

In this section, I re-turn to the two children, Maria and Marco. As discussed in Chapter Three, Maria and Marco were not chosen by others to be in a group and they decided to leave the drama classroom and work outside on the sports field. In this section, I also diffract with another group of three girls, who were also working outside. However, in this chapter, I diffract with the silences and atmospheric attunements that are be-coming evident.

I remained entangled inside the drama class, observing and, in turn being observed by some children while I was talking with other children. Mr. Smith took the video camera and intra-acted with some of the children working/diffracting with one another in the classroom, he went outside and filmed those children on the field. It was only later, after I diffracted with the video footage that I was frustrated and disappointed that I had not moved outside to watch the children working on the sports field.

Mr. Smith had gone outside and in the video footage, Maria and Marco are seen to be walking towards the drama classroom. I presume that they had left the classroom and

walked slowly side by side, towards the far corner of the sports field. Having reached the fence of the field, the two children must have turned around and slowly walked back towards the drama classroom. For Massumi (2002: 1), a body moves and feels simultaneously so that the movement and sensation have “a way of folding into each other, resonating together, interfering with each other, mutually intensifying all in unquantifiable ways apt to unfold again in action, often unpredictably”. In the instance of movement, a body (human and/or nonhuman) “in movement then, does not simply move between points, rather it exists in movement” (Springgay, 2014: 80). Inspired by Gernot Bohme’s return to the materialist roots of the word atmosphere, Anderson (2009: 78) argues *atmos* indicates:

> a tendency for qualities of feeling to fill spaces like a gas, and sphere to indicate a particular form of spatial organizational based on the circle. Together they enable us to consider how an atmosphere surrounds people, things and environments.

Diffracting with the video footage in silence, the atmosphere surrounding Maria and Marco seemed to be subdued as they wandered around the field. They seemed to be talking to one another but any form of the required dramatisation of ‘lost’ did not seem to be happening. The space around them is the playground, but there is little movement from the trees or plants, the clouds in the sky. Movement seems to be suspended within the atmosphere. In the video, on their trip back to the drama class, they saw Mr. Smith and increased their pace to meet him in the middle of the field. They have a discussion with him and the video camera, looking for assistance and clarification of the instructions. Mr. Smith and the camera then turn away from Maria and Marco and proceed to focus and film another group.

The second group is made up of three girls. Two of the girls stand with their backs towards Mr. Smith and the camera, while the third girl lies on her back with her knees slightly bent, on the grass, her arms seem to be lifted to her head, shielding her face from the sun. The three girls are not moving or speaking, but rather forming a small community. Looking at them I wonder what they are thinking and what ‘new’ is going to e/merge about the

concept ‘lost’. Diffracting with the photograph which has captured their image, the girls seem almost ‘lost’ in their own thoughts and also seem to be unsure or at a loss as to what is expected of them.

Figure 5.7: Forming a small community.

Figure 5.8: Changes in the atmosphere.

As Mr. Smith approaches with the camera, one of the girls suddenly becomes aware of being watched by the camera. The atmosphere surrounding the girls unexpectedly changes and she immediately turns back to the scene, moving her hands to her chest, without saying anything to the other group members. The other girl turns to see what the first girl was looking at.

Figure 5.9: Affective force of the atmosphere and the camera.

The second standing girl looks quickly over her shoulder at the appearance of Mr. Smith and the camera and also joins in the dramatisation of the scene. It was fascinating to watch how the girls changed their body positions and suddenly became animated due to the affective force of the atmosphere and the agency of the camera entitled with girls-grass-field-task-set-by-the-teachers. Explaining this change, Anderson (2009: 79) says that atmospheres are:

> perpetually forming and deforming, appearing and disappearing, as bodies enter and into relation with one another. They are never finished, static or at rest.

Anderson and Ash (2015:45) talk about the ambivalence of atmospheres while trying to understand how (and the reasons behind) the changes in atmospheres, while at the same time "holding onto the touch, or weight, of an atmosphere".

It is only while the filming of the second group of girls is taking place that Maria and Marco come into view from the side of the video screen and continue to walk slowly across the field. The video footage of Maria and Marco stops there as Mr. Smith and the camera follow the dramatisation of the scene of the second group.

Figure 5.10: Walking and running.

The following day, I spoke to Mr. Smith and asked why he had not continued filming Maria and Marco. Mr. Smith explained that he was more interested in the group that "was doing something" (field notes, November 2017). Beatriz Benavente (2015: 62) explains the difficult and limiting position researchers find themselves in when they miss some of the intra-actions while focusing on others:

> Observing visible and invisible relations attends to the limits of the researcher in the research (the impossibility of knowing everything, or the possibility of excluding certain things even inasmuch as one is bound into these exclusions); while it also pays special attention to how relations are iteratively reworking themselves, and

whatever seems invisible at first sight becomes visible when observed at a different angle.

Re-turning to the video footage, still with the sound muted, I watched over and over again the way the two children, Maria and Marco walk towards Mr. Smith and the camera. I watch their facial expressions, the scrunching up of their eyes, the movement of their arms and the gestures of their hands as they 'talk' to Mr. Smith. Some of the arm movements indicate a sense of uncertainty, the lifting of shoulders indicating a resigned 'I don't know' action. Again the sense of being lost was e/merging.

Haynes (2008: 7) points out, a particular practice that occurs in classrooms "often involves teachers retaining control of questions and these are carefully constructed for pupils to arrive at the right answers". Children spending a large part of their day at school, playing a guessing game where they try to guess what is in a teacher's head, or try to guess what is expected of them in terms of performance or the correct answers they are supposed to give. Re-turning to the video clip, watching and listening to Marco and Maria again as well as the small group of the three girls, this observation by Haynes and Murris was evident. It seemed as if all of these children were at a loss as to what was expected of them by the teacher in order to complete the activity. Using their words and sentences, they were entangled with the teacher in a complex dance of trying to guess what the teacher was thinking and in doing so, arrive at the right answer.

Books-Spaces-Bodies-Atmosphere

The way in which we worked rhizomatically with the picturebook *The Lost Thing* (2010) by Shan Tan and the video publicly available on the internet is very different from the way I was taught to teach literacy, or the way CAPS prescribes the teaching of literacy.
In a Foundation Phase classroom, reading *to* the children usually takes place during the literacy lesson, the teacher is either modelling reading a text as part of a formal reading lesson or reading the text as part of a comprehension lesson. At the end of a school day,

some teachers will read a picturebook *to* the class if there is some time available just before they go home. This activity signalling the end of the day involves the teacher reading the text and then showing the children seated on the carpet in front of them the pictures. There is generally no involvement from the children, who are passive listeners as this is a ‘quiet time’.

When reading picturebooks, David Lewis (2001: 74) states:

> [W]ords are never just words, they are always words-as-influenced by pictures. Similarly, the pictures are never just pictures, they are pictures-as-influenced by words. Thus, the words on their own are always partial, incomplete, unfinished, waiting the flesh of the pictures. Similarly, the pictures are perpetually pregnant with potential narrative meaning, indeterminate, unfinished, awaiting the closure provided by the words. But the words and the pictures come from outside the picturebook.

In other words, the idea that the words and pictures come from outside the book means that the reader draws on her dis/embodied, situated knowledge and experiences and ‘brings’ them with her as she reads the book. The intra-actions between the nonhuman text, pictures, pages, ink and the human body, hands, eyes are never certain or established. These intra-actions are also experienced differently by different readers as each body’s prior situated knowledge is different. Story or picturebooks that offer “rich, complex and ambiguous pictures and texts” (Haynes & Murris, 2009: 178), encourage readers of any age to explore concepts and ideas creatively and critically and the opportunity for the “freedom and support to make sense of it themselves” (Haynes & Murris, 2009: 178) by drawing on their own prior knowledge and experiences.

Perry Nodelman (1988: 56) explains the intricate entanglement between the words and the pictures as being ironic as words often tell the reader something that the pictures do not and vice versa. According to Susan Hall (1990: 11), in picturebooks the “pictures provide information not always contained in the words and both the pictures and the words are

read". Bettina Kummerling-Meibauer (1999, cited in Sipe, 2012) explores the relationship between these two different sign systems in which there is "important information missing from the text that is supplied by the pictures" and calls this a "semantic gap". Reader-response theorist, Wolfgang Iser identified that every text has a gap or "indeterminacies" (Iser, 1978, cited in Sipe, 2012) which the reader or viewer needs to explore and process with their bodies and senses while reading the picturebook. This entanglement and exploration results in an infinite number of creative possibilities. This is an opportunity for the child to establish alternate possibilities or suggestions through their embodied experiences and literacy desiring (Kuby & Gutshall-Rucker, 2016: 315), while filling the 'gap' in the story. Nikolajeva (2003) confirms that children make use of complex narrative strategies or techniques in order to read the pictures.

The reader, according to Haynes and Murris (2017: 152), is enticed in two "different directions of meaning-making by the use of these two sign systems" namely, the pictures and the text. Each time the child reads the picturebook, she needs to interpret and think about the text, the pictures and the 'gap' between the two sign systems which invites further reading, investigation and exploration and most importantly necessitates creative and critical thinking of readers of all ages (Sipes, 2012: 4). While there is the creative thinking, Haynes and Murris (2017: 177) state that "for the educator to philosophize with the children requires direct entry into the world of text and simultaneously recognising that the text has agency". This process of reading picturebooks involves complex skills that require "transmediation" or "the translation of content from one sign system into another" (Sipes, 1998: 101). But what encourages or facilitates this process is the intra-action in-between both human and nonhuman bodies. Instead of the usual focus on the meaning of the picturebook or the comprehension of the story, the focal point shifts to the intra-action between humans and the material which also has "agentic qualities" (Kuby & Gutshall-Rucker, 2016: 15). With the intra-action, there is a constant entanglement and flow or movement between the reading of the text (words) and viewing the images, and back again. The entanglement which involves the picturebook, the classroom spaces, time, the glass window, the carpet, teachers, the children and their emotions, the sounds and silences, video cameras, school uniforms, adds a complexity to the "material-discursive

processes in child: adult literacy/ies encounters, and provides an ontoepistomological context that is always shifting, evolving and in/determinate" (Murris & Haynes, 2018: 4).

The result is a process of movement or oscillation, as the reader adapts their interpretation of the text and pictures. Because the meanings of each sign system are always shifting, there is a continuous oscillation. Sipes points out that the possibilities for new meanings to be created and e/merge each time the reader reads the picturebook are "inexhaustible" (1998: 103). It is this 'inexhaustible' potential for new meanings that makes picturebooks a rich resource to encourage children to review and reread and, in so doing, they will produce new knowledge as they construct new connections and make modifications of their previous interpretations (Sipes, 1998: 103).

As discussed earlier in this chapter, usually a child is read *to* during the literacy lesson or she is engaged in reading a text to find answers to questions set by a teacher to assess the level of the child's comprehension. I have discussed elsewhere in this thesis that this is a superficial, shallow entanglement with a text and a *lost* opportunity to work with concepts rhizomatically as I have shown how the concept 'lost' can work transmodally.

In Chapter Two, I have explored the pedagogy of Philosophy for Children (P4C), the community of enquiry (Lipman, 1991; Fisher, 1998) which encourages both teachers and children to work collaboratively in (what is claimed) a secure, more caring atmosphere while exploring philosophical issues through dialogue. The intention of a community of enquiry is to create a safe place, space or *atmosphere* for "thinking, a creative context for moral and social enquiry" (Fisher, 1998, p. 57). The notion of an atmosphere and a body being affected as opposed to being affected by an emotion, is crucial, since what happens when one enters a space begins to influence "neurological responses a full half a second before consciousness even registers a change" (Massumi, 2002, cited in Snaza & Sonu, 2016:29). The idea of the atmosphere created in the community of enquiry, as discussed above, is important to me as the community of enquiry always has an intensity and atmosphere that is difficult to articulate. It is the same with a book and the affect it has on the atmosphere in a community of enquiry. A book can make an individual sigh, wonder,

get excited, provoke desires, produce lines of escape that exert power to as opposed to power over something (Massumi, 2017).

It is, according to Deleuze, the entanglement of the affective atmosphere with the human bodies, the nonhuman bodies, like the furniture, the equipment, the sounds and movement, as well as the nonhuman bodies like the bugs and insects that move into our classroom, that affects the meaning making that is going on in/with/around the classroom. As Deleuze (1994: 139) puts it:

> something in the world forces us to think. This something is not an object of recognition but of fundamental encounter…It may be grasped in a range of affective tones…In whichever tone, its primary characteristic is that it can only be sensed.

Important in building a community of philosophical enquiry is a listening that is not only responsive (see Chapter Two), but also response-able. This kind of listening involves listening to what teachers and children say and taking seriously their personal, concrete daily experiences when exploring concepts such as ‘lost’. But is also involves taking seriously the way in which matter is always already entangled with the discursive. In this chapter I have paid attention to the atmosphere that is part and parcel of the teaching of intra-active comprehension. As material-discursive entanglements they “collide and force indentations and impressions that force counteractions and diversions into new collisions” (Knight, 2009: 25). Material-discursive entanglements are part of the teaching and learning I am researching and matter in what is regarded as data. Human-centred research practices tend to exclusively focus on the social, emotional, linguistic and cognitive dimensions of what happens in a classroom. A relational intra-active ontology moves away from human exceptionalism and does not locate intelligence or knowledge construction in and between human individuals but includes the nonhuman.

Reconfiguring subjectivity in this way means doing justice to the *real* world we are a part of in all its complexity. Educational research tends to interpret classroom practices only through a social science lens. What Karen Barad’s critical posthumanism in particular has

brought to our attention is how physics, and in particular how important Quantum Field Theory can be for educational analysis (see, e.g., Murris & Haynes, 2018; Lenz Taguchi, 2010; Murris, 2016).

Chapter 6 Time(in)g Childhood

The round piece of plastic, with its twelve colourful numbers each separated by five small, round, black dots against a white face and two colourful pencil hands that move tirelessly around the circle, hangs on the narrow wall between the brown wooden door and the glass window (See Figure 6.1 below). The clock is approximately 1.5 metres from the ceiling, low enough for me to point to the numbers on its face when the Grade Three children and I are exploring the concept of time during a maths lesson, but high enough that I can see the clock above the heads of the Grade Three children when I need to check the time. Below the clock, screwed into the wall, is a piece of equipment that is also considered vital in the Foundation Phase classroom – the weatherboard (See Figure 6.2). The weatherboard also displays the concept of time by showing the date, days of the week, months of the year, the seasons and the appropriate weather symbol or picture that corresponds with the particular day. Each day, as part of the routine, the 'Weatherboard Monitor' is responsible for changing the magnetic squares on which the information is printed.

