More-than-words:
Reconceptualising Two-year-old Children's Onto-epistemologies
Through Improvisation and the Temporal Arts

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**More-than-words:
Reconceptualising Two-year-old Children's Onto-epistemologies
Through Improvisation and the Temporal Arts**

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Dedication

For Mum, Dad and Shadow
Wendy, Amrita and Felix

Abstract

This thesis project takes place at a time of increasing focus upon two-year-old children and the words they speak. On the one hand there is a mounting pressure, driven by the school readiness agenda, to make children talk as early as possible. On the other hand, there is an increased interest in understanding children's communication in order to create effective pedagogies. More-than-words (MTW) examines an improvised art-education practice that combines heterogenous elements: sound, movement and materials (such as silk, string, light) to create encounters for young children, educators and practitioners from diverse backgrounds. During these encounters, adults adopt a practice of stripping back their words in order to tune into the polyphonic ways that children are becoming-with the world.

For this research-creation, two MTW sessions for two-year-old children and their carers took place in a specially created installation. These sessions were filmed on a 360˚ camera, nursery school iPad and on a specially made child-friendly Toddler-cam (Tcam) that rolled around in the installation-event with the children. Through using the frameless technology of 360˚ film, I hoped to make tangible the relation and movement of an emergent and improvised happening and the way in which young children operate fluidly through multiple modes.

Travelling with posthuman, Deleuzio-Guattarian and feminist vital material philosophy, I wander and wonder speculatively through practice, memory, and film data as a bag lady, a Haraway-ian writer/artist/researcher-creator who resists the story of the wordless child as lacking and tragic; the story that positions the word as heroic. Instead, through returning to the uncertainty of improvisation, I attempt to tune into the savage, untamed and wild music of young children's animistic onto-epistemologies.

Table of Contents

Table of Images

Prologue: Introducing the Bag Lady

Bag Lady

This thesis is a messy thesis, as a body of work it leaks and sucks.

I introduce my figure of the *bag lady*, a manifested figure of Donna Haraway's thinking which builds on Ursula Le Guins's *carrier bag theory* (Haraway 2016, Le Guin 1989, Fisher 1979). Thinking as bag lady has helped me to unwind and stitch threads through the mess. I am afraid that these threads might make us more lost than found but being lost is always an adventure and as Haraway teaches us 'no adventurer should leave home without a sack' (2016: 40). Collecting theory and stories in leaky carrier bags, I proceed with Haraway's encouragement to make 'wonderful, messy tales to use for retelling, or reseeding, possibilities for getting on now' (2016: 119). I begin my thesis with a short introduction to the transdisciplinarity of bag ladies: the nomadic art of bagging. I hope my bag lady will help orientate the reader through this messy thesis. With Adsit-Morris (2015) (another bag lady), I propose the researcher-as-bag-lady as a performative methodology and my creative avatar for the posthuman and feminist materialist philosophy that this thesis affiliates with (Haraway 2016, 2013, 1988; Braidotti 2013, 2019, 2022; Taylor, Blaise & Giugni, M. 2013).

Adsit-Morris describes bag lady research as requiring a 'different logic, an attunement and attentiveness to what gets gathered up, used, shared; an attentiveness to which seeds should be saved for future reseeding, for future reworlding' (2015:8).

My figure of bag lady emerges from the art of Ursula Le Guin (whose work I have loved since childhood) and the artful philosophy of Donna Haraway. Their carrier-bag theory draws on the work of anthropologist Elizabeth Fisher (1979). Fisher posited the *Carrier Bag Theory of Human Evolution* and proposed, based on anthropological cultural knowledge and understandings of palaeolithic hunter-gather diets, that 'before the tool that forms energy outwards, we made the tool that brings the energy home' (Le Guin 1989: 167). These bag ladies have unfathomable roots, with tentacles as deep and as wide as anything. They 'make attachments and detachments; they make cuts and knots; they make a difference; they weave paths and consequences but not determinisms; they are both open and knotted in some ways and not others' (Haraway 2016:31). My bag lady operates in feminist, new material, decolonised, wild landscapes in order to tell different stories, sing different songs, bringing the energy home to the entangled now. The Bag: 'A leaf a gourd a shell a net a bag a sling a sack a bottle a pot a container: Holder. A recipient' (Le Guin 1989: 166): a thing that holds something else; an installation; a camera; data; a chapter; a thesis; a practice; a life.

Bag ladying has been my life/art praxis, involving the unpacking of miscellaneous containers and remixing; juxtaposing, synthesising, making sense and making nonsense. This is the life of the improvising nomad, Open ends, open bags. My bag-lady-artist has been moved by aleatoric forces into the academy and fashioned a little home - 'a performative research praxis of gathering stories/ideas/theories and creating habitual nomadic research patterns' (Adsit-Morris 2017:44) in the borderlands of research and creation. She knits up

and throws out lines to follow and tangle because bag ladies align with what Haraway (2016) thinks of as tentacular, spidery weavings; bags are nets and nets are bags.

My lived practices as an *animateur* (or community musician or socially engaged artist) quite literally involves copious amounts of bags, suitcases and containers. I work with stuff and people - particularly two-year-olds. I make installations with open-ended materials (and open-ended outcomes). I have lots of things and lots of containers to put the things I work with in. My body is also a (leaky) container, carrying the creative and experimental practices I have gathered over a lifetime. A soundbox and an ear. My name Arculus, a Greek word, is, according to Google, a Roman deity of strong boxes. Arculus is also, in shape-changing fashion, a tiny part of an insect's wing and a family of bivalve clams. A diminutive of 'arch' (little arch), Arculus also suggests a small portal, a small liminal threshold between somewhere and somewhere else. In this thesis, I put carrier bag theory and small arches to work in the interstices and borderlands between art and research. Things that are other things, names that migrate and mutate like the bag lady figure, I wear as both artist and researcher, illustrating how I think methodologically with others and, later, with the concept of *research-creation* (Manning & Massumi 2014; Manning 2016; Springgay & Truman 2018; Springgay 2020; Truman 2021; Loveless 2019) which I unpack in Chapter 4, as I proceed through this thesis. In this landscape, I unpack and repack in new ways to tell new stories that lie in the *betweenness* of research and creation.

What is shared in this thesis is a collection of stories: each story is a collection, a bag, a chapter; tales of the journey and the choices that were made as I packed theory and arts practice, installation and a nursery community into a research project, cobbling story-bag research together like a medicine bundle (Le Guin 1989). They are stories of helpful and tricksy technological companions; cameras, themselves bags, shifting the truth of things as

they were unpacked, resonating their filmic contents against each other to produce new stories. They are also stories that resist the ever-present threads of colonialism (Tsing 2016), un-packing politics and ethics, black lives, child onto-epistemologies and the tyrannies of words. Some stories are told through improvisation and sensing. I can honestly say that things almost wrote themselves at times. Fluttering through most of these bags are ineffable more-than-word things that cannot be written, but are still there, active as gaps and silences. These carrier-bag chapters attend 'to what gets gathered up, used, shared' (Adsit-Morris 2017:45), stories that speculate, imagine, wander and wonder. Each bag is a world made by its contents, worlds within worlds, bags within bags; essays within chapters, suitcases within vans, installations within spaces; people within installations, film within cameras, emptinesses within form. These things have been placed together to 'get bumped around, jostle to and fro, cross pollinate, cross contaminate, break, shatter, decompose; some fall through the cracks, others must be left behind' (Adsit-Morris 2017:47).

Why am I doing this?

I ought to say a bit about this research, why I am doing it and what brought me here to this thesis. For the last decade, I have been working in a children's centre in an area that has been designated one of the most economically deprived areas of the UK. Working as an artist/community musician, running music and arts groups with families and music/art sessions in nurseries. This work involves many bags. I was working regularly in nurseries from 2008 when funded places for two-year-old children were piloted and rolled out. I was both fascinated and troubled by what I was seeing: fascinated by two-year-olds, their multiple modes of communication with each other and their non-verbal/semi-verbal thinking. My practice was changed through working with this age group as I could not play

the interesting adult holding forth as a default mode. Two-year-old children do not do monophonic attention for prolonged periods of time, no matter how interesting and funny one is. Although getting children to sit and listen may seem to some to be a very desirable goal, working with two-year-olds made me question the very idea of the (all-knowing, all singing, all dancing) adult as single-focus. At the same time, I was troubled by how language and words were being used in settings. I noticed the value that was put on words, how this seemed to crush more subtle and nuanced modes of communication. I was further troubled by how the valorisation of talk also affected the way in which parents from diverse ethnic and socio-economic backgrounds seemed to be expected to use language with their children (these issues of language and words are discussed fully in Chapter 3). What I want to raise here is my fascination with the way in which two-year-old children think and operate which drives my bag lady's wanderings and wondering. My practices of improvisation are kept vital through working and playing with two-year-olds. That is to say, my practiced awareness of emergence, of feeling into a dispersed field of attention, of sensing relation and becoming-murmuration, are directly related to hanging out with young children as a bag lady, practiced awareness that carries multiple modes and open-ended possibilities.

As part of my master's degree, I examined the musical nature of peer-to-peer relationships between two-year-old children and in some ways, this thesis continues that line of thinking. However, since completing my MA, I have entered the entangled world of posthuman and feminist materialist philosophy and this has helped to ward off the troubling teleology of childhood. Following Cannella & Viruru (2004), who recognise the colonised, marginalised and othered state of childhood, this thesis is an attempt to engage with young children's animistic onto-epistemologies without reducing children to adults-in-waiting.

Words and Prick Tales

Le Guin (1989) and then Haraway (2016) use carrier bag theory to resist (and poke fun at) 'prick tale' narratives (Haraway 2016: 39), the dominant ways of knowing that are linear, distanced and ocular. Haraway uses the phrase 'prick tale', to describe the story of Man, of human exceptionalism: a tragic tale with only one actor - a singular Hero on a unified, objective quest. 'All others in the prick tale are props, ground, plot space or prey. They don't matter; their job is to be in the way, to be overcome, to be the road, the conduit, but not the traveller, not the begetter.' (Haraway 2016: 39). Through *bag lady storytelling*, I resist heroic narratives of early childhood, the child as adult-in-waiting (Arculus & Macrae 2022), the child of Man (Kromidas 2019) which are assumed by the binaries of adult/child. Haraway (2016: 39) notes that prick tale theories conflate words, tools and weapons:

So much of earth history has been told in the thrall of the fantasy of

the first beautiful words and weapons, of the first beautiful weapons as words

and vice verse. Tool, weapon, word: that is the word made flesh in the image

of the sky god; that is the Anthropos.