Figure 6.1: Clock on the wall.

Figure 6.2: The Weatherboard.

In this chapter, I will take a closer look at the regular happenings in my classroom and how time is entangled and interwoven in the Grade Three children's lives because the concept of time is being considered as "relational and connected with space and matter" (Hohti, 2015: 1). Because the clock plays a prominent role in the classroom, several early

childhood scholars have shared their reservations. They wonder about the negative influence of how the clock, and how time is used, to govern practices in the classroom (Wein, 1996; Wein and Kirby-Smith, 1998; Rose and Whitty, 2010; Pacini-Ketchabaw, 2012; Hohti, 2015; Tesar, 2016). For example, Veronica Pacini-Ketchabaw (2012: 155) calls school's clock practices "a tyranny of time" and talks about clock time as "practice's invisible hand". The reasoning behind Pacini-Ketchabaw's statement is that the clock shapes educator's practices by regulating the teachers' and children's schedules and movements. Not only does the clock regulate the movement of human and nonhuman bodies (e.g., furniture is rearranged, swim wear is pulled out of bags), but in many other ways, time dominates classroom's daily procedures and routines.

In the school where I teach, there are a number of examples that illustrate how time dominates my own Grade Three classroom's daily teaching practice. For example, at Groveview School, it is widely agreed upon by the management team and teachers of the school that the children in the Foundation Phase benefit from doing the subjects that are considered more important, like maths and literacy, and that require the attention and focus from the children early in the morning when they are 'fresh'. As a result, the majority of the maths lessons in the Foundation Phase are timetabled before half past ten in the morning (see Figure 6.3). The maths lessons are followed by the literacy lessons, between approximately half past ten and twelve o'clock (see Figure 6.3). The activities that are considered to require 'little focus and concentration' like art, drama and music and sport skills are often timetabled for later in the day. Each timetable shows the days of the week and each day of the week is broken down and indicated as units of time. Time that is cut up into little bits or little blocks of time that simultaneously are all qualitatively and quantitatively similar. Each little block of time can be exchanged for one another, swopped at will. In my school, at the start of every year staff members are given a timetable that is displayed on his/her noticeboard. The timetable is prominently displayed in class, and each subject is indicated by a different coloured block for easier and quicker reading by the teacher. Yet, it is very seldom that the children in the Foundation Phase are given a copy of the timetable, nor told what a timetable is, let alone shown what a timetable does or explained how the timetable works.

GRADE 3T 2017

	1 7:55 – 8:30	2 8:30 – 9:05	3 9:05 – 9:40	4 9:40 – 10:15	10:15 – 10:35	5 10:35 – 11:10	6 11:10 – 11:45	7 11:45 – 12:20	12:20 – 12:40	8 12:40 – 13:15	9 13:15 – 13:50
Mon	Num	Num	Num	Num	B	Eng	Eng	Music	B	Afrik	L/Skills
Tues	Choir	Num	Num	Afrik	R	Num	Eng	Eng	R	Eng	Eng
Wed	PE	PE	Num	Num	E	Eng	Eng	Eng	E	L/Skills	L/Skills
Thurs	Eng	Eng	Comp	Comp	A	Num	Eng	Afrik	A	Zulu	Eng
Fri	Assem	Eng	Num	Num	K	PE	Drama	Art	K	Art	

Figure 6.3: Grade 3T Timetable 2017, Groveview School.

Karen Barad's concept of entanglement is a way of examining and diffracting with the peculiarities of different times (Hohti, 2015). Time is thought of as not merely being there as a parameter or container for events, but is rather produced in relationships among spatial, material and social factors (Hohti, 2015). As we have seen in the Introduction of this thesis, Barad's definition of entanglement is that being "entangled, it is not simply to be intertwined with another as in the joining of separate entities, but to lack an independent self-contained existence" (Barad, 2007: ix). Diffracting with this definition of entanglement implies then, that human bodies, nonhuman bodies, time, space, matter exist and e/merge only through relationships with each other. The clock e/merges as a "historically and culturally specific practice with differential effects on different bodies in the classroom at different times and in different spatial configurations" (Pacini-Ketchabaw, 2012: 154).

Clocks emerging as something different

Encroachment of clock time on people's lives and their freedom has been firmly acknowledged. In the late 13th century, various monasteries began calling the monks to prayer at prescribed times, using signs from nature, like the rising and setting of the sun (McCready, 2001). Hoffman (2009) notes that at the start of the 14th century, the telling of time had moved from using natural signs or cycles in nature to regulate and govern human bodies to being measured by a physical object, the clock. By the 17th century, clock-measured time had "enormous consequences for the regularisation of all human activity" (Hoffman, 2009: 133). By the 21st century, the clock in its many analogue and digital forms called people not only to work, but to work more efficiently, productively and faster. Clock-measured time called human bodies to equate or standardise work with time, with their own bodies and with others' bodies – sometimes "propelling us at speeds that feel beyond our control" (Rose and Whitty, 2010: 260). The clock practices also opened up the opportunity for "conditions for moral rules of conduct" (Rose & Whitty, 2010: 260).

Robert Levine, in his book *A Geography of Time* (1997), discusses the way civilization learned to define, track and, ultimately, harness and use units of time. For example, changes in climate conditions and celestial bodies allowed people to mark off seasons and

months, sundials and shadow clocks made it possible to measure days, although erratically given that these methods were useless during inclement weather and at night. In other words, the machine or the clock performs in a particular way to regulate bodies – essentially, the clock has power over humans and can be seen as political. So, the human-machine entanglement is a field and a force and can be thought of as having mutual agency, it affects how bodies behave. But as Massumi (2015: 18) reminds us, 'power over' is always a 'power to'. Drawing on Foucault, he points out that power "doesn't just force us down certain paths, it puts the paths in us, so by the time we learn to follow its constraints we're following ourselves" (Massumi, 2015: 19). He suggests that freedom (in this case from clock time) is not necessarily about "escaping from constraints" (Massumi, 2015: 12) imposed by, for example, the clock. But in the "coming-together-of-movements" the constraints can be flipped "into conditions of freedom" (Massumi, 2015: 17). We cannot get rid of the clock, but we can change how the clock works in our pedagogical practices by, for example, enacting a rhizomatic e/mergent curriculum where concepts are projected forwards (*progettazione*) as I have shown with the concept 'lost'. So how did the clock come into existence?

Using Galileo's work that joined pendulums and periods of oscillation, the first pendulum clock e/merged in the early 1700s, improving and refining both the accuracy in and the way in which the measurement of time was divided. And as the methods for marking days, hours, minutes and seconds became more sophisticated, people became more personally connected to time. Time moved from clock towers in a public square, to grandfather clocks in a home, to pocket watches, to wrist watches, to digital numbers on phones. Yet despite the growing number of ways people were learning to measure time, punctuality was never a consideration because, as Levine (1997: 66) writes, "every community kept its own time, making it difficult to synchronize events" beyond an area. This continued until the Industrial Revolution, which required a greater coordination of activities within and across space. Levine suggests that the railway system was the leading reason for standardising time, because it needed common, centralised timetables to transport materials efficiently to various stations that were, at first, running on different local times. While standardising railway times helped order the manufacturing schedules and, eventually, laid the foundation for an international time zone system, in the "immediate future it helped connect concepts

of time, efficiency, virtue, and success" (Levine, 1997: 67). The agency of the material-discursive machine-human entanglements are again evident.

Time clocks were being created, advertised and marketed to factories as a way to "save money, enforce discipline and add to the productive time" (Levine, 1997: 67). Levine gives the example of an 1891 advertisement for the Electric Signal Clock Company that reads: "If there is one virtue that should be cultivated more than any other by him who would succeed in life, it is punctuality: if there is one error to be avoided, it is being behind time" (Levine, 1997: 67). The Blodgett Clock Company's catalogue reiterates this moralising statement, claiming that "order, promptness and regularity are cardinal principles to impress on the minds of young people" (Levine, 1997: 68). However, not everyone was in praise of the regulation of time or time being divided into measurable units. For example, the "New York Herald in 1883 noted that the standardised time "goes beyond the public pursuits of men and enters into their private lives as part of themselves." (Levine, 1997: 72). An additional point of resentment was the loss of what was considered "natural time" (Levine, 1997: 75). After the introduction of the standardisation of time in 1884,Charles Dudley Warner, voiced his concerns about the inflexibility and invariability of time lived by the clock by saying, "The chopping up of time into rigid periods is an invasion of individual freedom and makes no allowances for differences in temperament and feeling" (Levine, 1997: 75).

Clock-time practices in schools

The breaking up of time into rigid sections or periods is considered necessary for the smooth functioning and regular routine of the school. The reasoning behind the rigid time periods is that there is an adequate exposure to all subjects as per the Curriculum Assessment Policy Statement (CAPS) requirements (see Chapter Four).

However, this breaking up of time might make certain knowledge practices possible, but at the same time prevents more flexible pedagogical practices that are considered more

rhizomatic[21] and e/mergent (see Deleuze & Guattari, 1987; Albrect-Crane & Slack, 2007; Lenz Taguchi, 2010). The cutting of time into smaller units can restrict the teachers' freedom to make quick, spur-of-the-moment decisions which make it possible to accommodate differences in temperament and feelings of human and nonhuman bodies. The idea of 'serious' work, maths and literacy, being equated with time is prevalent in the school system where a modern industrial conception of "time is strongly present and where timetabling symbolises the finite, ordered and scarce nature" (Wein, 1996: 398) of being in school. Iris Duhn argues that the idea of "time in units relies on uniformity, which leaves no space for surprise, beauty, micro-movement and variation" (2016: 383). Sherry Rose and Pam Whitty describe a scene in their article, *"Where do we find the time to do this? Struggling Against the Tyranny of Time"* (2010), where "the efficient movement of children and educators become the overriding priority…their clock-bound work created stress and, in the worst cases, a kind of frenzy: a running to be on time" (2010: 264).

I have also experienced this 'kind of frenzy' described by Rose and Whitty (2010) in my own practice in my classroom on a regular basis. It was also evident while working with the Grade Three children on this research project, there were many times that an item or activity or discussion had captivated the Grade Three children, creating a rich, intense exploration through the various intra-actions and I would suddenly look up at the clock on the wall to discover that we are late for the next class. My voice can be heard over the hum of the children, the buzz of bodies engaged with one another and other general classroom sounds as I try to simultaneously get the children to stop what they are doing (see Figure 6.4 and Figure 6.5), pack away the items with which they have been working, fetch the items necessary for the next class and leave the classroom in a manner that is acknowledged by other staff members to be orderly and acceptable behaviour. Acceptable behaviour would include the children leaving and entering a classroom quietly, walking between the different classes in a straight line and without about the affect time has on your own anxieties to do everything you need to do on time and pack it all in. Often what does happen is that some children are reluctant to stop what they are doing and move to the

[21] See Chapter Three for an explanation of Rhizomatic Curriculum.

next class or activity. Other children, perhaps sensing my anxiety, make a dash for the next class (See Figure 6.5).

Figure 6.4: Leave what you are doing – we are late!

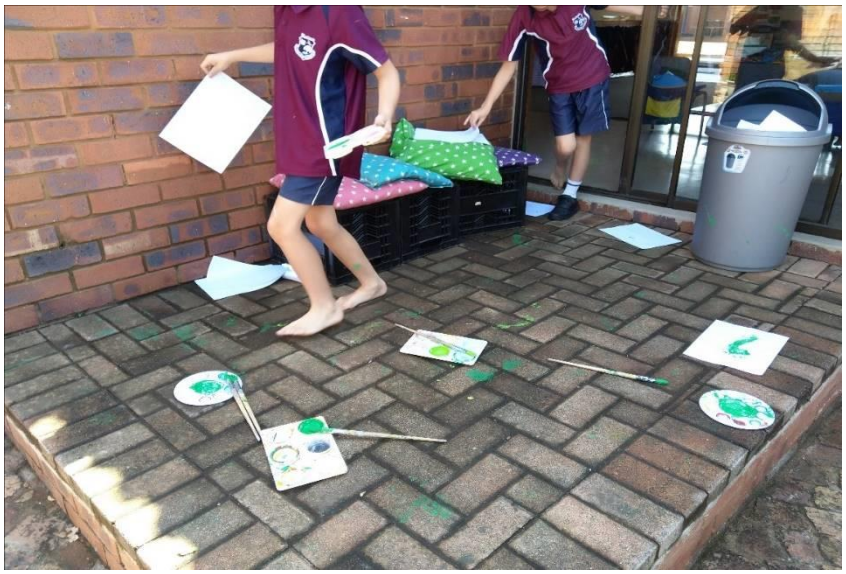


Figure 6.5: Go…go…go!

While I am trying to get the children to move to the next class without ‘wasting time’, the clock-time also has an affect on my own anxieties. There is a daily, sometimes not-so-subtle pressure to do everything that I need to do on time and within time.

Clock-time practices and good teachers

The clock structures the arrangement of the children’s bodies, the educator’s bodies as well as the bodies of parents, in the classroom, including the very pedagogical practices deployed throughout the regular day (Pacini-Ketchabaw, 2012). At the same time, the clock “produces particular knowledges about what it means to be an educator and what it means to be a child” (Pacini-Ketchabaw, 2012: 155). This statement by Pacini-Ketchabaw could be extended to what it means to be a parent too – getting their child to school on time or not being late to fetch their child. In the Foundation Phase classroom, the clock also affords the e/mergence of certain professional codes of practice, such as sticking to regular schedules and fixed routines (e.g., play time, lunch time, going-to-the-toilet time). These two fundamental elements, schedules and routines, in the Foundation Phase are brought into existence through the clock’s material-discursive reality and its entanglement with human bodies. We need to turn to the clock as an apparatus and measuring device to understand our normalising educational routines and schedules. Through these ontological processes the clock becomes implicated in creating the so-called ‘professional’ Foundation Phase community. When I, as a teacher, follow the “scripts for action” (Wien, 1995: 391) and by looking at my clock stop one activity in order to send the children on to a different activity, I am “declaring a professional awareness of what’s appropriate” (Pacini-Ketchabaw, 2012: 159). Following the clock and the prescribed schedules allows me to be included in the Foundation Phase community. Likewise, by *not* following the rhythms of the clock and the way it is used normatively in curriculum guidance, teachers will be judged as lacking professionalism and possibly be regarded as being a bad teacher. For example, changing my mind about starting with literacy, because in maths, some issues are raised by the children that merit additional consolidation and practice. Or as discussed in Chapter Two,

during a community of enquiry, following the flow of the enquiry and where the children might lead it. This might result in taking time 'away from' another subject which may also be seen as bad practice by other staff members and even the parents. However, the arrangement of time as a material-discursive apparatus, fragmented into short periods of specified activities, prioritises normalising clock-based routines and positions the teacher as the keeper of these routines and as being responsible for sticking to unilinear school time. This means that it "teaches children that the teacher, as keeper of the routine, is the dominant individual" (Wein, 1996: 397) - the one 'in charge' as the teacher can start or stop an activity at will. This perception is often misleading as the teacher is not really 'in charge'. So by following clock-time practices teachers may feel that they are prevented from being completely free to be response-able in the moment. As a result of these internalised discourses that govern teachers, the following of clock-time practices, keeping the class 'under control' or behaving in a way that is seen as professional etc, I often feel that I do not really have the opportunity to be response-able in the moment. The fear that I may be regarded as being unprofessional because lessons have not been planned appropriately if I as a teacher, 'run out of time' or 'go over time' patterns my behaviour in my classroom.

Moreover, the reliance on uniformity of the normalising clock-based routines creates scripts for action. These scripts for action are in the form of daily practices or "patterns of action repeated in the same way day after day" (Wien & Kirby-Smith, 1998: 9) until the repeated patterns of action become automatic and taken for granted as normal expected *good* practice. Sticking to time, not running out of time or not going over time, planning and managing one's time efficiently are all entangled with normative notions such as 'quality education' and being a 'good teacher'. A predetermined separation of foundation phase subjects (maths, literacy and life skills) through time-tabling practices also gives the impression that these subjects are not always already entangled, when as a matter of fact they are. For example, maths is just another symbolic language that children need to learn to read and many picturebooks for young children offer rich pedagogical opportunities for teaching children to count (e.g., Eric Carle's *The Very Hungry Caterpillar*). Teachers have scripts of varying kinds to regulate the movement of both their own and children's bodies. When teachers know these scripts well, they perform them automatically, without giving

much time to think about why and how these scripts for action may be working with and on the human and nonhuman bodies. Carol Anne Wein (1996: 396) argues that:

> the schedule and its component parts become taken-for-granted scripts for organising time. Passed on from one year to the next, ritualistic routines such as calendar time, snack time, outdoor time, and field trips remain embodied and unchallenged.

As suggested by Wein, in my Foundation Phase classroom there are also varying "taken-for-granted" scripts for action, for example, the class timetable, the weekly planner detailing how I should prepare for my lessons, known as a Weekly Preparation Forecast (see Figure 6.6 below). The Weekly Forecast is drawn up by each teacher after the weekly preparation meeting. This is when all the teachers within that Grade meet to discuss the following week's work, assessments and activities that need to be completed. Each teacher is responsible for her own forecast which must be sent to the Head of Department every Monday morning so that there is a record of the preparation being done. Looking at the Weekly Forecast below, it becomes evident that the children as knowledge producers are excluded as what children are supposed to learn is predetermined by the adults – see, for example, the idea that every minute needs to be justified in a weekly forecast.

The year plan is another example of a script for action that I am required to draw up and submit to the principal at the beginning of the school year which incorporates many recommendations from the CAPS documents, as well as the duty rosters that are handed out in January outlining various staff duties (e.g., playground duty, assembly duty etc).

Grade 3T - Weekly Forecast Week Ending: 8 Sept 2017 Theme: Mini Beasts

*Assessments to be completed by week ending:

	Monday	Tuesday	Wednesday	Thursday	Friday
1 7:55-8:30	**MID TERM BREAK**	Choir/E.Lesso	PE	Admin, homework, reading cards **English-** Guided Reading – Yellow Group Non-Fiction cards	Admin, homework, reading cards Spelling Test and dictation are' *phonics/sounds heard
2 8:30-9:05		Admin, homework, reading cards **English-** Guided Reading-Red Group Non-Fiction cards	PE	**Maths-**Cont with Capacity. Revise time and fractions WP in books x2	Mental Maths Test- *Mental Maths
3 9:05-9:40		**Maths-** Oral counting-20, 25, 50, patterns, WP in books x2, X tables, Revise ¼ past and to. Revise arrays	**Maths-** Oral counting-20, 25, 50, patterns, WP in books x2, X tables, Revise ¼ past and to. Revise arrays	Comp	**Maths-**Cont to revise all concepts
4 9:40-10:15		**Maths-** Continue with money-Booklet-complete. Cont With rounding off	**Maths-**Introduce informal capacity ml, l	Comp	**Writing**-Phonics sentences in cursive-Pen Licenses
10:15-10:35	B	R	E	A	K
5 10:35-11:10	**MID TERM BREAK**	**English**- Introduce 'are' sound with story, reading strips, sentences. Discuss word meanings.	**Writing**-Phonics sentences in cursive	**English-**Youtube of Insects	PE
6 11:10-11:45		**English-** sounds-blue/red in lang books. Sentences with spelling words	**English**-revise 'are' sound. Prac on whiteboards, games	**English-** Comprehension-Buster the Fly	Drama
7 11:45-12:20	Music	Afrikaans	**English-**Intro of gender nouns	Afrikaans	**Art:** Own Insect
12:20-12:40	B	R	E	A	K
8 12:40-13:15	Afrikaans	**L/Skills**-Front page of Mini Beast theme	**L/Skills**- Front page of Mini Beast theme	Zulu	**Art:** Own Insect
9 13:15-13:50			**English-** Guided Reading – Blue Group Non-Fiction cards	**L/Skills**-Word Search with insect words	Assembly

Figure 6.6: Weekly Preparation Forecast, Groveview School, 2017.

Simmering tensions and challenging the norm

Despite the traditional way of thinking, there exists a lived contradiction between "educators' pedagogic values and the linear, lockstepped scheduling that undermines these values" (Wein, 1996: 380). According to Wein and Kirby-Smith, this is due to the fact that no one has "the time to think…about how time undermines what the teacher values" (1998: 9). Part of the stress experienced in the Foundation Phase classroom is largely due to the "the modern governance of clock time and its perpetuations of 'normalized' constructions of children, families, educators, relationships, learning and curriculum" (Rose & Whitty, 2010: 259).

Re-turning to my research project's video data, I watch a clip of video footage. It is half past eight in the morning and the Grade Three children are chatting quietly. They are sitting around the edge of the rectangular carpet that is positioned in the front of my classroom. The classroom is slightly darker than usual, which could be due to the lights not being switched on or that the early morning sun has not filtered through the glass windows. In the video I watch myself taking a large piece of paper off the bulletin board at the back of the classroom and, keeping my arms up high, I lift the paper so that it does not touch the floor. I walk to the carpet and the ring of children's bodies. I step into the circle of human and nonhuman bodies and I place the paper down in the centre of the circle so that the black writing is visible. I join the ring of bodies regulated by the nonhuman mathematical body of a circle (although of course the mathematical concept 'circle' is human made). I begin the session by talking about the previous event and what new knowledge had e/merged from our community of enquiry. We re-turn, as a community, to the previous discussion and become aware of the entangled ideas, words and thoughts that had e/merged. We work *as* a group, not just *in* a group. The difference being that *in* a group, the children think and behave as individuals, but when thinking *as* a group, the children contribute, compare, suggest and test hypothesis, build on to one another's ideas and arrive (possibly) at a consensus, although dissensus is also celebrated. I notice however, as I diffract with the video footage, my anxiety which is evident by the urgency in my voice. I had not noticed this before.

By “tunnelling into the past like an earthworm” (Barad, 2014: 168), I remember that the regular routine had been changed in order to accommodate a sporting activity that would involve a number of children later that day. My time was limited. In the video clip, I glance up, and although it is not visible in the video footage, my eyes read the clock on the classroom wall. I re-member the quickness of my heart and the mild anxiety in my stomach as I realised that the next period on the timetable had started. The Grade three children were meant to be at a different class for another subject with a different teacher. At Groveview School, even though the children in the Foundation Phase stay with their homeroom teacher for the majority of the school day, there are times that they leave their homeroom class and go to another teacher for a different subject like sports skills or music or drama (see Figure 6.3). If I have sent the children to the next teacher a little later than stipulated on the timetable, that teacher runs the risk of not completing her syllabus by the end of the year, or the children in my class ‘fall behind’ the other Grade Three classes. This often causes tension and anxiety with staff members, which can lead to friction between us.

Constantly looking at the clock on the wall (or my wristwatch), changing my pace of teaching or instructing the children to stop their activity and move to another class is part of my everyday practice. Wein notes that “many actions seem to be performed by teachers almost automatically, in a taken-for-granted way, to be carried into the present (and future) by their presence in the past” (1996: 381). This is often illustrated by teachers who have memorised their timetable and can carry out the routines of the day without needing to consult the timetable pinned to the notice board. In contrast, I experience daily tensions that e/merge because of the discrepancy between what I am supposed to do according to my timetable, or the year plan, or the many duty rosters crowding my noticeboard (see Figure 6.7) each breaking my day into parcels of time telling me where I should be, or the CAPS documents and what actually happens (for example, a staff meeting that goes over time, an incident in the classroom – someone upset, getting sick, squabbles or other teacher and children ‘interruptions’).

Figure 6.7: An overcrowded noticeboard.

Although, I continually "work the tensions between theory and practice" in my classroom, I do acknowledge that any "educational practice, whether it be authoritarian or democratic, is always directive" (Freire, 2004: 66). This tension is also acknowledged by Sherry Rose and Pam Whitty (2010: 262) when they point out that a permeable, flexible and negotiable curriculum is difficult to achieve as a printed document. In spite of efforts to contextualise and "affirm curriculum-making as an ongoing and changing encounter among people, environments, materials and relationships" (2010: 262), there is a continual reminder of how difficult it is to disrupt curriculum as a "directive in the context of officially " (Rose & Whitty, 2010: 262) mandatory processes and products.

The tensions that lie simmering beneath the theory/practice binary resonate with the notion that time is a commodity, to be calculated, bought, sold, wasted, saved and spent.

Time, then, becomes a possession, which informs the idea and language use of ‘having time’ or ‘running out of time’.

Making time with the CAPS documents

According to the Curriculum Assessment Policy Statement (CAPS) (DBE, 2011), the three main Foundation Phase subjects are literacy, mathematics and life skills. There are other subjects that fall under these three main headings – Sports Skills, Art, Drama, Music and Beginning Knowledge are also part of the curriculum. It is a game of manipulation and moving different subjects around so that these subjects can be included as part of the academic day as part of the National Curriculum (and not as an add-on).

As seen in Chapter Four, the CAPS Curriculum underpins the teaching content in the majority of the schools in South Africa. CAPS, gives a detailed breakdown of the time spent on different activities for the teaching of the Home Languages in the Foundation Phase classrooms. It is CAPS that informs the schools and teachers as to the recommended number of periods (or time) to be allocated to each subject. Teachers are encouraged to follow the recommendations as closely as possible which is considered a professional code of practice. Pacini-Ketchabaw concludes that the teacher engages with the clock as an “intrinsic element of professionalism” and the appropriate “professional practice emerges as clocks, children, educators and other human and nonhuman bodies intra-act in an iterative process” (Pacini-Ketchabaw, 2012:159). So, the clock practices like the timetables, the clocks hanging on the walls and the weatherboard in every classroom are physical, tangible examples of how the human and nonhuman bodies diffract with each other and affect the routine and structures of the school day.

I have included the breakdown of the Literacy timetable for Grades One, Two and Three (see Figure 6.8 below). It is not an exact science deciding how to allocate the pockets of

time to each specific skill. But when the CAPS documents were first made available, there was a sense of constantly mentally adding up and juggling of activities and formal teaching time to make sure that the time specified by CAPS is generally adhered to by the Foundation Phase teachers. As the teachers have become more relaxed and comfortable working with CAPS, there is less adding up of all the little bits of time and more teaching possible without strictly adhering to the time prescriptions.

The Department does not prescribe how to break down the **minimum time** into the different components although the following suggestions are made for each grade.

GRADE 1 HOME LANGUAGE		Total per week
Listening & speaking	15 minutes per day for 3 days	45 minutes
Reading & Phonics	Phonics: 15 minutes per day for 5 days (1 hour 15 minutes) Shared Reading: 15 minutes per day for 3 days (45 minutes) Group Reading: 30 minutes per day (2 groups each for 15 minutes) for 5 days (2 hour 30 minutes)	4 hours 30minutes
Handwriting	15 minutes per day for 4 days	1 hour
Writing	15 minutes per day for 3 days	45 minutes
	Total per week	**7 hours**

GRADE 2 HOME LANGUAGE		Total per week
Listening & speaking	15 minutes per day for 3 days	45 minutes
Reading & phonics	Phonics: 15 minutes per day for 5 days (1 hour) Shared Reading: 20 minutes per day for 3 days (1 hour) Group Reading: 30 minutes per day (2 groups each for 15 minutes) for 5 days (2 hours 30 minutes)	4 hours 30 minutes
Handwriting	15 minutes per day for 3 days	45 minutes
Writing	15 minutes per day for 4 days	1 hour
	Total per week	**7 hours**

GRADE 3 HOME LANGUAGE		Total per week
Listening & speaking	15 minutes per day for 3 days	45 minutes
Reading & Phonics	Phonics 15 minutes per day for 4 days (1 hour) Shared Reading 20 minutes per day for 3 days (1 hour) Group Reading 30 minutes per day (2 groups each for 15 minutes) for 5 days (2 hours 30 minutes)	4 hours 30 minutes
Handwriting	15 minutes per day for 3 days	45 minutes
Writing	20 minutes per day for 3 days	1 hour
	Total per week	**7 hours**

The Department does not prescribe how to break down the **maximum time** into the different components although the following suggestions are made for each grade.

GRADE 1 HOME LANGUAGE		Total per week
Listening & speaking	15 minutes per day for 4 days	1 hour
Reading & Phonics	Phonics: 15 minutes per day for 5 days (1 hour 15 minutes) Shared Reading/Shared Writing: 15 minutes per day for 5 days (1 hour 15 minutes) Group Reading: 30 minutes per day (2 groups each for 15 minutes) for 5 days (2 hour 30 minutes)	5 hours
Handwriting	15 minutes per day for 4 days	1 hour
Writing	20 minutes per day for 3 days	1 hour
	Total per week	**8 hours**

Figure 6.8: CAPS Specifications of the time allocations for Home Language in the Foundation Phase. (Department of Basic Education, 2011: 8 & 9).