This conceptualising of words and what they do/are, as tools, as weapons, as linear fixed stories, is a theme of this research and will be returned to as a refrain as the thesis unfolds. I dedicate Chapter 3 to resisting the story of the wordless child as lacking and tragic; the story that positions the word as heroic. I activate the wordless child as unknowable, untamed and more-than-adult in order to run and dance with wild child onto-epistemologies. I explore in this thesis how the naming of the world and what words do to

the world when they pin it down, is a form of prick tale that tells of how the world is brought into existence under the Words of Man. This is a difficult tale to tell as 'the last thing a hero wants to know is that his beautiful words and weapons will be worthless without a bag, a container, a net' (Haraway 2016: 40). Carrier bag tales deprive us of both anthropocentric, transcendental and developmentalist ways of knowing, in favour of a nomadic and mutable knowing 'that is neither resolution nor stasis but continuing process' (Le Guin, 1989: 169). With Barad (2007) and MacLure (2013a), I propose that words are part of other things, not over or above them but in the bag with them and working as bags themselves, carrying senses, feelings and affect as well as meaning.

Curiosity, bags and tentacles

Loveless (2019) drawing on Haraway, proposes curiosity as a key player in how we tell the stories of our research. And the sort of curiosity Loveless and Haraway are talking about is the dangerous kind of curiosity that 'gets one into (methodological/ontological/epistemological) trouble' (p. 23, my parenthesis). For Loveless, research is not just asking questions, it is about being driven by curiosities and being ethically bound by them to attend to *how* we tell the stories we tell. It is also, critically, attending to what the stories we tell are telling us. This wandering, wondering curiosity is what motivates and moves my bag-lady-as-method that transverses the intersections between theory and practice and works with tentacular - and polyphonic – messiness, 'putting unexpected partners and irreducible details into a frayed, porous carrier bag' (Haraway, 2016, p. 119).

Haraway calls for bag ladies 'to feel and to try' - to live life along lines. Tentacular ones such as bag ladies and those who think tentacularly (like Tsing 2010 and Sheldrake 2020 and the polyphonic mycelium that they think-with) are entangled in the world and alive in the world. Tentacular tales have no centre or central player; they do not reside in a place of ocular-ity that looks down upon the world remotely and objectively like Haraway's sky gods. Tentacularity is relational as lines, feelers, movement; tentacular tale telling weaves string bags for collecting all manner of troublesome and incommensurate things, juxtaposing them and paying attention to what happens as they come together; it pays attention to what oozes out of the differentials and interstices between things; it notices how things when placed next to, or *thought-together-with* other things, somehow exceed the sum of their parts.

Hero tales and prick tales do not do this; they cannot emerge as Heroes from these messy Bags that tentacles weave because 'Hero does not look well in this bag. He needs a pedestal or a pinnacle. You put him in a bag, and he looks like a rabbit, like a potato' (Le Guin 1989: 169). In the complex bag stories that are told in this thesis, the heroic, adult centred, developmentalist, linear, monophonic stories of early childhood education (such as the word-gap and the 'normal child') become as ridiculous as potatoes in sacks. These heroic stories are also tragic tales, bound up with human exceptionalism and failures of adult endeavour (Delpech-Ramey 2010). Bag lady methods counter the Hero through playfully and creatively telling messy, comedic tales to disruptively mock developmentalism in order think of children as multiple non-teleological becomings (Hickey-Moody 2013). Curiosity, tentacularity and the urge to follow uncontrollable relationships with things, is a research method of being lured by the world in transversal, transgressive and subversive ways.

Following Braidotti, along with my fellow vital materialist bag lady, Adsit-Morris (2015), we understand research as 'a process of expression, composition, selection, and incorporation of forces aimed at positive transformation of the subject' (Braidotti, 2014:164). Adsit-Morris (2015) understands bag lady research as 'a drawing, re-drawing and undrawing of boundaries and territories within the multiple locations one finds oneself. [...] We create patterns and leave traces as we wander throughout spacetime, gathering up others (im/material others that matter) and scribbling half thought ideas on post-its' (p. 44). The practice of creating this thesis is a mapping praxis. Mess mapping is a way to work creatively with the marks that becoming-imperceptible processes of improvisation leave: an inefficient cartography (Knight 2021) through disordered entanglement that does not attempt to tidy up or represent imperceptibility but rather seeks to reanimate, to trace and collect the messy marks and residues that movement leaves.

Old Bags

Perhaps it is their potential threat to make heroes look ridiculous, that bag ladies are the recipients of misogynist and ageist abuse - the Old Bags, the Witches, Medusas, Harpies and Hags that get in the way of the Hero. Osgood and de Rijke (2022:236) notes how as feminist early childhood scholars, we find ourselves 'routinely fighting against patriarchal systems that seek to control and contain us'. Bakhtin, who I will now bring into this discussion, noted powerful and ambivalent anti-authority figures of pregnant, laughing old hags in medieval iconography. He sees these bag lady figures, along with the figures of clowns and fools, as having a vital and earthly power to resist 'the classic images of the finished, completed man, cleansed, as it were, of all the scoriae of birth and development' (1984: 25). Young children and this middle- aged bag lady are both too near to birth and

death to appear complete, child and hag are always becomings. I seek the potential of laughing old bag ladies, becoming-hags alongside untamed - even tantruming - toddlers, as forms of activism, critically affirmative manifestations of refusal (Osgood 2022: 236). Bakhtin's resistance to the completed (M)an has, I think, generative and earthy affinities with Haraway's chthulucene. Both are concerned with the unfinished becoming; Bakhtin's preoccupation with bringing our attention to the subjugated onto-epistemology of the earthbound, the grotesque (from 'grotto': cave, earthy container) as the regenerative principle of life and/through death, makes kinship with Haraway's gently mocking resistance to Heroes and sky gods: her calls for earthbound stories of becoming-humus and her invoking of protean Tricksters tell a different tale. Bakhtin, through the grotesque, shows that stories of unfinished and open bodies, bodies that are not separated from the world by clear boundaries, bodies that are blended with the worlds of animals and objects, have been told (and suppressed) for centuries (1984:27). Thinking with open bags and the earthiness of young children with their bodily excretions and inhuman entanglements, I will suggest how Bakhtin, Haraway, Le Guin and others provide fertile, earthy time-spaces in which my Bag Lady exists as a 'clownish female figure who works with awkward, nomadic, comedic - and childish - onto-epistemologies that disrupt the tragic (hu)Man Adult' (Arculus & MacRae 2022).

Posthuman conceptions of the child

To tell these carrier bag tales, I draw on feminist posthuman and materialist philosophy in early childhood, which calls into question what is meant by 'Human' (Braidotti 2022, 2013) and associatively, what is meant by *Adult* and what is meant by *Child* (Murris &

Osgood 2022, Kromidas 2019, Murris & Kuby 2022). I strive to weave and stitch alternative stories of human, adult and child over and through the singular, dominant narrative, entangling the singular story into a polyphony of multiple threads. Posthuman stories include 'alternative visions of 'the human' generated by people who were historically excluded from, or only partially included into, that category' (Braidotti 2022:3). These include both women and LGBTQ+ people (sexualised others) and Black and indigenous people (racialised others). Posthuman thinking examines how 'class, race, gender and sexual orientations, age and able bodiedness continue to function as significant markers in framing and policing [...] humanity' (Braidotti 2019:114).

Early childhood still lingers on the boundaries of what is considered to be human, where children and animals still remain (Kromidas 2014, 2019), particularly the non-speaking child. The binary of adult/child positions the not-yet-speaking child in a way that effaces their onto-epistemologies and renders them politically powerless (Murris and Kuby 2022). In resisting this binary through temporal arts practices and the making of magical eventful spaces, that is to say spacetimes that open to the present and the virtual, where adult words and curriculum do not dominate, we may be able to map the marks of the child's way of knowing. By tracing the messy threads of children's multi-species, more-than-human entanglements, we might make lively, animistic ways of knowing tangible and reclaim our sense of animacy (Stengers 2012).

The slippery status of childhood is where I head with my research-creation bags. I seek to resist the teleological tales that are told about children; heroic and tragic developmental tales of the fulfilled or unfulfilled adult potential of the child; boring tales of a linear journey to the prize of adulthood. During this journey, I endeavour to unpack not only the boundary between adult /child but also to unpick the prevalent binary between

self/other; the prick tale of indivi-dualism that is 'written into our [adult bones]' (Murris 2016:46). Following Duhn who proposes that very young children, are, perhaps, 'less caught up in the illusion of a self that controls and governs than older humans who have learned to see, feel and think the self and the world in particular ways' (2015: 928), this thesis explores how improvised arts practices with children might help adults break through the chimera of self/other.

Bag lady synthesis

I started becoming a bag lady long before I started to become an academic. Creating the conditions for feeling and listening into the multiplicity of present time is an arts praxis I have developed over decades. To make this kind of work, I have drawn on practices of improvisation, deep listening and playful clownishness (Lines 2017, Oliveros 2005, Wright 2006, Johnstone 1981). However, it is in the nature of bag ladies to constantly unpack and repack themselves. Undertaking this PhD has been a process of unpacking arts practices, collecting theory, concepts and philosophy, mixing things up, finding things that work together in a bag that can contain and synthesise. My praxis of the bag lady as *method* has unfolded before me through this PhD, through Haraway (2016), Le Guin (1989), feminist materialist scholarship (Braidotti 2013, Barad 2007) and reading and engaging with theory and philosophy around temporal arts (Delpech-Ramey 2010; Bakhtin 1981, 1984; Manning 2012; Deleuze and Guattari 1987).

Wondering and wandering as bag lady, unpacking and repacking theory and practice, has allowed me to understand my creative work in new ways, as I have come to inhabit the

intersection between art and research. I have come to reconceptualise the parameters of my arts projects, such as minimising speech, as applying *enabling constraints (*Manning 2016; Manning and Massumi 2014). I have come to think of developing *complicité* as a *technique of relation* (ibid) that prepares for *emergence (ibid).* As a musician, my thinking-through-practice with parameters, conditions and synthesis has found kinship and alliance with Deleuze and Guattari's philosophy. These musical concepts are themselves ways to think *about* and conceptualise temporal art practices such as the heterogenic nature of the More-than-Words (MTW) installation-event. They are also at the same time ways to think through creative phenomena (such as the installation) in order to understand the cosmos as arising from sets of conditions rather than transcendent principles arising from a grounded hierarchy.

This unpacking and repacking of practice and theory is an ongoing synthesis of reaction and research: bag lady synthesis as method. Deleuze and Guattari were excited by how synthesis offered a new approach to philosophy, how it was able to combine, filter and transform heterogeneous elements through one another. They described philosophy as becoming a 'thought synthesiser functioning to make thought travel, make it mobile, make it a force of the Cosmos (in the same way as one makes sound travel)' (ATP: 343). They recognised the potential of the synthesizer to de-territorialise the 'truth' of western classical music, western classical philosophy and understandings of linguistics, art and process.

Carrier bag synthesis is a methodology that works with heterogenous components to make, unmake and remake research practices, as my thinking has travelled into new landscapes, new contexts. It selects and synthesises that which calls out or is chanced upon; that which carries feelings or responsibilities. Some of these chapters are the labours of unpacking a research set up. Some are packed around a political call, others around an

oscillating thought. All carry childhood onto-epistemologies and practices of improvisation.

All the bags are leaky, none of them work perfectly or with certainty.