As we have seen, there are numerous clocking practices that shape how human and nonhuman bodies behave and not behave at the school where I teach, Groveview School. The clocks hang in every classroom. The weatherboard and posters indicate the months of year, days of the week and birthday calendars.

Time-based practices that shape behaviours

But there are other time-based practices that shape behaviours. For example, the morning lesson could be interrupted because children arrive late or leave early for a doctor's appointment. Children leave the classroom, because it is their turn for a specialised music lesson or perhaps a therapy session. Or a child has been identified as being below the required academic standard – she is behind her classmates in terms of performance and has to 'repeat' the year. Age-stratification, another time-based element, constantly structures school life. Perhaps a child runs out of time with a formal assessment task. S/he should not have taken as long for the task, a colleague tells me, while another child is observed to rush and finish the test too quickly, making - what some might judge as - careless errors, or producing untidy pieces of work. A colleague suggests sex education is taught too late in the primary school and she suggests that she will raise it in our next staff meeting. Many of my boys in the class are on Ritalin (a scheduled medicine that is administered to children who experience concentration problems), because they struggle to keep their bodies still for long periods of time. But possibly, there may also be an element of boredom and lack of connection between what is being taught in the classroom and the children's interests and engagements that could add to the squirming and wriggling and lack of interest. When we move away from the individual child to child as phenomenon in our analyses (see Chapter Three), the blame is not 'in' the child, and there is nothing wrong 'with' the child, because there is no 'inner' and 'outer'. It is the entanglement of infinite factors that have mutual agency and produce the, for example, bored behaviour: the temperature, atmosphere, the texture of the carpet, the wind, hunger, CAPS and the ringing of the bells.

The most obvious clocking practice in my school is the ringing of the bells. They ring at 30-minute intervals indicating the start and end of each period as well as the start and end of the day. The bells work on a computerised system and ring through the intercom system. The sound is shrill and loud, bringing any movement and speaking to a stop. On a few occasions, there is a power failure and the bells are unable to ring. This tends to result in a kind of ‘chaos’ as the more ‘natural’ flow of teaching-working-learning-bodies assemblages take over. The children in my class are often completely engrossed in their diffractions with the other human and nonhuman bodies as new knowledge is created. As a result, the children are sent to the next period late. The only thing that seems to follow the set schedule is break or play-time.

The children are supposed to have time-conditioned tummies, which become hungry at approximately ten o’clock every morning. Hungry stomachs notify the bodies in the classroom through movement – the churning and tightening of their stomachs and through the sound – their stomachs growling and rumbling. As well as questions of, “When is it break? I’m hungry!” However, there are some children who are not hungry at the stipulated break time and often would rather play or chat to friends, than eat their lunch. One of the side effects of the medicine, (e.g., Ritalin given to children to increase their concentration span) is that it suppresses the child’s appetite and can make them feel nauseous, which means that their hunger is not synchronised with the clock-practices. At Groveview School, the Foundation Phase children are given a five to ten minute ‘feeding time’ before playtime (children and animals share the same place on the evolutionary timeline: wild, savage, immature and underdeveloped intellectually). This forces the children to sit on the corridors and eat some lunch before they go to play as there is no time during the school day to eat lunch. Again, these practices remind the children that they do not have the freedom to decide when they are hungry or not as their behaviour is regimented by the timetable pinned to the notice board.

Figure 6.9: Feeding time.

Intra-actions, e/mergences and clock-practices

Time is a dis/continuity (Barad, 2007), and the past, present and future are "iteratively reconfigured and enfolded through one another" (Barad, 2007: 383). The past, which is a continuity, no longer in existence but also "never left behind, never finished once and for all" (Barad, 2007: 234). The future, which is a continuity but has not come into existence yet in an "unfolding of the present moment" (Barad, 2007: 234); and the present, the now, this very moment, which exists but is discrete (Tesar, 2016).

So, the production of new knowledge is not generated in time. Instead it is the iterative intra-actions that generate new temporalities or new possibilities where the new is

considered a tracing of what is to come. The new knowledge that is generated during the discussions and work being done by the Grade Three children is not contained in a distinct period of time, but rather the ongoing intra-actions generate new possibilities. It is possible to regard the teaching and learning of literacy as not “progressing on a straight line of predetermined development” (Olsson, 2009: 186). Rather this process is a fluid movement, moving in all sorts of directions. But each time there are subtle changes which are “creative acts reshaping the territory” (Olsson, 2009: 186) of teaching and learning of literacy.
Deleuze (1987) makes a distinction between the present, the actual and the virtual. The virtual is present and real but not actual in space and time (yet). Instead what is called virtual is “not something that lacks reality but something that is engaged in a process of actualisation following the plane that gives it its particular reality” (Deleuze in Olsson: 2009:190).

Childhood as a “modern invention” (Jenks, 2003: 45) defines children as beings at the beginning of individual time. Modern childhood has been considered “conceptually, politically and culturally, as a time of renewal, hope and malleability” (Duhn, 2016: 378). It is adults who have invented and utilised the concept of clock-time in daily events, institutions and children’s lives to “segregate, measure and define their childhoods” (Tesar, 2016: 402).

The Grade Three children, myself and the other bodies in the classroom are more than essences or fixed substances with separate boundaries. Instead, we are phenomena which Barad says, “acquire specific boundaries and properties through the open-ended dynamics of intra-activity” (2007: 172). Similarly, the clock on the classroom wall can be thought of as an apparatus or a “material-discursive phenomenon that materialises itself in intra-action with other material-discursive apparatuses” (Pacini-Ketchabaw, 2012: 157).

Barad’s notion of intra-activity provides a framework to understand the “entangled process of transformation that takes place in clocking practices” (Pacini-Ketchabaw,

2012: 156) in the classroom. Drawing on Barad's explanation of the intra-active process as "the mutual constitution of entangled agencies" (2007: 33). That is, the clock, the weatherboard and the timetable are not separate from the child, the teacher, the wind, the sounds and silences etc. All of the human and nonhuman bodied are always entangled.

> In contrast to the usual 'interaction', which assumes that there are separate individual agencies that precede their interaction. The notion of intra-action recognises that distinct agencies do not precede, but rather emerge through, their intra-action.

As we have seen in the Introduction and Chapter Four, Barad differentiates between interaction and intra-action, by identifying the productive aspects of relations. Interaction is usually based on the assumption that matter has its own "separateness and individual agency of physical matter" (Pacini-Ketchabaw, 2012: 156). The notion of intra-action, on the other hand, "proposes that distinct agencies of matter emerge through intra-action, in their mutual entanglement…thus it is through intra-actions that particular material articulations of the world become meaningful" (Pacini-Ketchabaw, 2012: 156). Adopting Barad's notion of intra-action, an event that e/merges in a classroom can be seen as a "gathering of material elements, discourses and human beings" (Hohti, 2015: 5). It is in-between the coming together or gathering of the elements that intra-action occurs. It is the entanglement of the clock-children-teacher-classroom-movement and the working with/on and through the human and nonhuman bodies that the "clock emerges as processes, children emerge as processes and educators emerge as processes" (Pacini-Ketchabaw, 2012: 158).

Figure 6.10: Agreeing on a space to work.

Figure 6.11: Who is in your group?

Transitioning through time and space

Re-turning to another video clip that was filmed the following week, the grade Three children are diffracting with one another, myself, the picturebook, the furniture, the floor, the carpet, insects, the trees and other elements that are gathered and entangled in ‘our’ community of enquiry. In other words, Braidotti’s notion of a community that involves the formation of a new alliance, a new people.

After a conversation in pairs, they get up and stretch their bodies. My voice can be heard giving instructions for the next part of the community of enquiry. There is a wave of movement of bodies, furniture, stationery, mouths and tongues as the Grade Three children carry out the instructions. Some children move away to get their pencil bags and sheets of paper, others move furniture to accommodate their small groups, some chat to friends and a few give the members of their group instructions. One or two of the children sit quietly watching the others.

Pacini-Ketchabaw calls this movement between different activities “transitioning” (2013: 221). She explains transitions in early childhood education as a practice rests on the westernised notion as time being “spatialised by having been divided into discrete units” (Pacini-Ketchabaw, 2013: 222). In the Foundation Phase, the children and teachers move between different activities on a daily basis, for example the transition or movement from numeracy to literacy, between art activities and playtime or the end of the school day and sporting activities. These transitions are more often than not synchronised with clock-time practices and the notion of spatialised time. It is this idea of spatialised, chronological time, that is “tamed into units that are uniform, measurable and predictable in their constant forward movement, [and] provides a deep throbbing rhythm to modernity’s vision of a better future shaped by logic and reason” (Duhn, 2016: 378).

James Williams states that “Deleuze’s philosophy of time is a process, where time is made through processes or intra-actions. This is in contrast to views where time acts as a container for events, or where time is a representation according to which events are

situated" (2011: 62). Comprehension or "practices of knowing in being" is explained by Barad as there being no "external parameter called time, nor a container called space" (Barad, 2007: 187). Similarly, Elizabeth Grosz argues that time is not a "neutral medium in which life can be framed or matter constructed. Rather time is an active and dynamic component in the actual framing of life" (Grosz, 1999: 4). These different notions of time or temporality have important implications for the Foundation Phase's focus on transitions. How different would our educational practice, and comprehension in particular, if time is understood as a process?

Time as a process and transitioning

The idea of transitions is dominant in the foundation Phase classroom. According to Pacini-Ketchabaw, many times "our knowledge on transitions acts as an authoritative voice that encourages us to make certain decisions and avoid others" (2012: 223). But more importantly, the knowledge of transitions allows teachers to make decisions about, and often intervene in, the lives of the children in our class, their families and often other teachers (Popkewitz, 1998). Pacini-Ketchabaw (2012: 223) states that the attention teachers show regarding transitions "is linked to the overall movement towards a better science in education…social progress and order are clearly reflected in our interest in transitions."

Teachers regularly document how the transitions children are involved in take place and the CAPS documents regulate how children and teachers experience transitions. There are a multitude of 'truths' about transitions that are evident in Foundation Phase practices. For example:

- ✓ A child needs to have gained certain skills to make a smooth transition into formal schooling.
- ✓ Children undergo various developmental and health screening tests in order to assist the smooth transition and entry into school.

- ✓ Certain social, emotional and physical skills ensure an easy transition into school.
- ✓ Children who have attended some sort of nursery school, make the transition to school more easily.
- ✓ The level of parental support and involvement can influence children's transitions into school.

These above 'truths' are made explicable through the scientific study of transitions which is then universally applied to *all* children, (Pacini-Ketchabaw, 2012). In particular how these transitions (or lack of them) may impact on the child's comprehension skills and the way in which they are taught and learn literacy. Our understanding of transitions and the implementation of the practices around transitions become a form of discipline, allowing teachers to "order, organise and govern children's actions in the name of scientific knowledge" (Bloch, Kennedy, Lightfoot & Weyenberg, 2006: 154). As a teacher, I order, organise and govern the children's transitions that occur in my classroom to space and time. Children supposedly transition in time from one developmental stage to another, the children transition through space as the move from one activity to the next, one classroom to the next or even to the next phase of schooling, the Intersen Phase consisting of Grade Four, Five and Six, at the end of the year.

For Barad time, or more precisely, temporality, is produced and "iteratively reconfigured in the materialisation of phenomena and the (re)making of material-discursive boundaries and their constitutive exclusions" (2007: 179). Barad (2007: 234) argues that time, space and matter:

> are intra-actively produced in ongoing differential articulation of the world. Time is not a succession of evenly spaced intervals available as a referent to all bodies and space is not a collection of pre-existing points set out as a container for matter to inhabit.

This means that the child and teacher do not exist before their coming together in encounters or intra-actions with each other. Time is produced by the relationality where

some human and nonhuman bodies have less time left, some are running out of time, while other bodies have plenty of time.

Time and childhood are intrinsically entangled concepts. Childhood is viewed as a preparation for adulthood, but developmental theories assume a deficit model of childhood. The child is compared to adult in terms of his or her development and there is an expectation of the child to develop and follow a unilinear trajectory that is seen as 'normal' (Burman, 2008; Murris, 2016). This expectation positions certain children as 'abnormal' because the normal is shaped by western ontologies and educational theories (Murris & Haynes, 2018; Taylor, 2013). The norm of this unilinear maturation process is an adult who is White, middle-class, male, hetero-sexual and able-bodied (Braidotti, 2013). Barad's conceptualisations of temporality and time have important implications for Foundation Phase practices and its focus on transitions. Veronica Pacini-Ketchabaw suggests we might use Barad's conceptualisations as "openings to think about transitions in new ways" (2012: 224).

Returning to the video clip, I notice the movement of the furniture, the children, the paper and pens, rulers and erasers as well as the sounds of the children, the furniture and my voice. I notice two girls. Each has left the community of enquiry with the rest of the children and both have gone to sit in their usual seats. Neither has made a noise, move furniture, or pick up a piece of paper or get their stationery out. Rather, both of them sit very quietly at their desks and watch the other human and nonhuman bodies intra-acting with each other (See Figure 6.11). During the community of enquiry, the Grade Three children had raised a question and were involved in a fascinating discussion that focused on the concept of 'lost' (see Chapters Three and Four). Both girls are focused and although involved during the community of enquiry itself, seemingly, they are not as involved in the follow up activity as the other human bodies are. I watch both girls and observe what they do next. After a minute or so, my voice can be heard on the video, and I ask the girl in the red shirt who was in her group as a way to remind her that there is an activity in which she is meant to be participating. My voice redirects her focus and she re-acts by turning her body to face me.

In re-turning to and diffracting with the video footage, I question why I want these two girls to behave like the others, why did I perceive them as not being able to transition smoothly to the next activity? Why do I take for granted that smooth transitioning between activities is the correct thing to do? According to Pacini-Ketchabaw, it is due to the fact that as a teacher, I am "stuck in thinking about time as linear, time as extensive, time as a series of 'nows' in which the children move from one discrete moment to the next" (2012: 224). I need to diffract with the concept of transitions. To do this, perhaps I should shift my own focus from how the child moves from one activity to the next and rather redirect my attention to the event itself that affects the child and more importantly, what is going on in the moment of transition.