A list (map and compass)

Lists are essential bag lady tools. Sometimes lists are scores or scripts. This list is more of a map of the thesis, written at the end of writing and brought back here to the beginning. It outlines seven chapters because the order of chapters, particularly the placing of Chapter 3, is not always seamless and there was no perfect, neat or satisfactory way.

The first half of the thesis sets the parameters of the research, the conditions, the contexts, the rationale, and the epistemological questions. I felt that these needed to be carefully calibrated so that I could go on to tell the stories that the children who took part in this research manifested in my thinking, my imagination and the world. These children are always close by, no matter what I am discussing. Chapters 1-4 deal with theoretical, political, and creative contexts. These chapters introduce and set up the research apparatuses (such as cameras and arts practices) that go on to produce the insights and speculations that are told in chapters 5 -7. In other words, while the first half of the thesis does not focus directly on children, everything I write makes and holds a space – or bag - open for how young children know and engage with the world.

In Chapter 1, I discuss the experimental conditions of my research which was designed to explore what happens when adults stop talking and how improvised arts practices might enable new understandings of two-year-old children's onto-epistemologies. I introduce the nursery setting and the parents, practitioners and children who took part in this project. I discuss the dangers of telling homogenising stories about race and skin and difference, particularly in the anonymising of names of children from a wide diversity of cultures. I go

on to discuss and theorise some of the creative techniques that were used during the sessions.

In Chapter 2, I introduce my three cameras and their very different eyes. I explore their potential to address the problem of movement and relation and also how each eye had a different relationship with time. I discuss the history of film in child studies and the dangers of ocular centrism. This sets the scene to later disrupt notions of film as truth.

Chapter 3 takes a different direction. This chapter doesn't fit neatly anywhere so I have placed it here as it provides a rationale for the research and interrogates the wider context in which the research takes place. The chapter analyses discourses and theories around the notion of the word-gap and critiques the deficit and colonial nature of this dominant ideology. I will introduce snippets of data in order to reconceptualise children's words as creative, polysemic expressions emerging through a more-than-human milieu.

Chapter 4 deals with the methodological problematics of writing about things that are not words. It works with borderlands and interstices, things that don't properly belong to one thing or another. I explore the concept of r*esearch-creation* and its affinities and differences with this research and discuss how I began to work creatively with the camera data.

Chapter 5 tells a story of wandering and wondering with film data. It works with Deleuze's *power of the false* to explore how my three camera eyes shatter and remake truth and time. It loops a short piece of time in order to unfold a speculative story that imagines how two-

year-old children might experience and understand time, intensity and death. Working with temporalities of improvisation and play, the chapter explores the liveliness of little, impersonal deaths that are on-goingly taking place all around.

In Chapter 6, I tell another data story that thinks with a pesky child, wildness, irritation and becoming-imperceptible. It examines how the practices and temporalities of child, researcher, artist, parent, educator cross over into each other in different ways and how the experimental conditions of the installation affect this. The chapter concludes by exploring the anomalous potential of arts practice to upturn and disrupt pedagogy in productive, de-territorialising and generative ways, offering a *second life* (Bakhtin 1984) to the education milieu.

Chapter 7 works with music and considers how children's onto-epistemologies and early childhood pedagogy might be conceptualised through music. I begin with a critique of generalist music education in the UK and an analysis of early childhood music education. I go on to examine theories around the musical nature of communication. I finish by discussing Deleuze and Guattari's philosophical thinking with music.
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Chapter 1: The Installation

Introduction

'Gesture and things, voices and sounds, are caught up in the same "opera," swept

away by the same shifting effects of stammering, vibrato, tremolo, and overspilling. A

synthesiser places all of the parameters in continuous variation, gradually making

fundamentally heterogeneous elements end up turning into each other in some way'.

(Deleuze and Guattari 1987:109).

In this section, I attempt to pack a bag for the reader so that they may unpack an

account of the More-than-words (MTW) installation-event from which film data was made.

I endeavour to form an image or sense of what took place so that the reader may

understand what went on, in and around the installation-event. I will place information,

pictures and lists - essential *bag lady* tools - and some preliminary theorising in this chapter.

I use the hyphenated term *installation-even*t in order to signal, differentiate, and also

activate, the installation *components* (materials, practices, set up, bodies, thinking) with the

co-performed and emergent *event*. The More-than-words (MTW) installation-event was/is the crux of my research-creation project. It is the timespace where and when the research *data* was created by three types of cameras, where an artistic event took place and, at the same time, became bagged by video cameras and transformed into data. It needs to be carefully recounted, because it was messy and complicated and many things that happened *all at the same time* must be somehow laid out on the page, in some kind of order.

The quote at the beginning of this section conceptualises the process of synthesis as a setting of parameters. It could quite easily be a description of the installation event. This image of the synthesiser crosses the borders of arts practice and research-creation. Synthesis is way of understanding the installation-event as a heterogenous synthesiser, arising out of a set of conditions. It is also a way of understanding the nomadic potential of bag lady research methods as synthesis; to understand how things transversally move upon each other and affect and transform each other. Each installation component, each practice, material or participant is itself a bag - *a multiplicity* that bleeds and leaks into and out of the scope of this thesis, so that it is impossible to be comprehensive in linear words as to what the installation was/did/felt like as an event. This is why synthesis is such a useful concept. In this chapter, I discuss the installation and how its *parameters* - people, arts, space, time, practices, objects, and, critically, asking adults not to talk, set the experimental conditions for the performed and emergent event from which the data was made. I include pictures to evoke a sense of the installation and how it worked upon and was worked on by the diverse communities of children and adults who attended the sessions.

My research questions.

This research set out to examine what might be understood differently when adult spoken language cannot dominate early childhood spaces. It aimed to make visible/tangible the ways in which two-year-old children know and understand a world that is not yet conceptualised through words. I hoped to generate understandings of the potential of arts practices in early childhood and to reconceptualise the onto-epistemology of child-knowing. Situated at the intersection of art practice, early education and research, it therefore asked:

1. What happens when adults stop talking in early childhood settings?
2. What is the potential of improvisational arts practice as a pedagogical method?
3. Can using multiple camera technologies, including 360˚ video work with relation and movement in ways that are not perceptible to the adult gaze or traditional video technology?

In order to address these questions, I set up an experimental installation that I will discuss in this chapter. I ran two sessions in the installation which were filmed by three types of camera technology which I discuss in the next chapter.

The More-than-words project

The More-than-words research project is a White Rose Doctoral Scholarship. It was conceived by Manchester Metropolitan University in partnership with the Arts Council

Bridge organisation, Curious Minds.[1] For the research, I devised an arts project in collaboration with a diverse group of children, parents and educators attending and working at a multi-cultural urban nursery school and Children's Centre in the North West of the UK. This project took place over two weeks in October/ November 2019 and the data was generated on November 11th, 2019, when the children, parents and educators attended a specially made installation event created by myself, dance artist Anna Daley and my supervisor, Christina Macrae. The arts project was typical of the way in which funded arts projects happen in the UK in that it was quite short term.

I co-created the project with dance artist Anna Daley. As part of the partnership, Curious Minds funded Anna's time to take part in the research. Anna and I had worked together before on several early childhood projects and had a warm and generative working relationship. We were both familiar with experimentation and uncertainty. Our creative approaches with children resist both talking and positioning the adult as a single point of focus. Instead, we offer provocations and try to stay open to what happens next. We give time and space to allow things to unfold without preconceived expectations, and we see what emerges from multiple goings-on.

Before the two-week period of the project itself, I spent time in the nursery school's two-year-old room for two weeks, familiarising myself with its life and rhythms and getting to know the children, educators, and parents. As I will shortly discuss, the nursery was a highly culturally and ethnically diverse setting with a majority of children from Black, South Asian and global majority backgrounds. At least 22 languages were spoken in the nursery school and over half the children spoke English as a second language (see appendix).

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[1] Curious Minds are an arts development organisation for the Northwest of England. Their role is to improve access to creativity and culture for all young people. Curious Minds partnered with MMU in this project as part of their remit to build a network for early years arts practice.

The classroom where I was based was specifically set up to receive children in receipt of the means tested two-year-old-funding. There was also a high proportion of children with special educational needs (SEN). Some children were newly arrived in the UK. Not all had settled status. In some cases, the nursery was still in the process of finding out the stories and building relationships with the families. I will shortly discuss in more detail my corporeal encounter with cultural, linguistic and epidermal (Saldhana 2010) differences of the children, educators and parents I worked with and some of the ethical problems I have been confronted with around the dangers of homogenisation and the effacing of colonial histories in research.

During my two weeks of 'hanging out', Anna Daley came in on five of those days and during Anna's visits, we introduced open-ended arts activities and materials to the nursery community. These included working with stretchy, striped string; putting duvets on the floor; introducing a child-friendly research camera that is discussed in Chapter 2; improvised *musicing* (Stige 2010) moving, projection play and ourselves, as curious bag ladies, not too concerned with speaking words. While this was a familiar creative practice, the thesis space of *research-creation* activated *bag lady* as a method to provide me with a way to interrogate and experiment theoretically as well as creatively.

Research-creation (Manning & Massumi 2014; Manning 2016; Springgay & Truman 2018; Springgay 2020; Truman 2022; Loveless 2019) explores the fertile intersection between arts practice and philosophical thought. I discuss research-creation in detail in chapter 4 but will provide examples of its productivity here here. Both art and research are forms of enquiry and research-creation explores the intersection, the borderland and the difference between them. During this research project and the installation event, creative interventions were also experimental conditions. I inhabited the role of artist at the same

time as the role of academic researcher. However, I felt I was not properly either but rather something else, a bag lady in the middle of messy tensions. I could not fully inhabit the role of improvisor while carrying the weight and responsibility of the researcher nor could I become overly concerned with collecting data as I had the duty of caring as an artist for diverse children, parents and educators. I was inhabiting the situated borderland between art and research. The nomadic figure of bag lady helped me navigate this liminal space . To become both and neither at the same time. This tension of *in-betweenness* has generatively carried me through the research as it opens up a *between* place that does not entirely belong to its constituent parts. Thus, something transversal is produced that breaks out of habits of practice.

Research-creation, as I will discuss in chapter 4, was a way to navigate tricky problems later in this research such as using words to write about things that are more-than-words and more-than-meanings. During the research project, research-creation provided an opening between the making and thinking, feeling and collecting, art and philosophy that was active and instantiated through my role as artist-researcher as I went on to write this thesis. Research-creation became a way to think about my relationship with the camera eyes (and ears) as the camera data pushed back at me in pivotal, unimagined and jolting ways enabling the manifestation of insights into children's ways of knowing that was not quite my own, not quite art and not quite research. I will tell these tales in chapters 4 and 5.

Anna, Christina and I were aware of the generosity of the nursery in welcoming us to experiment and disrupt. We in turn wished to enrich, inspire and support the hard working, dedicated educators. We were aware that at the very least, we were extra bodies in the room to engage with children. During this time, there were convivial conversations

and shared thinking. Educators S.A. and A.K. both compiled case studies of the project (see pg. 291). At the beginning of the second week, Anna, my supervisor Christina MacRae and I created an installation in the 'black box' drama studio at Manchester Metropolitan University and invited the children, the nursery educators and the children's families to attend a More-than-Words (MTW) session. During the day, we ran two sessions which ran for over an hour. We went to the nursery and collected around seven two-year-old children and seven/eight adults (parents and carers); we walked to the university together, arriving at the installation together. As we arrived, I invited the adults to limit the use of words during the sessions and instead, attend to what the children did *without words*. Beyond safety, there was no right or wrong way for children, or anyone else, to be in the installation, no single point of focus to adhere to or pay attention to. It was not a set performance: it was a set of invitations. We had no way of knowing what the children might do, how the group would feel and how they might use the space.

Everyone attending the sessions had given their consent to be filmed. The film footage produced during these sessions - what I term the MTW *installation-event* - constitutes my research-creation data. The sessions were filmed with three different types of cameras: a 360 camera, suspended in the middle of the installation; Tcam, a CCTV camera mounted on a wheeled platform which children can roll around; and the iPad footage taken by the nursery practitioners as part of their everyday nursery practice. The cameras and the data they produced will be discussed in Chapter 2.

Film data was produced during the installation-event and collected in technological camera-bags - memory chips and hard drives - to be carried into the future of the research.

Resisting the homogenisation of difference: the children and adults of the installation-event

I had not worked before in such a culturally diverse setting as this Nursery School and Children's Centre. Coming from the East of England, my work had mainly been in predominantly white working-class areas, low socio-economic communities and eastern European families. The nursery where this research took place is an inner-city setting in the North West of the UK. The area is described as an area of socio-economic deprivation as it has a high percentage of families living on low incomes. The area has a shifting demographic with a growing population and many families are recent migrants; it is one of the most ethnically diverse wards in the urban North West (Bullen 2015). Running against a characterisation of the area as one of poverty and crime, is a counter-narrative of cultural diversity, multilingualism, educational aspiration and a strong sense of community (MacRae & MacLure 2021). There is a well-established research relationship between the setting and Manchester Metropolitan University. My supervisor Christina MacRae has conducted a slow-research ethnography: the Sensory nursery (2019a, 2019b, 2020) and more recently, the Listening-2 research project (MacRae & MacLure 2021)

Thinking with Ingold (2013), who makes the distinction between knowing *about* people and learning *from* those we study *with*, I entered into the nursery as an incoming, white artist and PhD student researcher, residing for a short time in a nursery school with a wide diversity of culture, skin colour and language, differences of aspirations, histories, funds of knowledge and ways of understanding children's education. The privilege of my shape shifting identity, of nomadic bag lady/researcher/university member was foregrounded by the threads of socio-economic poverty and colonial histories at the same time as immersing me in a cosmopolitan agglomeration (Saldhana 2010) of many different

educational, parental and child ways of knowing. Through being inside this nursery assemblage for a short time, hanging out, moving within its walls, moving to its rhythms, I absorbed it, and it absorbed me.

I still do not know many facts *about* the people I worked with, but I was part of an assemblage with them at the nursery for a short time and later, we made a carnivalesque installation event together, a wild rumpus (Bakhtin 1984, Sendak 1963) which was not the same as the nursery assemblage. Rhee et al (2018) note that there is still a fixation on the one best/real/right truth, the monophonic way to tell education stories and this extends to how we tell stories about race and skin and difference in education. Rhee et al (2018) urge us to acknowledge our complicity with these habituated understandings and practices, while at the same time resisting them, by asking alternative questions and presenting 'differently othered bodies within mainstream frames' to push to rethink how/what we know (p: 132). Following these ways of thinking allows me to think about the MTW installation and this research-creation project in ways that are mobile, entangled and desiring of a decolonising ethics.

My corporeal encounter with cultural, linguistic, and epidermal (Saldhana 2010) difference during the project, brings a rich sense encounter and knowledge to this thesis. But I began to realise as I started to write this thesis (working with data, alone in a pandemic), that it is very easy for these differences to disappear. I have felt this potential erasure acutely in the anonymising of children's names. This process of anonymising is a critical part of universities' ethical procedures. Anonymisation is designed to safeguard children and protect people's identities. However, when I started to write, to tell the tales and make sense of the data, I became uncomfortably aware that my lack of knowledge *about* these children's cultures, language and family backgrounds made it very tricky for me

to choose another name for them without homogenising their cultures and skin colours. What if the child's name had a significance that was being rubbed out by the process of anonymising? What if my chosen name was from another country, culture? Who was I to bestow a (pseudo) name anyway? Moreover, it was under the identity of white university researcher and PhD student that I approached families when asking for their consent. My mantle of artist or bag lady, with its accompanying ambiguous status, had to be jettisoned; in order for the paperwork to be completed, I became a white academic. This of course affects relationships and raises questions of who can step in and out of these 'identities' and who cannot. Power differentials apply all the way down: for example, while early childhood educators have a low-paid and arguably undervalued status in UK education, they become both an authority and conduit of knowledge for families receiving funding, experiencing poverty, seeking asylum and with a language other-than-English.

I have ended up making an ongoing way of naming children (child-who-watched, child-who-called 'got it!), names that are *entangled-with* and *becomings-with* the MTW installation. This way of naming is an attempt to work with a posthuman, animistic onto-epistemology. Yet in anonymising/renaming I have nevertheless erased culture, ethnicity, skin colour. There is a troubling white homogenisation in anonymisation. For example, *'Buzzer'*, (who-created-many-kerfuffles) could be a child from a middle-class white family – there is nothing in this pseudonym to say that he is a Farsi speaking child who has come from Afghanistan to buzz about the installation and this thesis. Buzzer's actual, real, given name does signal his cultural background. I have wondered, while contemplating these matters, whether as part of the consent process, parents could have been asked to create their child's pseudonym. This way the whole process of anonymisation has a creative potential to include, to make conversations. This anonymising/re-

naming/homogenising/whitening is an ethical issue that continues to trouble me. What I

have learned is that in future research I will pay more attention to how anonymisation and

pseudonyms are initially generated, where children's cultural affiliations, skin colour and

family histories run the risk of becoming invisible. Following this, while I make my own

whiteness and power visible, I also celebrate the multiple shades of skin, culture and

ethnicity that the children, families and educators I worked with during my research

brought to this project. Their multiple ways of playing in the installation. It is in no way my

intention to efface these differences, as I write about what happened during the project. I

strive to be an advocate, acknowledging colonial histories of which I am part and to honour

the onto-epistemologies of differently coloured bodies as well as the onto-epistemologies of

young children. In this way, I ward off and try to resist becoming yet another white

academic writing about other skins as if they are knowable.

It is a recurring theme of resistance in this thesis to keep returning to how early

childhood policy assumes the cultural bias of the white, middle-class and able bodied. How

normal is based on white, western samples and how developmentalism, which underpins

early childhood education, privileges ways of knowing and being that are fundamentally

western, adult and white (Tembo & Bateson 2021; Young 2018; Fendler 2001; Blum 2017;

Burman 2017; Cannella and Viruru 2004; Viruru 2001; Johnson et al. 2017; White 2016;

Curtis 2011; Averini et al. 2015; Gesell 1934).

Thinking about how children occupy anomalous positions between differences and

about what this can potentially teach us and produce in education, is a theme of this

research. The young two-year-old children in the nursery setting exist between the cultures

of their home culture and the culture of UK early education, itself a complex set of tensions

between practice and policy. Young children generative and productively work with

difference through early childhood education. Perhaps by paying more attention to children's understandings of the anomalous spaces they occupy and how children synthesise and produce culture, language and experience through this space, we may potentially turn towards a brighter education that works with difference in productive and generative ways.

Why an installation-event?

Rather than creating a research project within the institutional space of the nursery, with children in their familiar world, I chose to create an experimental installation which was familiar to no-one. The two installation sessions were intended to be extra-ordinary. They were one-off, ephemeral events which would complement my research inquiry into improvisation and arts practices: a borderland or liminal space between people's daily lives and practices. The sessions and the space were outside the usual realms of children, parents and educators and they were also experimental and unknown for us. The bag-lady artist spaces I make are always temporary and provisional, always uncertain. But this space was also new and different in that it was an experimental *research-creation* space, somewhere between artistic and philosophical inquiry. It was therefore an unfamiliar landscape, producing conditions for different kinds of emergence, including the production and collection of data.

There were practical reasons for making an installation outside the nursery. Firstly, I wanted a space where I could freely film children with consent to be filmed with a 360˚ camera (I discuss the 360˚ camera and research methods in Chapter 2). This would have been impossible in the nursery as a 360˚ camera picks up everything around it and I did not have consent for all children to be filmed. The polyphony of children's worlds was a key

phenomenon I wanted to study, so, in order to be able to use the 360˚ camera freely, I needed a different kind of space. The installation was therefore set up to both produce and welcome polyphony. It also set the experimental conditions to attempt to produce polyphonous data. Secondly, in order to address my research inquiries, I wanted to apply the *enabling constraints* (Manning and Massumi 2014) of asking adults to not talk and this would have been a difficult parameter to request in the nursery. This is partly because the institutional space of the nursery in the UK is associated with pressure on educators and parents to be talking to children all the time as I discuss in chapter 3. It is also because as a visiting artist, already beholden to busy nursery educators for welcoming me into their space and routines, I would not have felt comfortable asking them to change the way they work in the nursery in such a major way. Another key aspect of making the installation was to create a special event, a space of difference, unfamiliarity and unknowability to all of us, as a gift and celebration, a lovely thing. Experiment, artwork, gratitude, curiosity: my intention was to create a little world for a short time with different rules, one which honoured the diverse ways of knowing of the community that populated it. These were some of the experimental parameters, the *enabling constraints* (Manning and Massumi 2014) of the installation-event. Within these parameters, an examining could unfold of what happens when there is no single focus, no adult words to name and direct things, no adults in *charge* of things: a wild timespace for gathering and bagging the world differently, seeking transversal borderings with children's untamed ontologies; a creative experiment setting the conditions of my research-creation praxis.

Techniques of relation: improvisation

As I have intimated, Anna's and my own creative bag lady practices involve actual material, bags of stuff and also collections of techniques, skills, experiences and methods that can be combined in multiple ways. Our materials and practices have been collected over our lifetime career-wanderings and are assembled, collated, and juxtaposed in order to form the parameters of the spacetimes we create with people to play, experiment and improvise in. Following Manning and Massumi (2014), we plan, or set the parameters for emergence. These parameters include the way a space is set; open ended materials; heterogeneity of materials and practices (objects, sound, light, movement, space, gesture, conviviality); multiples of the same thing (balls, shaky eggs, string bobbles); things that can be used in multiple ways; small things and larger things, breaking up the space in interesting ways; and having everything re-configurable as loose parts. We also consider how things might be encountered (arranged in groups, lines, in containers, central, at the edge, hidden, plentiful); what else might be introduced (light and sound changes, a large gathering objects), and what is removed (words: adults directing children's play, narrating, questioning, describing). These parameters form some of the conditions for what might subsequently emerge between participants, practices and things in the installation spacetime. The installation space moves like a large synthesiser. Once set, the space synthesises its own life independently, as elements work upon and resonate with each other. We - Anna and I - do not, cannot, fully control it, we can only twiddle with parameters, such as lighting changes or the introduction (removal/change) of elements. In Le Guin's words, 'its purpose is neither resolution nor stasis but continuing process' (1989:169).