With/in the moment of transition

For Deleuze, "time does not consist of 'nows' or units…time is not extensive; it is not the connection of distinct units" (Colebrook, 2002: 41). Rather time is thought of as "intensive, always taking the form of different and divergent durations" (Colebrook, 2002: 41). Colebrook draws on Bergson, (1991: 4) who explains that:

> one duration is not merely one instant replacing another; if it were there would never be anything but present – no prolonging of the past in the actual…Duration is the continuous progress of the past which gnaws the future, and which swells as it advances.

Time can then be understood as being particular to bodily experiences. A human and nonhuman body has many "different durational rhythms which exist alongside each other…A body is experienced through rhythms which pass, and which endure" (Coleman, 2009: 175). Looking at the picture of the two girls sitting quietly at their desks (see Figure 6.11), their bodies would perhaps illustrate these durational rhythms that intensify and flow through their bodies. Colebrook says that this is possible because

“there is a flow of time, which produces ‘worlds’ or durations. Time is a virtual whole of divergent durations: different rhythms or pulsations of life” (2002: 42).

What might be happening is that the girls’ experience of the community of enquiry *intensifies* their present and futures. Pacini-Ketchabaw (2012) suggests that when I was thinking that the girls had difficulty in transitioning from one activity to the next, their experiences of the community of enquiry stayed in the past and the girls were only *re-membering* it in the present. Instead, for these two girls, the experience of the community of enquiry had not happened in the past, it was still happening during the next activity. However, this does not mean that the past determines the present or future, or the intensity of the community of enquiry caused the girls’ difficulty to participate in the next activity. Rather, a past “activity endures and qualifies the intensity of the present activity” (Coleman, 2009: 171). For the girls, each moment in the community of enquiry is a “moment that becomes and becomes part of other moments of experience” (Coleman, 2009: 171). I should then, not focus or concentrate so much on the supposed difficulty of the girls transitioning between activities. But instead, see time as becoming. As Coleman argues, “time as an organisational structure does not exist outside of, or regardless of, the child’s experience…time is peculiar to a body’s experience of it” (2009: 171). It would make a real difference for the children in my class if I saw or realised that “things that stay become and it is through this becoming that a body’s possibilities are produced” (Coleman, 2009: 171).

By not being so focused on the clock on the wall, which was marking the time and simultaneously almost taking on the role as the “decision-maker” (Wien & Kirby-Smith, 1998: 11), has given me the opportunity to break open the old scripts from which I had been working, like the Year Plans, Weekly Preparation Forecasts and has created new possibilities when working with children.

Transitioning, time and comprehension

The ‘next’ process of the community of enquiry was to, in small groups, draw ‘the start of lost’. The children were deeply engaged in the process. The collaboration was evident in the closeness of the bodies, eyes looking at and ears hearing one another, their mouths and hands moving as new, e/mergent knowledge was created. Having an affirming and experimental attitude (Dahlberg & Moss, 2009, cited in Olsson, 2009; see also Lenz Taguchi, 2009), can be very difficult to achieve and implement when having to deliver an official curriculum framework that is mandated by government timelines as in the CAPS Documents.

Approximately forty-five minutes into the video, I notice children still engaged with the process as their ideas and pictures emerge. Watching the video, it becomes increasingly obvious that the children are involved in choosing. The time spent at the activities increases and the concentration spans for these by human and nonhuman forcers and fields mutually initiated activities becomes longer and more sustained. By challenging the westernised construction and the tyranny of time, Wein and Kirkby-Smith (1988), articulate the connection between the integrated curriculum, unhurried time, and sustained complex activity. A new curriculum is then able to e/merge which does not focus on a programme that the teachers had previously decided was ‘good’ or worthwhile for the children – often working with a particular deliberate binary logic between concept and the world it represents. For example, during the community of enquiry, instead of using the human made definition of ‘lost’ as in people getting lost, the children explored the concept ‘lost’ in a relational manner. The deliberate logic is not random, but rather assumes a particular relationship between human and the world. The Grade Three children in my class had begun to co-own and co-construct the curriculum with me (Wein & Kirby-Smith, 1998) through a different doing of conceptual enquiry.

In a clock-bound classroom, the comprehension activity should take approximately 30 minutes. At which point, the Grade Three’s would have had to get up and move or transition to a different subject with a different teacher who also has her own script for

action to follow. In the example above, I could not keep the Grade Three children as the clock indicated that it was time to change activities, but the intense atmosphere of the community of enquiry was lost as the Grade Three children moved out of the classroom. I experienced a physical unease and almost sadness that the intensity and buzz that had been created while the children were intra-acting had disappeared because of our bodies being synchronised, affected and governed by the clock-time. So, the normalising affect of clock time is that there is limited harmony with time as duration, which is subjective and different for everyone. Measuring children's abilities through clock time doesn't do justice to different doings of time by the children when experiencing the community of enquiry.

A rigidly kept time schedule undercuts support for children's intra-acting with ideas through the community of enquiry. As discussed in this chapter, while the Grade Three children spend the majority of their day with me, there are still scheduled activities, lessons, breaks, home time that can put a stop to the community of enquiry, because the children have to move to their next lesson.

At the same time, I feel bound by following the various steps during a community of enquiry. There is a schedule that is to be followed closely as far as possible. For example: the provocation is presented, thinking time follows that, then questions are formulated, etc. The children's decision making and ownership of their activity, or in posthuman terms: agential cuts and their ability to respond, as well as giving the children the opportunity to assume responsibility for their actions are all restricted when stopped in order for something else to begin (Wein & Kirby-Smith, 1998).

Cultivating and creating time in the curriculum framework

The school operates through/with/in the time constraints put into place. The constraints include the various duty lists, timetables, bells, clocks I am committed to the cultivation of a classroom space that creates and encourages opportunities that “investigate complexities and multiplicities to unearth rhizomatic connections” (Deleuze & Guattari, 1987) and that the spaces can also instigate new possibilities for thought, affect and action. In these classroom spaces, my intention is to be more sensitive to the importance of focusing on time not as a decision maker. Instead, I recognise that the human and the nonhuman bodies e/merge with new experiences and knowledge rather than existing in small pockets of time.

Drawing on Dahlberg, Moss and Pence (1999: 17), I realise that in order to cultivate and create time in the curriculum framework, I need to be aware that:

> We live in a world that is increasingly time-governed, driven by new technologies and demands for increasing productivity. We are saturated with information. We demand and expect instant answers and quick fixes. We do not make time for other things, not least reflection, dialogue, critical thinking, working the tensions between theory and practice. Perhaps one answer to “What can we do?” is to say that we will struggle against the tyranny of time governance; we will risk crises by choosing to work with complexity, finding ways to think critically and searching for new questions; by doing so we will open up the possibility of new understandings and practices.

Although this research has already been carried out in the past, I have not left it behind and never can. Part of my methodology has been the iterative process of re-turning to the data I created by intra-acting with a machine (my camera). With each re-turning the data dis/continuously created, intensifies and becomes richer as it sediments the world in its iterative becoming. This richness is created, not because I am representing the past,

through and with my writing but that each time I re-turn and diffract with the data, new data e/merges adding to the complexity of the layers (Murris & Haynes, 2018).

By shifting my focus from being acted upon by the clock, and for "creating space for time that is not uniform but enables opportunities for the singularity of this encounter to emerge" (Duhn, 2016: 383) infinite possibilities open up for data creation. The new knowledge produced for my own practice as a teacher is the idea of learning to work *with* the clock, rather than working with time as a commodity, something to control. The ethical difference this makes is that it resists my inclination to control children through clock time and to possibly treat them as mere objects of measurement and medical diagnoses.

The tensions that lie simmering beneath the theory/practice binary resonate with the notion that time is a commodity, to be calculated, bought, sold, wasted, saved and spent. The concept of time then assumes a humanist colonising ontology and time becomes a human tool used to control. Time also becomes a possession, which informs the idea and language use of 'having time' or 'running out of time', much like the White Rabbit from the novel *Alice in Wonderland* (Carroll, 1865).

In the next chapter, the opportunity is created for me to re-turn to each of the previous chapters and intra-act and diffract with new possibilities using the notion of temporal diffraction or travel hopping, as suggested by Barad (2017).

Chapter 7 Flows and Intensities with(in) timespacematter

Exploring rhizomatically…and…and…and

At the start of this thesis, I listed the questions that would inform my research. In this chapter, while each question is listed, I have now started each question with the word ‘and’. Each question is not isolated and explored as a separate component as I had initially planned. Rather the questions are now entangled and interwoven with one another to be explored rhizomatically. As discussed early, the concept of exploring ideas rhizomatically, briefly suggests that there is no linear progression to knowledge acquisition. There is no beginning, middle or end to the way new knowledge is created, rather the process is fluid and always entangled, much like a rhizome root structure. In this chapter I re-turn to and diffract with each chapter through the research questions that informed this research.

The title of my research project is:

> Teaching Intra-Active Comprehension with Picturebooks in a Grade Three South African Classroom.

The main research question asks:

> What difference does it make when I teach literacy diffractively using the intra-active pedagogies of P4C and Reggio Emilia for the teaching of literacy in my Grade 3 class?

This main research question is supported by the following sub questions:

1. What is Intra-active Comprehension?

2. and…how does Intra-active Comprehension reconfigure child in relation to more than human?
3. and…how does Intra-active Comprehension open up opportunities for the child to create new knowledge or concepts?
4. and…how does Intra-active Comprehension work in order for children to read picturebooks differently?

I re-turn and re-read the questions again and again throughout the research process, but when I came to write this chapter and I once again diffracted with the questions, I feel that I should have added this question…

5. and…how do I, as a co-researcher/teacher/human body look for the new that is created through the intra-action and diffraction with the bodies, both human and nonhuman, in my class?

I shall re-turn to this question throughout Chapter Seven as I travel-hop (Barad, 2017) 'back and forth' while diffracting with each chapter.

Re-turning, tunnelling and burrowing…

In Chapter Six, I discussed the idea that time could not be thought of as a concept that was distinctly divided into compartments that follow one another in a unilinear pattern. Rather, we should consider time as transitions or durations that requires the reconsidering of the past, present and future, as well as the relationships in-between them. Deleuze (2006: 59) argues that:

> the past would never be constituted if it did not coexist with the present whose past it is. The past and the present do not denote two successive moments, but two elements which coexist: One is the present, which does not cease to pass,

> and the other is the past, which does not cease to be, but through which all present pass.

A memory comes back to us in many different forms. Memories of various past events act on us in our present moments. The events or things that the children and I experienced or that went on in the past in the classroom experiences are still present with/in us (Coleman, 2008). Even though we may say an event happened in the past, it is still with us now. Deleuze says that our "experience and practice moments are not linear events in which we only excavate our memories for things that happened in the past" (Pacini-Ketchabaw, 2013: 225), but rather our memories are part of our present as well. Barad (2007: ix) explains that memory:

> does not reside in the folds of individual brains; rather, memory is the enfolding of space-time-matter written into the universe, or better, the enfolded articulations of the universe in its mattering. Memory is not a record or a fixed past that can ever be fully or simply erased, written over, or recovered (that is, taken away or taken back into one's possession, as if it were a thing that could be owned). And remembering is not a replay of a string of moments, but an enlivening and reconfiguring of past and future that is larger than any individual…The past is never finished. It cannot be wrapped up like a package, or a scrapbook, or an acknowledgement; we never leave it and it never leaves us behind.

Certain events that happened in the past should be considered "enduring things" (Coleman, 2008: 93) and are the ways in which certain things transform and become. In other words, the events move from the past and as they are re-experienced or re-visited, they become "assembled as different, novel, intensive temporalities" (Coleman, 2008: 93). How then, can we consider the memories of events from the past as part of the present? According to Coleman (2008: 94):

> The past is…to be re-experienced through its intensity, through the endurance of a past thing, its connection with the present and the future. Moments of intense

> experience are not self-contained or bounded units. Rather, the jump or leap involved in remembering and re-experiencing a past moment is a connection between different durations.

By capturing my memories in writing from data created, I started to question: What am I working with as I diffract with a memory of the events in my classroom? Although absorbed in my personal, embodied experiences, I was not alone, but always re-turning and re- connecting with the Grade Three children, other staff members, events and things. I am in the photograph, but I am also looking at the photographs. When Barad (2007: ix) says that memories are not "merely authentic replays of events, but also creations", I still felt it necessary to hurry when writing down my thoughts and re-memberings, in order not to lose or forget something that started to slip out of my reach, things like my direct entanglements with the particular events and ordinary things, how they felt, how they looked and what happened around them. I spoke earlier (see Introduction) in this thesis about being busy with my daily plans, often exhausted after each day working with the Grade Three children. But I still needed to ask: What else? What at the same time? How does this work? and position those questions within the context of my classroom. Davies and Gannon (2012) present memory writing as part of their collective biography approach in which the aim is to produce material for further stages of collaborative work. I used their advice to write only, and not to try and explain or reason. I also tried to produce my own memory writing as a flow of thoughts or re-memberings, trying to get as close to what happened with the children in my classroom as possible, without stopping or hesitating to make meaning of it. Later, by drawing on MacLure (2013), I saw how moving away from explanations of the events was crucial to disrupting the idea of analysis as being a representation of the events that e/merged.

> Karen Barad (2014: 168) explains re-turning to the past as a "multiplicity of processes, such as the kinds earthworms revel in while helping to make compost or otherwise being busy at work and at play, an imagery of the soil being turned over and over with it being ingested and excreted". This is an animated description of an earthworm "tunneling

through it, burrowing, all means of aerating the soil, allowing oxygen in, opening it up and breathing new life into it" (Barad, 2014: 168). By re-turning the events throughout the thesis, I am diffracting with my re-memberings, but not with the intention to reflect and represent what was going on, but rather as Murris and Haynes (2018: 87) put it as "a kind of slow scholarship". By returning again and again to the same text or event, a "thicker understanding" (Murris & Haynes, 2018: 87) is created.

In this research, I attempted to identify and focus on 'slivers' of data created, 'isolate' them and magnify them. But the slivers of events are not able to be segmented or compartmentalized, contained in a separate space, place or time. Each of the ordinary events or simple things that I have focused on does not have a beginning or is considered as the start of an event, nor is it at the end of the event. Instead these slivers are like a ball of wool, entangled and knotted, messy and entwined. Trinh Min Ha describes the messiness of the entanglement as a piece of thread that is "crisscrossed and interlaced by other threads until it breaks with its own linearity", so that only an intricate, "complex, tightly knit tissue of activities and events that have no single explanation" (Trinh Min Ha cited in Barad, 2014: 184) are evident.