A critical ingredient of our artistic practice is how we work with and intentionally foreground uncertainty, through improvisation and playful game-finding. Following the

dramaturge and improvisation teacher, John Wright, we attune to the space and those in it so we can:

1. Find the game.
2. Entertain each other with it
3. Recognise when the game is over
4. Find another game

(Wright 2006: 39).

Wright's guide for improvisation is a technique of relations that has proven to be the most excellent template for encounter in spaces that have no talking (as well as in those that have talking). It is a template which develops a sense of dynamic mutuality between multiple players, the human players as well as dyadic relations. In theatre practice, this mutuality is called complicity or *complicité,* which I shall shortly discuss. A further characteristic of this work, one that arises through its conditions, is that it is characterised by multiple points of focus. There is no all-knowing adult leading but rather, a multitude of small encounters between humans and space and materials. This way of working, with its absence of a focal point or adult led activity, acknowledges and honours what Tsing (2015) understands as polyphonic life. Attending to the polyphony of the world rather than the monophonic, mono rhythmic beat of the curriculum clock, is an ongoing theme of this research. Within the polyphonic, poly-temporality of the installation, there are more things going on than any single human could possibly oversee, analyse, control or understand. Improvisation is a technique of sensing through polyphonic messiness, finding shared games and interesting phenomena. Improvisation is a technique of reaction that transects the artist bag lady and the researching bag lady praxes. It runs through this research-creation project, carrying it off in wayward directions.

Techniques of relation: enabling constraints

I will theorise the installation-event as *research-creation* (Manning 2016; Springgay & Truman 2018; Truman 2022; Loveless 2019) in Chapter 4. Here, I would briefly like to touch upon Manning and Massumi's *techniques of relation* (2014), to highlight these as devices for catalysing and modulating interaction as 'domains of practice in their own right' (91). In our arts-educator practices, Anna and I have been experimenting with and collecting techniques of relation in our carrier bags for decades. Bag lady *method* enables this practice to find a terminology, a theory and a philosophy, as Manning and Massumi's *techniques of relation* are placed in a bag with the existing practices of 'complicité' 'playfulness' and 'open-ended play'. *Techniques of relation* modulate the conditions of an emergent event; they have an ethics of engagement and are improvised as they respond to the desires and expertise of participants – in this case a diverse group of children, educators and parents. In Manning's (2009) exploration of *enabling constraints* the enabling constraint of removing adult talk is a technique of relation that has a dynamic effect: it flattens the hierarchies between adults and children, allowing heterogeneous polyphony to become tangible. Enabling constraints and techniques of relation are about setting particular parameters that plan for synthesis, emergence, and the production of the new. Critically, they invite 'active collusion in determining how the event [will] transpire' (Manning and Massumi 2014:92), so that in the end, it becomes everyone's event.

Manning notes that the 'essence of a technique of relation is not its content *per se* but its capacity to become more-than and to create more-than.' (2009: 41). Within the MTW installation, bodies moved in relation between constraints (gravity, walls, rules, responsibilities) and improvisations (discoveries, encounters, expressions). The MTW

sessions were full of surprises (as improvisation makes room for surprises). Things (dances, gestural conversations, affects, emotions) emerged between and with other things (children, adults and materials), constantly shifting and morphing. Relational movement modes 'will always change, perishing when no longer relevant, opening the way for new modes that continuously affect [the] becoming-dance' (Manning 2009:41). Manning's techniques of relation thus apply to the improvised practices adopted during the MTW installation and they are also a way of understanding an *improvised* relationship between researcher and data. Techniques of relation are a way to conceptualise the experimental conditions of the installation-event as research-creation and also a way of moving creatively and productively with data as I shall unfold in chapters 4, 5 and 6.

Techniques of relation: *Complicité*

I will now discuss the resonance between techniques of relation and the dramaturgical concept of *Complicité,* a group relationality that emerges through an encounter as a dynamic, sensed, attuned force between those taking part (Macrae & Arculus 2020). *Complicité* is a form of relational corporality developed as a theatre technique by dramaturge Jacques Lecoq (2000). It arises out of the conditions of bodily encounters, disorientating sensorial polyphonics (Tsing 2017), awkward co-presence with its distinctive affects (Lorimer 2014) and a mutual vulnerability within a temporal present. Out of these messy relations, complicit murmurations briefly take flight. To be inside a complicit movement is to be aware of becoming both murmuration and bird *at the same time*. Or it emerges from improvising a line of song within the polyphonic whole. This embodying of collective difference, sometimes clumsy, sometimes joyful but always *felt,* is not the same thing as the conceptual inclusivity of sameness where bodies do not matter (Rhee 2013).

This is particularly important to remember when working with a diverse group of adults and children with unique and situated relations to language, creative expression, education, citizenship and belonging.

This embodiment of difference as a technique of relation requires both the risk of discomfort and the risk of expression. Saldanha (2010) proposes that collective identities and subjectivities always emerge through corporality and bodies are collectively creative as well as adaptive: 'Bodies never come alone' Saldanha (2010: 2410). This idea that, like subjectivity, collective identities (of diverse individuals) emerge through corporality, leads me to think tentatively about the decolonising potential of group improvisation, the practice of developing playful *complicité*, collective encounters through movement, sound and material. Building on this idea of *complicité*, I think with Rhee et al. (2018) and their idea of *complicity* as the possibility of change, starting from where we are, in the middle of things, colonialism, racism - and also anti -racism, congeniality, aesthetics, care. Complicity acknowledges what Rhee et al. (2018) refer to as *appositional entanglement* (123) and I place complicity together with the theatrical term *complicité* as a corporeal technique of relation, of becoming-with, troubling the boundaries of self/other without homogenising. Saldanha (2010) offers the idea of aggregation to counter individualism. He notes how aggregation is rooted in/ towards a flock and implies a gathering. Aggregation has the potential to account 'how 'I' am not privileged as a site for thought, since thought is always a network of minds' (Saldanha 2010: 2418). Aggregation is an adding up of affects, intensities and potential. The heterogeneity of participants concentrates the intensity and vital potential, producing abundant bursts of shared becoming (ibid).

Because of its multiple foci and lack of knowable order, spaces such as the MTW installation-event can feel chaotic and out of control. Engaging with techniques of relation

may involve passing through thresholds of awkwardness particularly for adults. It meant that the 'usual rituals of self -presentation and self-positioning' (Manning & Massumi 2014:98), are changed, discouraged, albeit in a hospitable, inviting and comforting way (Ibid) . There could be discomfort and uncertainty by having ones' words removed if you are an adult who is responsible for children either as a parent or educator. It could also be liberating – or both. For children used to being led and guided by adults and their words, the relinquishing of knowable structure can also be difficult. Other children, who perhaps have a closer relationship with the boundaries of adult structures, spill into the space and this exuberant, messy spilling-over can cause further anxiety for adults. What is critically important is the ongoing awareness of - and care for - the power differentials, aspirations and cultural funds of knowledge between a highly diverse group of children, families and educators.

Following Lorrimer (2014) and Tsing (2005), I understand passing through awkwardness as a difficult yet generative portal. To feel awkward is to feel very aware of each other in new and surprising ways: '[A]wkwardness is premised on a knowing co-presence or felt connection. It requires a mutual vulnerability and a sense of disconcertion. It makes little sense to talk of a non-relational awkwardness' (Lorimer 2014: 196). Passing through such thresholds signal an entry into the unknown; a wildness as a 'retreat from the conventional' (Halberstam, 2020:11). Everyone turns towards each other, becoming-improvisor because nothing is familiar. This awkward process is eased for adults by attending to the children's curiosity and exuberance which leads to what happens next. It is also helped by the clownish, playful, wordless practices of bag ladies. Laughter becomes an emergent manner of hospitality that eases the passage through thresholds of awkwardness. Thus, relational techniques for *complicité* and improvisation become research parameters

that cross over from my arts practice to the research and back again, stitching together new bags to hold things in.

I return now to the installation-event to provide a listing of its conditions. Lists can be bags and also codes for untangling mess, scores for organising time, records, documents, threads.

How the sessions were set up: a list

The walk

The installation was built in the Manchester Metropolitan studio theatre - a 'black box' theatre studio which was a short walk away from the nursery school. The walk was part of the event although it was not filmed. Anna Daley, Christina MacRae and I collected the children, parents and nursery staff. We walked and sang as we travelled over the bridge to the university.

Asking adults not to talk

Before we went into the installation, along with other basic information, such as where the toilets are, I *invited* the adults to limit their talking and instead focus on what the children did without talking about it. This was communicated not as a hard and fast rule but rather as an *invitation*. Parents and educators aware of my research interests were invited to hold back on talk, which they did. This stripping away of talk is discussed throughout this thesis.

Containers packed and unpacked.

Placed around the installation were suitcases and buckets containing musical instruments, hand bells, balls, balls of fabric, balls of string, plastic cones. Some of the contents were arranged into 'mini landscapes'; others were left in containers to be

unpacked. There was a pile of beanbags at the far end (a comfy space) and Anna's duvets were packed into three large zip -up plastic bags in the centre of the space, like large cushions. The duvets had been taken into the nursery, so the children were familiar with both the bags and the duvets they contained. At one side of the space was an assemblage of wooden boxes. The boxes had also been taken into the nursery on previous days and many of their contents were what children had placed in them at that time. In other words, many of the contents of the installation were familiar to the children.

Figure 1: String-bobbles

String bobbles

Throughout the space, string-bobbles were hung from the ceiling. These string-bobbles were light-weight pompoms attached to string which were attached to the lighting scaffold on the ceiling. The string was either slightly elastic stripey string or hairy, rigid sisal string. These string-bobbles were, for me, a principal feature of the space and a new experiment. I had not made an installation in a space where this kind of mass suspension from the ceiling was possible - so it was an unknown, wild territory. The strings and bobbles

picked up the light. There were two pulleys attached to the ceiling. The strings going

through the pulley were attached to sandbags at one end and several large round shadow

screens at the other. Pulling the strings or moving the sandbag would lower or raise the

screens.

Figure 2: projections and string-bobbles

Figure 3: Screens, blue light, duvet bags and string-bobbles
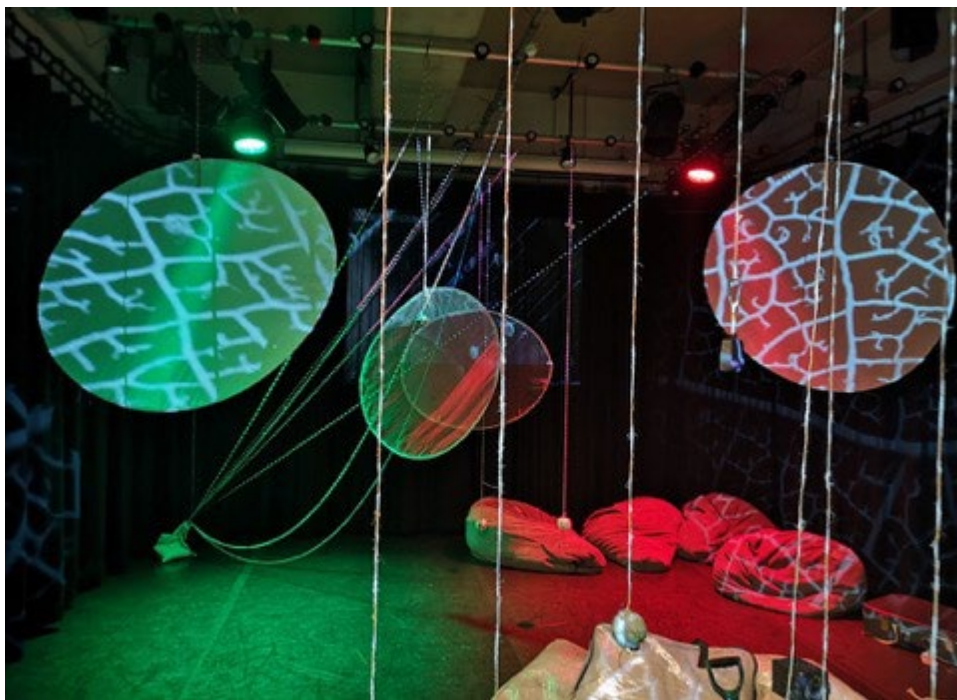
Figure 4: Screens and sandbags

Figure 5: Pulleys

Figure 6: Pulleys and screens

Soundscapes

A playlist of sounds was created by Anna and me. These tracks had different feels and vibes, invoking (for us) different affects and movements, such as exploration, flight, pulleys, excitement. The first track was a very low- level track which had been composed for my installation, Magic Adventure (Drury 2014). The track is tuned to a C pentatonic and the tuned instruments that were encountered inside the installation were also in this mode. Thus, all tuned instruments, handbells, chime bars and tubular chimes were harmonised with each other and the recorded soundscape.

Ocean by Rachel Drury (2014)

Alone in Kyoto by Air (Godin 2004)

Mbira by Robert Rich (1989)

Creature by Ben McCabe (2019)

Loose narrative or score

To prepare, Anna and I had playfully imagined what could happen and developed a score or framework for our improvised encounters. This included firstly a long period of open-ended exploration. Most of the installation components were either already placed around the space or in a bag or suitcase placed to be discovered. We planned a lighting change half-way through the session and introduced a large silk parachute around the same time. We planned that later, coloured scarves would be introduced and then, towards the end, that we would roll in a very large and offer a multitude of egg shakers. We held this score and its possibilities lightly and checked in with each other throughout the sessions, feeling the best times to introduce a new transformation or provocation.

Figure 7: MTW session

Figure 8: MTW session

Figure 9: MTW session

Figure 10:MTW session

Figure 11:MTW session

A carnivalesque experiment

The MTW installation-event, and the bag lady practices that made it, sat on borderlands between art and research, as well as the borderlands between education, research and philosophy. It sits between ordinary life and art. It was, at the same time, an event, a research experiment and an artwork. The borderland between art and life, termed the *carnivalesque* by Bakhtin (1984), causes me to think about the installation-event as a *carnivalesque experiment.* He recognised carnivalesque time-spaces (cronotopes) as being potentially outside of dominant, hegemonic and official aspects of the world; an alternate world 'opposed to everything that [is] readymade and completed' (1987:11) - and I would add *knowable*. Like the young children who inhabited and rule it, the installation timespace produced 'ever changing, playful, undefined forms' (ibid). The carnivalesque is associated

with deep folklore that laughs at, mocks and parodies the tragic hero tales of those in power. It is unfaithful and mocking; it is a space of mess, clowns and improvisation (Arculus & MacRae 2022). This carnivalesque experimental timespace acknowledged and activated the mess and corporality of life. Bakhtin notes that a characteristic of carnival is that it is not a spectacle; instead, it embraces all that are within it; no one is on the outside. Every session is unique, everything in it is always affecting it.

The carnivalesque experimental installation-event can be understood as a research-creation *bordering object* (Loveless 2019), as it resists any kind of certainty in method. It can be seen as an inquiry producing its own world with its own laws, 'the laws of its own freedom. It has a universal spirit […] in which all take part' (Bakhtin 1984: 7). Thus, the installation-event speaks to practices of temporal arts and liberatory expressions but with a philosophical, political and ethical awakeness to its positioning, in relation to dominant powers. It is not faithful to certainty in either its creation or research potential but its encompassing, world-making qualities set the conditions for a movement, a relation between practice and research. Loveless (2019) notes that the research-creation object belong to no-one. The *boundary object 'does things with disciplines*, satisfying certain of their requirements, without, however, belonging to any one of them' (33). It fails to completely fulfil the criteria of any single disciplinary field. It is an in-coherent and monstrous object. It is able to speak to the disciplines it borders meaningfully but does not fit so well that it can be claimed entirely within any of them (ibid). This is the nomadic and shape shifting potential of the bag lady method: a potential to bring things from other places and place them somewhere else, watch them transform, then move them again.

In this chapter I have introduced the installation-event, the where, when and who of this research experiment. I have discussed some of the ways in which bag lady practices

relate to bag lady research, through putting theoretical concepts of enabling constraints and techniques of relation in a bag with terms associated with temporal arts: polyphony and synthesis, *complicité* and, finally, carnivalesque.

The underpinning ethos of the installations-event sessions and the ways its parameters were set, were effective ways to meet my research aims. The installation set the experimental conditions to explore what reduced talking and playful arts practices might open up. Containing a culturally diverse group of parent, practitioner, artist and child subjectivities, it offered the potential for multiple and ongoing improvised encounters, the complexity of which would be filmed by 360˚ cameras and the other film technologies that I will discuss in Chapter 2.

The installation-event and all its complexity set the scene for what comes next in this thesis. I do not seek to make the event knowable or visible. I acknowledge that there is never a representation for the becoming-imperceptible event (Braidotti 2013:137) but by recording it, tracing the marks it makes, the residue it leaves behind, I seek to work creatively and theoretically with the data it produced.

In the next chapter I will introduce the data-carrying camera bags that recorded the installation-event.

Chapter 2: Three Camera Eyes and I

Introduction

In this chapter, I introduce the cameras, three types of optical technologies, that played a pivotal part in this research-creation project. I used cameras in this research to explore their potential to work with relation and movement. The cameras allowed me to be inside the installation-event while they did their job of making audio/visual data. Given the focus of my research, cameras seemed to be an exciting and productive method for data collection in the complex polyphonic context without words of the installation. In particular, the frameless technology of 360˚ film offered the potential of radically different understandings compared to framed vision or adult gaze.

I discuss what these different camera eyes make possible and what they do with time, whilst weaving in historical tales of visual research methods in child studies and education. This project is entangled with video methodologies that respond to de Freitas' (2016) call to take an experimental stance to video data in education (Caton 2019; Hackett

and Caton 2019; MacRae 2019, 2020; MacRae and MacLure 2021). The video methods used in this research are situated within feminist new material and posthuman philosophies and influenced by my readings of works by Rosie Braidotti, Donna Haraway, Karen Barad, Karin Murris and Liselotte Olsson. They help me a think with time, movement and relationality, as well as polyphony (Tsing 2010; Sheldrake 2020), in order to re-think bodies-in-motion (MacRae and MacLure 2021, Manning 2009).

These methods have affinities with research that works with multiple perspectives through different camera technologies in order to disrupt the certainty of the adult gaze, while acknowledging adult power (Elwick 2015; White 2020, 2016; Caton 2019; Caton & Hackett 2019). The methods align with my bag lady practice of, and fidelity to, improvisation: a practice of trying to let things (such as research, installation-events, relations with data) become what they want to become; to be inside the research but not in control of it. This requires a trust in processes of improvisation, of not knowing what is going to happen. Following Springgay and Truman (2018), I hoped that cameras might help me imagine what kinds of worlds are possible and what may already be existing but is yet un-perceived. The use of camera as method in this research does not seek to represent, capture or extract authenticity, answers or truths; it is an experimental and creative endeavour working speculatively with the different temporalities that these very different technologies bring.

I will shortly discuss the cameras and the different qualities and temporalities they bring to the research. At the end of chapter 4, (pg. 130) I tell the tale of how I began to engage with camera data working creatively with chance, curiosity, and impulse, resisting systematic ordering. I will recount the shock of how the camera technologies pushed back at me in unexpected ways as they disrupted each other's ways of seeing, sensing and

feeling. I began to stitch together moments of data time across the three very different

camera eyes. In chapter 5, I continue this thread to tell of how I worked with Deleuze's

power of the false (1989) to examine the way I which the different temporalities of the

camera eyes seemed to shatter the truth of each other. In this way, the story I go on to tell

through the data in chapter 5 becomes liberated from notions of truth and representation

and instead opens up to a generative speculation through which children's more-than-adult

ways of knowing the world becomes tangible.

Ocular-centrism

In this section, I explore the way in which the moving image has been deployed by

dominant epistemologies for over a century. It has a long history in popularising and

disseminating scientific research in child studies and is how 'the child has served multiple

epistemological functions, depending on the interests of the researcher' (Ossmer 2020:

522). Acknowledging that there is no neutral territory and that observation in research

always makes marks upon the observed (Haraway 1988) is a starting point.

There is an uneasy relationship between trans-corporal sensing that takes place

between the watcher and the watched and the potential for the watcher to read,

comprehend and invade the watched (MacRae and MacLure 2021:6). The ocular-centric use

of video in early education has been used as a means of defining what is or what *should be*

through using moving images as demonstration or exemplification (White 2016; Curtis 2011;

De Freitas 2015; Gesell 1934). As I will make clear, the purpose of this project is not about

making essential claims about children. It is rather an opening up of different onto-

epistemologies through imagination, embodiment and theory, while acknowledging that

while I can grapple with the coloniality of my gaze as an adult looking at children, I can never resolve it (MacRae and MacLure 2021).

De Freitas urges us to pay attention to the history of scientific cinema and to the ways in which video structures the kind of research we do (2015: 553). This has been demonstrated in the ways that scientific desire for objectivity has been entangled with the emergence of motion picture technology since the late 19th century (Ossmer 2020; Curtis 2011) and Ossmer shows that understanding how visual technologies have been historically used in science can help us to "denaturalise what ha[s] come to be thought of as human nature' (2020:520-1). The bringing of children's bodies under adequate scientific control (Watson 1919 cited in Curtis 2011:424) manifests a particular, adultist onto-epistemology and a particular way of understanding developmental time. Through working with chance, playful improvisation and curiosity, I attempt to avoid techniques of surveillance and claims of rendering the lives of others visible (MacLure 2013a). I heed Osgood and Murris's call to 'keep (the) child in play' without following the child or making the child central to investigation (2022:8). Above all I have sought to avoid 'observation's ambition to comprehend: to circumscribe and bestow meaning' (MacRae and MacLure 2021: 5). Rather I have attempted *thinking-with* camera technologies in order to speculatively *think-with* children and *think-beyond* adult epistemologies.