By re-turning to each event discussed in each chapter, I am not recounting what once was, but I am turning it over and over again, "tasting the rich soil from which ideas spring, and opening up again to the uncountable gifts given that still give, to proceed to the place from which we have never left/leave (Barad 2014: 168). Karen Barad uses the concept of 'travel hopping' in order to explain the concept of temporal diffraction or quantum leaps and she uses the notion of travel hopping as a "powerful concept to unpack the infinite density and complexity of a particular spatial point in space and time ('spacetimemattering')" (Murris & Haynes, 2018: 74). The idea of travel hopping lends itself to the possibility of me re-turning to and diffracting with 'the' past in my classroom with the Grade Three children.

Temporal diffraction and travel hopping

In this final chapter, I am using time as a duration that requires the re-considering of the past, present and future, as well as the relationship in-between them. To travel hop is not to travel in time as in science fiction movies, where in a time machine I travel to a past destination in order to change or fix something. Rather, Barad has opened a possibility for me to travel hop back to each piece of glowing, beckoning data. By re-turning over and over again by “iteratively intra-acting, re-diffracting, diffracting anew, in the making of temporalities (spacetimemattering), new diffraction patterns” (Barad 2014:168). Through the notion of temporal diffraction or travel hopping, I have the opportunity to re-turn to each of the previous chapters and intra-act and diffract with emerging data in order to create a richer, more intensive understanding of the intra-actions that materialised. Each time I re-turned to the individual chapters and diffracted with data, I would think about what *new* was happening or emerging. It was with this thought that I would stumble upon an ordinary event that would glow after the event.

By re-turning and tunnelling through the data, burrowing and allowing oxygen in, opening it up and breathing new life into it, a slice of time from which something new e/merged, was created. The new became through the intra-actions as I entangled with the data. The sliver of the event which glowed was always there but only by me re-turning and breathing oxygen into the event, something new appeared. The chapters have been written in a linear, sequential structure, each separate, numbered chapter following the next. However, looking back, the chapters are always entangled with one another. By being entangled, the chapters are working diffractively with one another. By sharing space and time, they add force to one another, resembling a rhizomatic structure with many knots.

Re-visiting the entangled

Posthumanism is a “paradigmatically different way of thinking about knowing (epistemology), being (ontology), and doing (axiology)” (Kuby, 2017: 286). I draw on queer theorist Karen Barad’s (2007) notion of the materiality of things and how the bodies intra-act with one another in Chapter One. It is important to remember that the material objects described in Chapter One, like the carpet, wall and other human and nonhuman bodies, can be understood to actively work on a body and make it behave or perform in specific ways. Lenz Taguchi (2010: 5) writes that, “All spaces and certainly pedagogical spaces, call upon us and demand specific ways of sitting, moving, talking or socialising with different affective force and intensities”. I discussed how the various material objects in the classroom become performative agents and can actively work with and on bodies to make them behave in specific ways, depending on the meaning that is being made or created in a specific space. In Chapter One, I focus on the large carpet that is in the front of the classroom. Usually each Foundation Phase classroom has a large carpet placed in the front of the classroom. The carpet acts as a communal meeting place for the teacher and the children.

By sitting together in the space created by the carpet, a different atmosphere was created in the classroom. There was a sense of collaboration a sense of togetherness in bodies and in learning. The focus shifts from individual written work done at the children’s desks to a sense of togetherness, a building of community. Kuby and Gutshall Ruckshaw (2016: 57), in discussing the meeting place in their particular classroom, say that “community building happens all the time, every day. Relationships are fluid and changing. We are in the process of **becoming** and uncovering how the space – physical, curricular and relational - is used”. The significance of re-imagining or re-thinking classroom spaces like the carpet, the physical architecture of the class or the furniture, affects the practices of education in traditional South African Foundation Phase classrooms. This re-imagining makes it necessary to take into account not only the bigger, more complex situations or events that may take place in any classroom, but also to take into account the ordinary, routine encounters as well.

Not only is the space of the carpet a performative agent, but also the furniture, stationery and art supplies in the classroom also act as agents too. In this Chapter, I focus not only on the nonhuman bodies, but also the human and more-than-human bodies. I became aware that it was also my voice, my silences, my body and even the deliberate or unconscious decisions I made were performative agents. By re-turning to the events in my classroom through the video clips, I was able to slow down time and focus on various snippets that during the actual event slipped past unnoticed. But while I was travel hopping and watching myself in the past in the video footage, my dis/embodied self, currently sitting on a chair in my study was affected by the footage in the present. What e/merged through my intra-actions with data created in the video was how I behaved, my facial expressions, how I spoke at certain times and how I kept quiet at other times.

Traditional research practices tend to treat data as passive matter without agency and the analysis that e/merges is identified, categorised and represented by a detached human adult researcher who engages with and analyses the data actively from a distance. Taylor (2016: 5) states that “doing posthumanist research in education is a challenge…Posthumanism proposes different starting points for educational research and new ways of grasping educational experiences than those afforded by humanism.” I was uncomfortable with the traditional role as researcher and did not know how to transcribe data that had e/merged in a way that would do justice to the child emerging. It became evident that I was firmly entrenched in the “safe space of knowing” (Mazzei & McCoy, 2010: 506) that might cause me as a researcher to “emulate practices and analyses that are known and predictable” (Mazzei & McCoy, 2010: 506).

I had started analysing the data as a detached observer/researcher, only focusing on the language and the words the children had spoken. I had already begun to determine themes, possible links and connections. I was analysing the words for implications and what they might mean. In contrast, from a critical posthumanist perspective, data is a co-constitutive force, working with and on the researcher, as the researcher works with and on data. From a critical posthumanist perspective, teachers as well as researchers

should be “attentive to, and responsive/responsible to the specificity of material entanglements in their agential becoming” (Barad 2007: 91).
Lenz Taguchi claims that the power dynamics positions staff and children (human bodies) and nonhuman (insects, furniture, stationery, plants, animals) as passive entities, which causes a sense of helplessness and loss of autonomy. There is a perception that the “real power” (Lenz Taguchi, 2010: 25) is not within my grasp and instead is imposed on me from the outside structures, like society, parents, principals and other staff members. Outside structures also include the policy documents drawn up by the management body of the school, articulating or outlining teacher’s duties and professional conduct. These structures according to Lenz Taguchi (2010) are built on systems of how society is organised and how knowledge is produced and upheld by these outside structures.

Lenz Taguchi (2010) suggests that this view of power is changed in critical posthuman analysis and instead of seeing the power as being held by a select, privileged few humans and imposed on others, power is seen as being produced through collectively constructed discursive notions and meaning making by all human and nonhuman bodies in and beyond my classroom. Understood through such a different philosophical orientation, the quality of my practice would then be dependent on the meaning making and embodied material-discursive practices in our classroom: our shared daily habits, practices, routines and actions as opposed to what I was not doing or what the children were doing or not doing? It is the critical posthumanist position of disrupting the humanist binaries that assist in answering the second question.

The second research question asked, ‘how does Intra-active Comprehension reconfigure child in relation to the more than human?’ Childhood has generally been “conceived of as a period of dependency, meant that education and socialisation were required to lead and train the child in the appropriate direction. Hence representations of childhood were central to social policies” (Burman, 2008: 76). The dominant representations of childhood e/merge from the “hegemony of developmental psychology” and regard “children as

provisional, preparatory, and subordinate to adulthood" (Stremmel, cited in Edwards et al, 2012: 143).

The numerous representational images of childhood portray an "idealised generic child against whom all children might be measured" (Genishi & Dyson cited in Sherbine, 2015: 2). One predominant image was that of the child seen as passive and innocent, "a blank slate to be gently acculturated by omniscient adults" (Sorin, 2005: 13), and who is in need of protecting so as to maintain her innocence, "so that she may remain a force for good" (Sherbine, 2015: 2). Other images of child included the child, who was a product of her parents' intimacy and as a result was considered evil, who must "have the evil beaten out and replaced by good" (Sherbine, 2015: 2) and the "miniature adult who lives and works alongside adults who are essentially the same, but larger versions of the child" (Sorin, 2005: 13). Jenks (cited in Sherbine, 2015: 2), talks about the image of the savage child who is seen as the "primitive other, not yet having achieved the reasoning or sophistication of adulthood".

These representational images of child create fixed ideas of what is understood by the term 'child' and as long as we think about the concept of childhood according to a westernised pre-given image of thought, we are stuck in a representational mode of thinking. This mode of thinking restricts us from taking into account the different possibilities of child and her experiences with the world. In this view, children are not to be protected from adult culture, which is traditionally understood as separate from their own. The dominant discourse in education is rooted in developmentalism, which represents "childhood in an overly simplistic ways" and instead of "being curious about childhood and difference, it encourages teachers to determine, know and fix what goes on in the classroom" (Blaise, 2013: 184). Over a period of sixty years, Jean Piaget conducted a research programme that profoundly affected society's understanding of child development. Many of Piaget's theories have been directly applied to education and many of his theories underpin the developmentalism philosophy. Many of the traditional practices advocated in literacy education are based on the work of Piaget (1970) and Vygotsky (1986). Piaget stressed the age-related cognitive development and

the unique nature of the child's thinking, while Vygotsky identified the social aspect of language learning.

While Piaget's theory presents several principles that supposedly provide a deep understanding of the child and general guidance for education, the theories are open to misinterpretation and misapplication. Theorists, often, rely too heavily on Piaget's concepts. The danger is that these theories, when accepted at face value, may be implemented in a far too rigorous manner and this has serious implications for the teaching and learning of literacy practices in the Foundation Phase.

A child's development or cognitive processes, mature and move through clearly categorised stages. These stages are hierarchically integrated, and people do not lose the insights gained at earlier stages as they pass through each stage, but rather, children scaffold new thinking strategies onto previous or existing stages. These pre-determined stages have serious consequences for the child and the way she is viewed. The theories of developmentalism imply that a child is on the border or outskirts of adulthood and needs to mature and progress through the stages and develop into the adults' way of thinking, but until each stage has been reached and mastered, the child is considered lacking. Developmentalist theories are underpinned by Cartesian dualism which sees the maturing or developing of the mind as having priority over the body and that all thinking is done in the (human) mind alone.

Rather, children construct their own cultures in relation to adults, other children, popular culture, materials etc" (Sherbine, 2015:2). The child e/merges in relation to the contexts in which she lives, plays and learns and in the processes of her affective encounters with human and nonhuman bodies, more-than-human and materials (Sherbine, 2015:3). Loris Malaguzzi elaborates on this conceptualisation of child as rich and connected, "an active learner seeking the meaning of the world from birth, a co-creator of knowledge, identity culture and values" (UNESCO, 2010).

My research offers the possibility of rethinking what we think we know about child, childhood and teaching and learning literacy in South Africa Foundation Phase classrooms. Usually children are seen “as simple, concrete, immature thinkers who need age-appropriated interventions in order to mature into autonomous ‘fully human’ beings” - a case and point of the ontoepistemic injustice in early years education (Murris & Muller 2018: 152).

Epistemic (in)justices

In Chapter Two, the Philosophy for Children (P4C) principles and the community of philosophical enquiry, the methodology of the P4C approach was explored as part of the research process. This approach was conceived by Matthew Lipman and his colleague Ann Sharp as a response to his students’ inability to think and express themselves creatively, critically and with confidence. According to Haynes (2014: 463), “regardless of age or status, a principle of P4C is that all those taking part are valued equally in the collaborative dialogue and quest for truth”. In a traditional Foundation Phase South African classroom, this is seldom the case. The teacher is seen as the authority, the keeper of knowledge and the answers, while the children listen quietly and politely and volunteer the answers when asked.

By engaging in the community of enquiry sessions, the many differences are not only appreciated but diverse opinions enrich the enquiries. The binaries, assumptions and stereotypes are disrupted. It is these assumptions and stereotypes that place the child as being “unknowing, irrational and immature” (Murris, 2013: 250). These stereotypes see the child as not having a voice or knowledge and ideas of their own. Miranda Fricker (2007), explains that when somebody is wronged in their capacity as a knower, a form of epistemic injustice has taken place. The community of enquiry encourages the disruption of the dominant roles of the adult/teacher and the children’s more submissive roles. These roles are often encouraged and reinforced by the national curriculum (CAPS), the school, the parents and often the children themselves, who have internalised deeply

engrained ageist discourses. The community of enquiry is not only an “activity, process or way of working” (Reynolds & Peers 2018, cited in Murris & Haynes, 2018: 146), but an exciting opportunity for problematising the ways in which literac(y)ies and comprehension are taught in schools.

Physicist and feminist philosopher, Karen Barad explains the relational materialist or posthumanist philosophy as the material-discursive being mutually implicated in the intra-activity of the on-going entanglement. It is with/in the entanglement that the various bodies make themselves intelligible to one another (Barad, 2007).

Through a posthuman lens the process of a community of enquiry is not linear or circular, but rather “rhizomatic and provoked by someone or something that raises philosophical questions” (Murris, 2016: 179). In a community of enquiry, the space between teacher and learner is fluid and in constant flux with no fixed boundaries. By problematising and interrogating the meaning of concepts by asking philosophical questions, educators and students connect strands of entangled meanings and concepts and make new endless patterns (Murris, 2016: 186). A posthumanist perspective moves away from the humanistic idea of thinking and reflection as inner mental activities inside a separate human being. Karin Hultman and Hillevi Lenz Taguchi (2010: 536) suggest that thinking takes place in and in-between bodies rather than an isolated, localised activity inside the mind of an individual.

Involved in the entanglement of the video made from the community of enquiry discussed, is not only the immediate space-time-material-human-nonhuman intra-action, but the event as part of more and more entanglements. I acknowledge this entanglement of the arms-legs-hands-humans-nonhumans-glass-window-space-time is entangled with the policies of the school, the architecture of the school; the management of the school, the current curriculum, outcomes-based education and South Africa’s post-apartheid education policies and…and…and…infinite entanglements.