The cameras as eyes and bags

The three types of camera eyes used in this research were: a 360˚camera which was hung in the middle of the installation space; Tcam - a wireless cctv camera mounted on a child-friendly trolley; and the nursery iPads that practitioners carried in order to document children's learning and interests. These cameras are eyes but also containers, dark grottos

into which light becomes made into film. The etymology of the word camera is linked to dark and vaulted chambers, bed chambers and also darkened chambers on boats and carriages. These camera eyes drifted through the installation-event as dark bags, nets to catch and gather their oneiric data. I hoped that these different camera eye/bags would glean and catch aspects of the intersectionality, affects and liminality of the MTW installation-event space and I hoped that they would do this in different ways. Cameras as more-than-human eyes and more-than-eye/I bag. Like nets (and eyes), the cameras do not catch all that passes but they each collect and contain particular things in particular ways, gathering and foraging different feelings, positions and qualities through their particular technologies. Each camera/eye/bag tells a different story, snagging different snippets, making viewing the installation-event *feel* different; each one understands the installation temporality differently. In this way the cameras explore and produce 'what can yet be thought', rather than becoming a record of what has already been thought (Andrew 1997 cited in Marks 2000: 26).

Later, in chapters 4,5 and 6, I will tell tales of what happened when the contents of these different camera eye/bags were brought together, juxtaposed and synthesised with each other, within the bigger mixing bag of this research. I will also explore how the ears of these cameras became critical. In this section, I will introduce each of the cameras and attempt to convey how each camera eye produces time, space and movement differently. I will at the same time explore the historical legacy of visual research in education in order to discuss how this research-creation might offer potential for different ethico-onto-epistemologies to emerge. Haraway reminds us that there is nothing unmediated, passive or neutral in the scientific history and scientific accounts of bodies and visual technologies: 'there are only highly specific visual possibilities, each with a wonderfully detailed, active,

partial way of organising worlds (Haraway 1988: 583). With Haraway's words in mind, I will introduce the different camera eye/bags/chambers of this research and consider their potential to see the world and understand time differently, in relation to the ways in which film has been used in educational research.

Camera 1: Gopro 360˚

The eye of the 360˚ camera sees in a radically different way to a human eye. It sees all around itself in a way that is more akin to the ways chameleons, pigeons and sheep see the world, rather than the binocular vision of human sight where the eyes face forward. I was interested to explore the capacity of a 360˚ camera to work with relational movement, to un-frame and de-centre the individual body; how it might encompass relating bodies-in-motion. 360˚ is a new technology that breaks out of framed video. I hoped to work with the 360˚ eye in order to sense movement and interconnection, to be able to see/perceive the installation-event through this all-round frameless technology. I was interested in how it might work with the relational complexity of multiple goings. While I was used to attuning to polyphonic and emergent phenomena in my arts practice, I wondered how I could open this to theory as part of this experiment. Reading Tsing (2010) and Sheldrake (2020) on polyphony and Manning and Massumi (2009, 2016) on relationality and emergence, I hoped the 360˚ technology would help to materialise polyphony and relationality as concepts, making them tangible in a complex environment.

The 360˚ eye observed the installation event from its centre with its chameleon eye capacity, an eye that sees all around, as a ball rather than a frame - an unfolding, spherical filmic encounter. While it offers a potential beyond the adult gaze and the framed image, there are conditions attached to this machinic 360˚ eye: the image is clear near the centre

of the room but shadowy and fuzzy towards the edges. There is also an absence of fine,

close detail which is sacrificed to having the all-round perception of movement and relation.

The handling and processing of such large data files is also problematic and time consuming.

Replaying the footage, a small piece of time can be configured and viewed in many different

ways. For example, the following images below are all taken from the same 360˚ image.

That is to say, they are the same piece of time but configured in different ways through 360˚

technology.
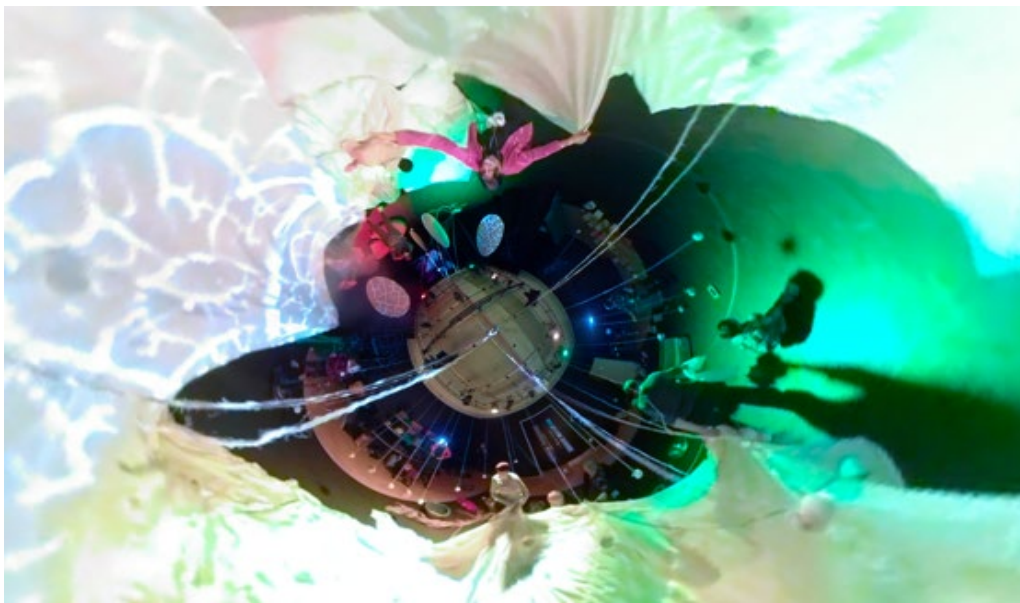
Figure 12: 360˚ eye in wraparound configuration

Figure 13: 360˚ eye in tinyworld configuration
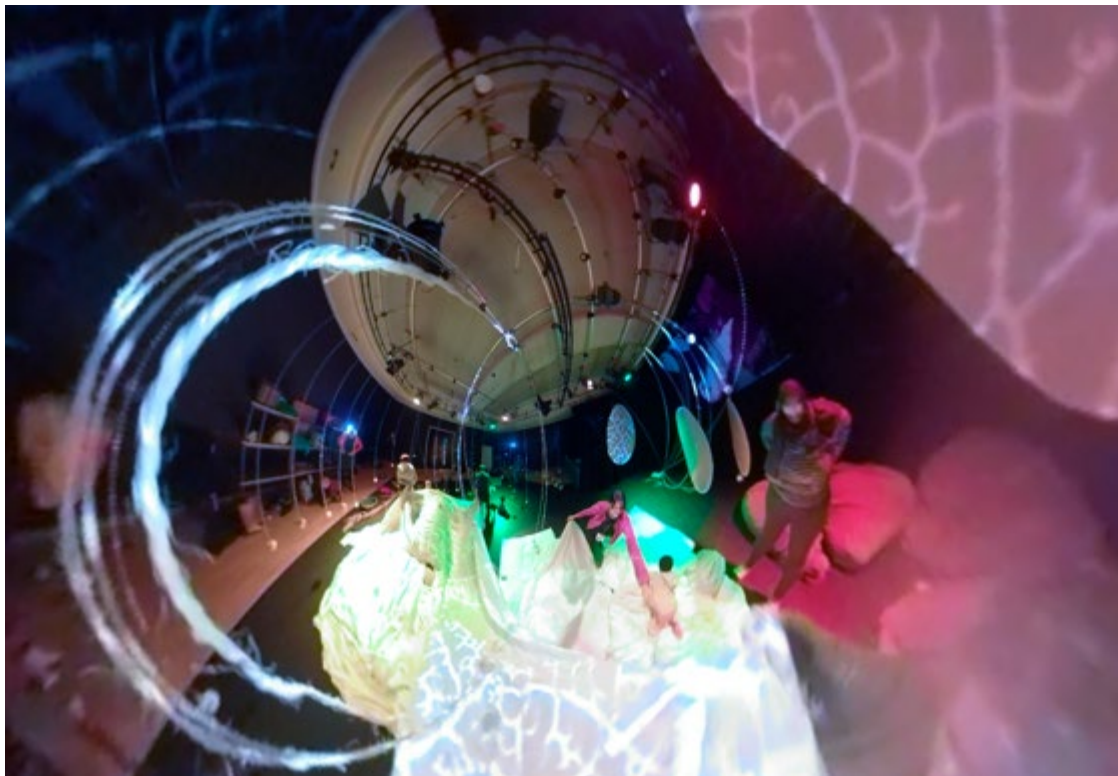
Figure 14: 360˚ eye looking towards the door.

Figure 15: 360˚ eye partially wrapped.

It is perhaps hard for us to understand how the photos above are produced from the same instance, as we are so used to frame-by-frame cinematic narratives. The 360˚ photos open up present time in space rather than placing time in a sequence. De Frietas (2019) interrogates how types of educational video research, that seek to decode bodily movement and conceptualise it as rational or as embodied cognition, have traditionally deployed a frame-by-frame analysis, stilling movement and pinning it down. A significant figure in the early pioneering of film and child development study was Arnold Gesell whose popular work in the mid- century grew around the idea of defining what was *normal* in children (Ossmer 2020). Gesell is worth mentioning here because of the relationship with (an albeit very different) 360˚ technology, which was also put to work as an early childhood research methodology. Gesell's observation dome afforded a 360˚ viewing system, whereby the

child at the centre was surrounded by multiple cameras that registered their every movement as an all-seeing technology that made normal development visible (Gesell 1934).

Gesell's research not only attempted to study and define normal children but to also disseminate his ideas of mapping what constitutes normal development of the infant (with the effect of influencing subsequent generations of child-rearing). Ossmer notes how, in the case of Gesell, techno-filmic materials configure scientific thinking, with each working on the other in order to co-constitute ideas concerning the natural development of the normal child (2020:520). Ossmer goes on to argue that this coupling of film and the desire for scientific objectivity, produces a certain epistemology. Gesell's studies in the 1920s and 30s at the Yale Psycho-Clinic involved the pinning down and abstraction of children's bodies. Gesell conceptualised children's development as a series of moments, just as film at the time was a series of static pictures. His work stilled moving film to photograph frames and then abstracted those photographs to drawn tracings (MacRae 2019). From this, Gesell then coded and prescribed norms of age- appropriate behaviours: normalities and generalisations of abstracted children which still haunt contemporary child psychology and education (Curtis 2011). 'The white middle-class child from New Haven became a universal child to whom children all over the world would be compared' (Ossmer 2020: 523).