It is this intra-action between bodies that was also explored in Chapter Two. The girl who raised her hand as an indication that she wanted to contribute to the community of enquiry and then disguised the lowering of her arm as another action when she saw the other bodies in the community. This new that was emerging was not psycho-analysed in my research, rather how the different bodies intra-acted with her and in a small, micro movement, her comprehension of the other bodies changed her body. It was the opportunity to re-turn to the event that allowed me to see this child intra-acting and to make me more aware in my own practice that these micro-movements are taking place continuously. Kuby, Gutshall-Rucker and Kirchofer (2015) state that Barad's concept of intra-action makes it possible to distance oneself from predictable outcomes and instead, offer opportunities for creating different knowledges. Instead of noticing, for example, the girl's lack of participation or hesitation in the enquiry, Barad's material-discursive analysis creates opportunities and new pathways to explore the concept of comprehension through the inclusion of the nonhuman, like the other arms and hands.

At the same time, I explored how the physical architectural structure of my classroom and the huge windows that act as walls and barriers and the outside bodies, both human and nonhuman, intra-act with the bodies (mine and the children) and create new knowledge. In this case, it was how my perceptions of the outside world travel through the windows and intra-act with me, and not always in a positive productive manner.

'(Con)texts of interpretations'

As part of exploring the process, I re-turned to how comprehension is usually taught in traditional Foundation Phase classrooms in South Africa. Comprehension is considered a critical part of the reading process and yet, children continue to struggle with applying comprehension skills as seen in benchmarking assessments. South African literacy expert Elizabeth Pretorius says that children are "often not given the opportunity to go beyond the immediate, literal meaning of information or shown how to do this when they read" (Pretorius, 2014:70).

How is what I am doing any different to the other staff members at the school? Looking through the glass window, my children are not reading the text as a class, nor are we systematically reading the pre-set questions on a worksheet together and I am not modelling the correct way in which to answer the questions.

It is here that I not only re-turn to Chapter Three, but at the same *time* and in this *space*, I connect, entangle and diffract with Chapter Four of my research as both chapters are entangled with comprehension-literacy-teaching-practices-theory…
In Chapter Four, the Grade Three children and I diffract with the concept 'lost' as part of a community of enquiry entangled with a literacy/comprehension activity.

I also introduced the term Intra-active Comprehension and at the same time and space, answer the first question, 'what is Intra-active Comprehension? How does it work? What does it do? The term came about as a response to the need of a term to describe, based on critical posthumanism theories, the rhizomatic and intra-active processes of children creating-with-materials-time-space-environment-humans. Barad explains knowing or understanding as a material practice of engagement as part of/with this world as the world is becoming, suggesting that the intra-activity between the child-materials-space-time-environment produces or creates the new knowledge (Kuby & Gutshall-Rucker, 2016). Literacy in schools is often measured, evaluated and tested through external means such as standardised benchmarking examinations. The children in schools are assessed and categorised as either proficient or incompetent in terms of their language ability. A concern is that not all children are proficient in the accepted, traditional practices or modes of communication of speaking and writing. Candace Kuby and Tara Gutshall-Rucker suggest that "this view of literacy does not leave room for the multiple ways of reading, writing and being literate in the world today" (2016: 33).

In response to the traditional comprehension process of 'question and answer' where children's voices (and bodies) are suppressed and ignored, it is through intra-activities between the child-materials-space-time-environment that creative and critical

comprehension can e/merge. This is made possible in-between human and non-human intra-actions where, according to Margaret Mackey, “physical exchanges as well as a conceptual and imaginative opening up” (2016: 167) occur.

The book *The Lost Thing* (Tan, 2010) assumes a “central organizing principle as a *living, talking* book, opening up a space of the performative” (Ouma, 2018: 177) and intra-active imagination of the children. The children sit on the carpet to watch the video and then later to listen to the story. It is their bodies on the carpet that transform at different moments of the video and story. By intra-acting with the material, reading, seeing, listening, smelling, stretching, imagining, the children are able to bring into the classroom space their own “(con)texts of interpretations” (Ouma, 2018: 177).

These (con)texts of interpretations suggested by Ouma became evident when I re-turned to the video clips and watched the children. One little boy’ reaction to the scene was noticeable, when for example, the narrator in the book took the ‘Lost Thing’ to the department building, or when the narrator’s parents did not want the ‘Lost Thing’ in their house any longer (Figure 7.1).These reactions register on their bodily reactions partly because of their “non-investment in the process of imagination as a purely cerebral activity” (Ouma, 2018: 177).

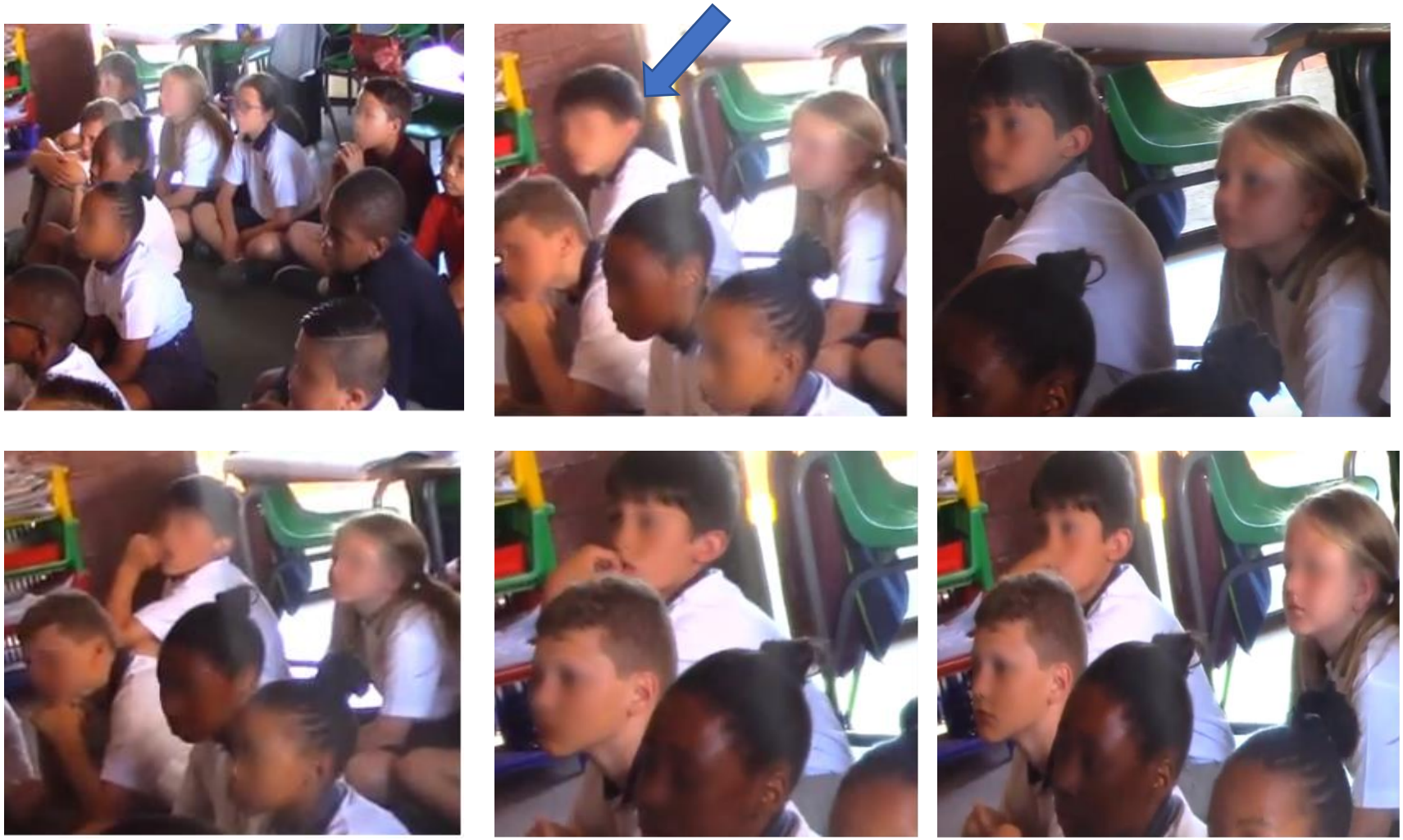


Figure 7.1: Bod(y)ies intra-act with the material.

Observing the Grade Three children intra-acting with the video and picturebook, gives me an opportunity to also observe the text as it generates a “space that incorporates the children’s bodies as part of the material cultures of the classroom” (Ouma, 2018: 177). The space is productive and is what Murris and Haynes (2018) refer to as the agency of the material - the dynamic that brings together the spaces, bodies and texts (Murris & Haynes, 2018) in the classroom. The Grade Three children in the community of enquiry have already, according to Ouma, (2018: 178):

> created a collective dynamic of shared imagination. This is the first step towards generating a dynamic not just of collective identity as part of the socializing logic intended for storytelling, but this also opens up space for… agency in relation to a shared community of listeners.

In re-turning to Chapter Three and Chapter Four, I attempt to do justice to the agential role that the material plays in the teaching and learning of literac(y)ies and comprehension in my Grade Three classroom. I remind myself to look for the new, the possibilities that have opened up in me re-turning and seeing the data created through the material-discursive assemblage of the video, photographs, the questions and the two picturebooks, namely *Tusk, Tusk* (McKee, 2006) and *The Lost Thing* (Tan, 2010).

Enfolding different temporalities

It is not only the incorporation of the materiality and objects in my research process, but also seeing matter as part of the agency usually only ascribed to humans that became significant in this research process. Becoming aware of the ongoing various intra-actions in-between the material and human bodies that e/merged from simple everyday events was part of the new that e/merged for me as a teacher-researcher.

In re-turning to Chapter Five and Chapter Six, I draw on Barad’s concept of intra-action which does justice to the connections between the human and nonhuman bodies in both space (explored in Chapter Five) and time (discussed in Chapter Six). While space and

time are always ‘already there’, although considered as part of the background or atmosphere, they may be invisible or inaudible to the human senses. Instead of focusing on the meaning that the picturebook is trying to convey, I try to re-direct my focus to the intra-actions between the human and nonhuman bodies, to also try to turn the spotlight onto material having agentic qualities (Kuby & Gutshall-Rucker, 2016: 15). The simple daily events or things cannot be viewed as linear, chronological blocks of time and Barad suggests that “matter doesn’t move in time. Matter doesn’t evolve in time. Matter does time. Matter materialises and enfolds different temporalities” (2013: 16).

I have also discussed how Karen Barad points out that the physical phenomenon of diffraction is the way in which “waves combine when they overlap and the apparent bending and spreading of waves that occurs when waves encounter an obstruction” (Barad, 2007: 28) to produce a diffraction pattern. The diffractive approach, Barad posits, is one where the pattern produced is itself “a matter of entanglement” (Barad, 2007: 36). Indeed, she argues: “diffraction is not merely about differences, and certainly not differences in any absolute sense, but about the entangled nature of differences that matter” (Barad, 2007: 36). I have explored how diffraction can be used as a methodological tool to be aware of the differences that e/merge and how the differences come to matter.

Throughout the research study when re-turning to the research process, I have tried to not analyse data created according to themes and ideas, or by looking for what is different and trying to psychologise and find the reasons behind certain children’s behaviours and answers. I have been aware that taking on the researcher/teacher role, there are according to Murris, Crowther and Stanley (cited in Murris & Haynes, 2018: 164):

> no absolute insides or outsides; we are part of the apparatus that measures (e.g. the conceptual framework we use, or that use us). In that sense we create knowledge (But never out of nothing) and participate in, and are response-able for, (re)configuring the material-discursive world.

The essence of this research is about materiality, looking past or beyond the humanist constructs of the individual mind and language associated with education, with teaching and learning of literac(y)ies and with teaching de-coding and comprehensions.
I have explored the vitality of the intra-actions between human and nonhuman bodies through the materiality of the community of enquiry and meaning making with picturebooks. I have also tried to develop a sense of learning and being with the world as opposed to learning about the world as a distant observer.

And re-turning again to questions

In order to answer questions three, which was, 'how does Intra-active Comprehension open up opportunities for child to create new knowledge or concepts?' and question four, 'how does Intra-active Comprehension work in order for child to read picturebooks differently?' I draw on the posthumanist viewpoint which establishes the child as an "emergent competent thinker and meaning maker" (Hultman & Lenz Taguchi, 2010: 2) in a relational field where non-human forces are equally active in constituting the child's becoming and learning.

A posthumanist approach focuses on what "emerges as an effect of the intra-activity that takes place *in-between* children and material artefacts" (Lenz Taguchi, 2011:47). Due to the fact that "media also differ in their modularity, their persistence across time, and the amount of physical feedback they provide" (Forman, 1994: 40), the child "actively creates and is created by the very encounters of human and non-human bodies in the making of art" through "entanglements, interruptions, and relations between and among materials, ideas, artist and environment" (Clark, 2012: 132). Vea Vecchi argues that our minds and bodies exist in connection with each other and knowledge is constructed through the sensations experienced by our bodies which in turn, make us think about the sensations and our bodies. Being afforded opportunities to experience and analyse complex problems through the various modes of communication or "languages" (Malaguzzi, 2012: 7), our bodies experience a variety of sensations. The variety and intensity of sensations experienced extends the brain's natural capabilities, or the thinking processes, which in

turn leads to a “greater richness and completeness to thought” (Vecchi, 2010: 18). Bruno Latour (2004: 206), describes this process as “learning to be affected” which according to Affrica Taylor and Mindy Blaise (2014: 385), involves “paying fresh attention to the way our bodies are moved, disconcerted, affected and enlivened by the collective body or the body-world”.

Barad argues that meaning and matter are entangled and meaning making cannot be a human only activity or process through language. In other words, meaning is the result of co-constructed processes between bodies, which include both human and nonhuman bodies and not through language representing pre-existing words and images. Maggie MacLure (2013: 659) says that the materialism turn works “across boundaries of science and the social, nature and culture. All, in their various ways, contest the notion of nature as merely the inert scenery against which the humanist adventures of culture are played out.” Drawing on the notion that meaning and matter are entangled, it was the intra-action between the children and the carpet, glass window and putting out their hands during the community of enquiry discussions that created new knowledge of how the material works with/on the human bodies in our classroom. The art that was created through the intra-actions in-between the children’s bodies, their collective voice, the art supplies, the furniture and the space of the classroom demonstrated how meaning is the result of co-constructed processes between the human and nonhuman bodies. The dis/embodied movements of the children showing the concept of ‘lost’ during the drama lessons illustrated how new knowledge e/merged, not only through language which represented pre-existing words and images.

The posthumanist approach to teaching literac(y)ies is critical of the idea that learning is something that happens in terms of inner mental activities inside a separate human being. Learning can, in a posthumanist approach, be understood as “emerging from what happens in distributed networks and assemblages consisting of both human and non-human matter and organisms that are in intra-action with each other” (Lenz Taguchi, 2011: 46). Because children learn through their bodies, sounds and a range of languages (Vecchi, 2010), the artworks pose questions to the child and the child ‘questions’ the artwork and in doing so, “learning and knowing takes place in the

interconnections in-between different matter making themselves intelligible to each other" (Barad, 2007: 140). It is the entanglement of the child speaking and using mediums to create the artwork, that a child enriches their understanding because "the medium causes the children to think about a whole different set of relations" (Forman, 1994: 38). Nina Odegard explains that it is through the "diversity and complexity" of different materials that "create more disparate situations, challenges, meeting places and play experiences than other defined toys or pedagogical material can do" (2012: 398). It was through the use of the class discussions, the art equipment and stationery – the felt tip pens, pencils, erasers, paper as well as the embodied experiences of the children during the drama lesson that created the more disparate situations and challenges in the Grade Three classroom so that new knowledge e/merged that did not rely solely on teacher generated question and answer worksheets.

And back to the beginning…

I did write at the beginning of this thesis that is was not my aim to suggest a practical *solution* as such to the low literacy achievements in South Africa (although this might indeed also be an affect of the intra-vention), but rather an ethical response which investigated a pedagogical approach that is relevant and can be used in connection to the requirements stipulated by the national curriculum.

But how am I affected by this research? How does this research also broaden and enrich the way I think about my practice in the classroom about the concept of child and teaching and learning of literac(y)ies? At the same time, how is the/my past entangled with the/my present and the/my future? While Barad (2007: ix) explains it is:

> … impossible to differentiate in any absolute sense between creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future.

I gave a brief explanation of South Africa's complex history in the beginning of this study and now, re-turning to those ideas, I be-come aware of how the events are entangled and not linear or sequential. I am sensitive to the past, that gaps due to socio-political legacies of the apartheid regime, and the colonial history which preceded it have impacted and become entangled with what is unfolding in my classroom today.

I re-visit the micromovements from this study and how they have diffracted with the socio-political histor(y)ies of South Africa. On page 51, I discussed how the I feel the need, experience the pressures and anxieties of conforming to demonstrating good teaching practices. I am aware of being judged by other staff, managers, directors and parents and on page 68, I spoke about governmentality of self (Dahlberg and Moss, 2005: 19). Teachers are still considered generally under-qualified, exhibit inadequate command of content and pedagogical methods, and have had difficulty meeting the requirements of C2005 (Chrisholm, 2012: 94; Spaull, 2013: 26). By having the other staff, managers, directors and parents look through the glass window and see, possibly judge what is happening in my classroom and myself as a teacher, is due to the fact that there are performance expectations from the stakeholders because this is a private school and it is result-orientated. At this particular school, staff cannot be seen to be lacking in any way as described by Chrisholm (2012) and Spaull (2013) above.

Re-turning to page 52, I diffract with the materiality of the classroom architecture. This included the glass window, where I discussed how the outside be-came part of the inside, or the carpet, where practical lessons using concrete resources should be taking place, or the tables and chairs, where the children work quietly on their own completing written work. The materiality of the clock and timetables used in the school and in my classroom are other examples of micromovements that have diffracted with the socio-political histor(y)ies of South Africa. As a result of these internalised discourses that govern teachers, the following of clock-time practices, keeping the class 'under control' or behaving in a way that is seen as professional. Sticking to time, not running out of time or not going over time, planning and managing one's time efficiently are all entangled with normative notions such as 'quality education' and being a 'good teacher'. The clock e/merges as a "historically and culturally specific practice with differential

effects on different bodies in the classroom at different times and in different spatial configurations" (Pacini-Ketchabaw, 2012: 154).

I have discussed how representational or traditional methods of research position the researcher (or the subject) at a distance from the world, with so-called 'objective', detached access to this world with the mind through cognition. In the same way, traditional educational systems position the teacher as an authority and at a distance from the children and their lived experiences. However, I am not on the outside or detached. Rather, I am already entangled with the lived experiences of each body, the spaces and the matter as both the teacher and adult. As part of these entanglements, Barad asks that as the teacher-adult I am response-able for my "observations, descriptions, interpretations and explanations and dare to see the ambiguities" (Dahlberg, Moss & Pence, 2013: 155). It is by embracing the willingness to be open to surprises, the unexpected that is so important for me as teacher-adult and for the children in my class and the role "we" play in the entangled practices of knowing and becoming.

Part of a response-able diffractive methodology is the cultivation of collective knowing, desiring, being and making-with so that we render each other capable, both as the teacher intra-acting with child and child intra-acting with teacher. As the teacher be-ing part of the entanglements, the diffractive methodology assists me in doing justice to the complexity of studying and working with child –

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

I acknowledge that I am entangled as both the class teacher as well as the researcher in this research project. I have some background or contextual knowledge of the children in my class and a sense of trust has been established with/in the relationships between the

children and myself. However, it has been through the on-going intra-actions and iterative entanglements between the human and non-human bodies that has created opportunities for new possibilities. Possibilities that do not only include the new knowledge that is created but the way in which I respond, my response-ability with the children. A way to breathe life into ever new possibilities for living justly with all of the entangled bodies.

An important part of this research was being open to the possibilities that the diffractive methodology creates between human, the nonhuman and more-than-human bodies through the various intra-actions. As human bodies, the children in my class and myself are part *of* this world not merely *in* the world. As a teacher-adult, there needs to be the effort made to disrupt the absolute humanist binaries of adult/child or teacher/student in the classroom. The material-discursive ontology sees teaching and learning of literac(y)ies as a process of world-making. The children and myself together play a role in re-configuring the world by intra-acting with material-space-time-atmosphere. As part of the entanglement of teacher-child-classroom-time-space-materials, learning cannot be viewed as a fixed, stagnant event, but rather learning is the opportunity to breathe life into ever new possibilities for living justly. The response-ability and accountability for living justly "present themselves with every possibility; each moment is alive with different possibilities for the world's becoming and different reconfigurings of what may yet be possible" (Barad, 2007: 182).

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Appendices

A) Letter of information and consent for children.

B) Letter of information and consent for parents/guardians.

C) Letter to the principal, outlining the research.

D) University of Cape Town - Ethical Clearance for Research Project

A) Information and Consent to Participate in a Research Project – Learners

Learner Information Letter

15th July 2016

Dear Grade Three Learner

Just like you are learning new things and ideas at school, I am learning new things at the University of Cape Town and I would like your help in finding out a few new things about the way you think.

The name of my project is:
"An investigation into how literacy can be taught diffractively in a South African Grade 3 Classroom using Philosophy with Children (P4C) and Reggio Emilia as intra-active pedagogies"

I am interested in seeing how you work and think during our Philosophy sessions. I will also be doing a Literacy project with you, where you will be audio and video taped during our discussion times and when doing any work. The project will last for about 5 to 6 months of school.
I will make sure that anything you say, all of your answers, your work and Literacy projects will be kept in a safe place. I will also not use your name or identify you in my project.
If you do not wish to be part of this project, your marks will not be changed in any way and you will not be forced to take part. You can change your mind at any time during this project and decide to leave the project. If you choose not to take part at any time, you are welcome to go to Mrs Smith's class for the period.

I am looking forward to working with you on this project.
Yours Sincerely

Mrs R. Thompson

Learner Consent Form to **participate** in, complete writings and drawings, be **audio and video taped** and take photographs for a project in the research project titled

"An investigation into how literacy can be taught diffractively in a South African Grade 3 Classroom using Philosophy with Children (P4C) and Reggio Emilia as intra-active pedagogies"

Please remember that you do not have to take part in this project. If you choose not to take part, your marks will not be changed in any way.

Name: _____ Age: _____
Grade: _____ Date:_____
Learner Signature: _____ Mrs Thompson: _____

- Please tick the box that shows how you feel about being a part of the research project.

I would like to take part in this research project and Mrs Thompson **<u>may</u>** use my work in her project.	
I would not like to take part in this research project and Mrs Thompson **<u>may not</u>** use my work in her project.	

- Please tick the box that shows how you feel about being audio and video taped for the research project.

I would like to be audio and video taped in this research project.	
I **<u>would not</u>** like to be audio taped in this research project.	

- Please tick the box that shows how you feel about taking photographs for the project

I **<u>would like</u>** to be photographed in this research project.	
I **<u>would not</u>** like to be photographed in this research project.	

B) Information and Consent to Participate in a Research Project – Parents

15th July 2016

Dear Parents,

Re: Information and Consent to Participate in a Research Project

I am a 3rd Year Ph D student at the University of Cape Town. I am doing research using children's literature in order to establish the kinds of questions children ask of texts, the ideas they themselves generate and the difference this makes for teaching literacy.

The title of my research is: An investigation into how literacy can be taught diffractively in a South African Grade 3 Classroom using Philosophy with Children (P4C) and Reggio Emilia as intra-active pedagogies.

Part of my research is to employ the P4C pedagogy, community of enquiry, whereby the children will be given the opportunity to ask questions and express their own opinions, enabling the participants to think and act with philosophical intelligence in order to gain a deeper and meaningful understanding of texts. I would therefore be grateful if you would grant consent for me to publish my findings in my research document.

Should you have any concerns about your child participating, or any questions you would like to ask about the study, please contact me any time at robynthompson@webmail.co.za or my supervisor at karin.murris@uct.ac.za

CONFIDENTIALITY:

The child's name and identities will be kept completely confidential at all times and in all academic writing about the study. The children's individual privacy will be maintained in all published and written data resulting from the study.

DATA:

All data will be destroyed between 3 and 5 years after the research has been completed.

RISKS AND BENEFITS:

There are no foreseeable risks in participating in this study. Any information gathered by me during the research will have no impact on the children's academic performance in the class.

Benefits of the project will be a contribution to allow the children an opportunity to engage in conversation with each other, expressing their own opinions and allowing their voices to be heard. In doing so it will improve their mode of critical & creative thinking and encourage a deeper understanding of texts.

TIME INVOLVEMENT:

I will be working with my Grade Three class, twice a week over a period of six months.

SUBJECT'S RIGHTS:

If you have read this form and have decided to allow the children to participate in this project, please understand that participation is voluntary, and you have the right to withdraw your consent at any time without penalty or repercussion. Individual privacy will be maintained in all published and written data resulting from the study.

CONSENT:

Please complete, sign and return the attached form, indicating whether you agree or do not agree to permit your child to participate.

Sincerely,

ROBYN THOMPSON

CONSENT FORM – PARENT / CAREGIVER / GUARDIAN:

I _____ am willing / not willing to allow my child _____ to participate in the research study entitled:

An investigation into how literacy can be taught diffractively in a South African Grade 3 Classroom using Philosophy with Children (P4C) and Reggio Emilia as intra-active pedagogies.

The research will be conducted by Robyn Thompson with Grade 3 learners.

_____ YES

_____ NO

PARENT NAME & SURNAME: _____

SIGNATURE: _____

DATE: _____

C) Letter outlining Research to Principal

15th July 2016

Dear Mrs Marsh,

Re: Information and Consent to Participate in a Research Project

As a 3rd Year Ph D student at the University of Cape Town, I am doing research using children's literature in order to establish the kinds of questions children ask of texts, the ideas they themselves generate and the difference this makes for teaching literacy.
The title of my research is: An investigation into how literacy can be taught diffractively in a South African Grade 3 Classroom using Philosophy with Children (P4C) and Reggio Emilia as intra-active pedagogies.
Part of my research is to employ the strategy community mode of enquiry, whereby the children will be given the opportunity to answer questions and express their own opinions, enabling the participants to think and act with philosophical intelligence in order to gain a deeper and meaningful understanding of texts. I would therefore be grateful if you would grant consent for me to publish my findings in my research document.
Should you have any concerns about the learners participating, or any questions you would like to ask about the study, please contact me any time at robynthompson@webmail.co.za or my supervisor at karin.murris@uct.ac.za

CONFIDENTIALITY:

The children's name and identities will be kept completely confidential at all times and in all academic writing about the study. The children's individual privacy will be maintained in all published and written data resulting from the study.

DATA:

All data will be destroyed between 3 and 5 years after the research has been completed.

RISKS AND BENEFITS:

There are no foreseeable risks in participating in this study. Any information gathered by me during the research will have no impact on the children's academic performance in the class.

Benefits of the project will be a contribution to allow the learners an opportunity to engage in conversation with each other, expressing their own opinions and allowing their voices to be heard. In doing so it will improve their mode of critical & creative thinking.

TIME INVOLVEMENT:

I will be working with my Grade Three class, twice a week over a period of six months.

SUBJECT'S RIGHTS:

If you have read this form and have decided to allow the children to participate in this project, please understand that participation is voluntary, and you have the right to withdraw your consent at any time without penalty or repercussion. Individual privacy will be maintained in all published and written data resulting from the study.

CONSENT:

Mrs. Marsh, as Principal, please complete, sign and return the attached form, indicating whether you agree or do not agree to allow me to work with the Grade 3 learners in my research project.

Sincerely,

ROBYN THOMPSON

CONSENT FORM – PRINCIPAL / DIRECTOR

I, _____ position held _____ _____ am willing / not willing to allow Robyn Thompson the opportunity to proceed with her research study entitled:

An investigation into how literacy can be taught diffractively in a South African Grade 3 Classroom using Philosophy with Children (P4C) and Reggio Emilia as intra-active pedagogies with the Grade 3 learners.

_____ YES _____ NO

SIGNATURE: _____

DATE:_____

D) University of Cape Town - Ethical Clearance for Research Project

SCHOOL OF EDUCATION

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7 September 2016

Ms Robyn Thompson PhD Programme University of Cape Town

Dear Ms Thompson,

RE: Ethical Clearance for Research Project

I am pleased to inform you that ethical clearance has been granted by the School of Education Ethics Review Committee of the Faculty of Humanities for your PhD research project entitled: 'An investigation into how literacy can be taught diffractively in a South African Grade 3 Classroom using Philosophy with Children (P4C) and Reggio Emilia as intra-active pedagogies'.

I wish you all the best with your study.

Yours sincerely,

Signature removed to avoid exposure online

Associate Professor Carolyn McKinney
Chair, School of Education Research Ethics Committee

"Our Mission is to be an outstanding teaching and research university, educating for life and addressing the challenges facing our society."