Thus, the technologies of Gesell's film production produced a particular situated knowledge of normal, masquerading as objective and universal, something I will pick up on again in chapter 4. Gesell's dome has a direct relationship with 360˚ film technology in that it carries the promise of an all-seeing eye. It also resonates with Foucault's thinking on the image of the panopticon (Foucault 1991) and carries 'the potential to become a method of panoptic surveillance where bodies are read, comprehended and invaded' (MacRae & MacLure 2021: 6). I am sure Gesell would have loved 360˚ technology for its potential to

continue his project to oversee, capture and slice time. He would, no doubt has exploited the potential of 360˚ to claim Haraway's 'god trick of seeing everything from nowhere' (1988: 581).

In my research, the 360˚ go-pro camera hung from the ceiling unnoticed through the MTW sessions, filming in all directions around itself. Unlike Gesell's dome, this single, circular camera eye looks outwards to an entangled multiplicity of goings on rather than inwards to a tightly controlled environment with its 'universal focal point' of a single child at the centre. The camera is in relationship with the exterior messiness of the world, the more-than-human ability to hold many children and other bodies wriggling together, slippery and un-centred as they move in different places, different rhythms, different temporalities, in complex worlds. It glimpses the way in which certain affects move bodies in relational space - or perhaps it glimpses how moving, relating bodies produce affects.

Gesell stilled the moving image to order time, to create a developmental timeline of normality. The potential of the 360˚ camera eye in my research-creation has been its particular abilities to present multiple versions of any single moment-in-time, to interrupt and interrelate time and movement. In other words, it is able to destabilise sure and certain understandings of linear and individuated time. It invokes an ethics of uncertainty and disrupts the very idea of a *comprehensible* child. 360˚ film-time can be rolled in many directions both specially and temporally. It loops and thickens spacetime and has the potential to imbricate multi-faceted understandings with multiple temporalities.

Through a different relationship with 360˚ technology, I offer a speculative alternative to the comprehensible child. I acknowledge with Haraway an 'embodied objectivity' or situated knowledge that helps me learn to imagine from other perspectives, to know where I am and where I am not (Haraway 1988: 583). This inverts Gesell's

panopticon in order to puncture the all-seeing, all-knowing prick tale that keeps children

and those that are for them, in their place.

Camera 2: The Nursery School iPads

A third of my data set comes from the short clips the nursery practitioners took on

their iPads during the installation event, as part of their everyday digital notetaking

practices. At the time of the installation, I was not expecting to be able to have access to

this iPad footage. However, the nursery provided me with a curated set of film clips from

the sessions, netted and bagged and passed to me to weave into the research. These clips

are radically different from the other camera eyes that I have used in this research and

productively generate new dimensions to the data.

Some of the iPad clips were later used by practitioners S and A to tell stories of

individual children. S and A made case studies over the time Anna and I spent in the nursery

(see Appendix p.294). They acknowledge the relational and multi-theoretical entanglements

in which the individual child they were studying resides.

Figure 16: iPad image

Figure 17: iPad image

Figure 18: iPad image

Figure 19: iPad image

These iPad clips are common forms of video data in early childhood and construct the child in particular ways, framing individual children and centring them. These framed constructions of children are aligned with developmental curricula and have a historic entanglement with claims of objectivity in psychological and developmental discourse that I discussed earlier. Indeed, the use of iPads in nurseries is now commonplace. iPads are used at the nursery to track children's development or learning journeys. As such, they align with a particular curricular temporality of ages and stages. Clips are uploaded to an online platform called Tapestry, a UK based company with nearly a million subscribers that 'helps staff and families celebrate their children's learning and development':

'Tapestry builds a very special record of a child's experiences, development and learning journey through their early years and primary education. Using photos, videos, and diary entries, a teacher or early years educator, along with the child's parents or carers, and the child themselves if they're ready, *weaves* the story of the child and how they are growing and developing.'
(Tapestry Nd, my italics)

Tapestry is a commercial product offering settings the ability to 'Save time and money and give your parents something amazing' (tapestry Nd). It collates data in order to form a *scrapbook* of children's development. It also provides ways in which parents and educators can share information with each other, helping the setting to understand the child's 'development at home'.

While the platform is an easy and accessible space to hold information, who or what decides what is worth including in the learning journey remains attached to a curricular

hegemony over what kinds of *achievements* are celebrated. The notion of *saving time* is a major selling point. Unquestioned is the mapping of tapestry to a developmental template that has been formed through a discourse of 'normal' ages and stages. The historic and contemporary prejudices of class, wealth and race are elided. There are potential undercurrents of surveillance and accountability as well as celebrating achievements as families from diverse backgrounds with different ways of understanding parenthood and childhood share film clips and accounts of children with state education.

This focusing on demonstrating accomplishment, of reaching and passing stages, of moving forwards on a scientific, efficient timeline is less *woven* than superglued onto a particular temporality, one that is haunted by a Gesellian epistemological legacy. The child is at the centre, unique but still somehow a unit, to be developed within a system that seeks to homogenise children so that they accomplish normality in a timely manner. Parents are co-opted into this 'expert' narrative while children endure the framed gaze, learning that certain things they do attract the gaze while others do not. In this way, the iPad clips in this research represent a type of film that determines and constructs a particular temporal-reality. Those on learning journeys must move forward; they must not retrace steps or wander far from the path. These learning journeys are timed marches, and the iPad eyes are moved by adult eyes/I, responsible and accountable for children's timed progression.

In my research clips from the practitioner iPads, children are centred in the frame. The clips are short: out of 38 clips, only one clip is over a minute long. This perhaps speaks of a world where time is lacking, where things - learnable moments - must be hurriedly gathered and collated. There is no time to linger. It becomes a method of freezing time into captured moments. However, some of the iPad clips diverge away from the centred child subject, pulled instead into wandering around the installation space, catching multiple,

polyphonic, carnivalesque happenings and bordering onto a different temporality as the eye becomes unlocked from curriculum and child-subject and leaks into a different epistemology. These meandering iPad clips catch onto the polyphony of the event as they turn around and the space layers of goings-on reveal themselves. The audio of these clips contains further goings on, out of frame cacophonies – the camera ear disrupting the camera eye. This evokes the messy, carnivalesque atmosphere of the installation event and how it disrupts the everyday discourses of education. The iPad eyes cannot remain faithful to their task, it would seem, like bored children, their imaginations cannot help themselves from straying.

Camera 3: Tcam (Toddler Cam)

Tcam was a robust, child-friendly device that I made specifically for the MTW research using cheap CCTV camera technology. Tcam does not centre the human or a particular subject but offers accidental and chance eyes. I had tested and developed the Tcam technology during other arts project with toddlers (Near and Far, Magic Acorns 2018) before the MTW project. Tcam was made with a small CCTV camera installed inside a wooden box which was mounted on a wheeled platform via a bendy neck. The CCTV transmitted wirelessly to an iPad and could be recorded via the iPad app. The whole assemblage looks like a little robot. Tcam had two boxes mounted onto its triangular deck into which things could be placed and a spade handle for children to push it around.

I took Tcam into the nursery during the two weeks I spent there before the installation-event. Tcam was a popular companion, taken for many walks around the space, sat on, rolled about, and its boxes collected small objects. The relationship between the children and Tcam began before the installation-event took place. In this way, Tcam

participated in the research-creation as a body that was already known to the children. Anna and I played with the Tcam live feed in the nursery, so that children could experiment with the camera eye feeding directly to the nursery screen. The children were fascinated by the Tcam live video feed and what it did with scale. Anna playfully modelled things such as looking into the camera eye and making her own eye huge on the screen. Children laughed and shuddered, moving from Tcam eye to screen image of Anna's huge eye.

The Tcam live feed was present in the installation-event too, but its presence was subtle as it was placed quite high up on the wall of the installation. In the nursery, the physical interplay between screen and camera eye had been key. I am not sure how much of the live feed was noticed by the children during the actual installation-event. There was too much else going on and the live image was inaccessible to the children's bodies. However, the playful and corporal relationship between Tcam and the children continued during the installation-event because as children rolled Tcam about the installation, this caused Tcam's eye to be positioned by happenstance, bringing a chance element to data collection. The children were not so much interested in Tcam as an eye but rather as something to move and play with. In this way, Tcam was more-than eye/I and it was doing something else as well as looking. Other camera eyes in the research did not have the same physical relationship with the children. The 360˚ was a small, expensive box that I carefully kept away from toddler hands and was barely perceptible during the installation-event while the iPad cameras were held in adult hands, pointing at children.

Because of its glitchy technology, I had envisaged that the Tcam would work a lot with chance as its recording function was prone to switching off intermittently and it would often need to be reset. In this sense there was an aleatoric element in what the Tcam eye gleaned and what escaped through the Tcam net. Chance was also at play as to what the

Tcam eye saw as it was pushed around and played with in the installation, its eye stared at odd angles seeing unnoticed compositions or scrolling surfaces - close up, grainy, material details of floor, legs, feet, bottoms of doors and more. Not all the installation event is covered by the Tcam: instead, the idiosyncratic technology produced random lengths of film. The Tcam footage has no audio and, due to more technological mystery, some Tcam data is slowed down. The Tcam eye sees with grubby, glitchy qualities of cheap technology, producing film that is radically different to both the 360˚ eye and the iPad eyes.
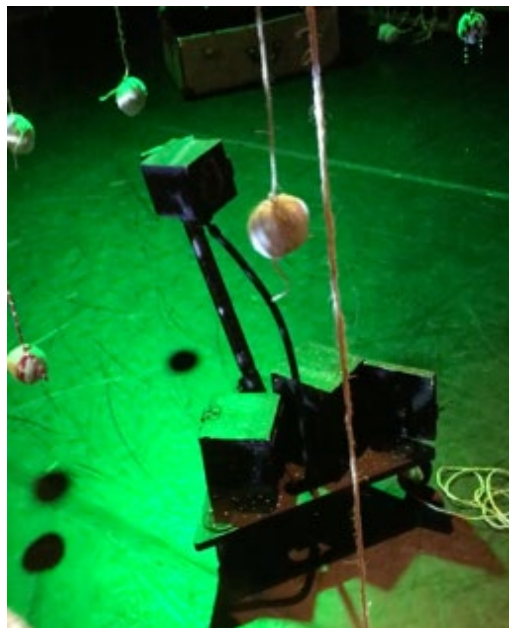
Figure 20: Tcam

Figure 21: Tcam eye, view of the door

Figure 22: Tcam eye, view of the floor

Figure 23: Tam eye, view of legs

Of the three types of camera eye, it is Tcam, the clownish camera trolley, that works most with unintended, anomalous and chance encounters, drifting with the children's movements, resisting control and situating itself in a more-than-human milieu. Tcam is always somewhere, never nowhere, possessing Haraway's embodied objectivity while fluidly working with haphazard, glitchy tech. Tcam made relationships, with children and with things and possessed a particular affinity with floors, rolling on them and looking at them. Tcam's active relationships in the world made an aleatoric form of data collection and brought a particular magic to this research (I use the term *magic* to signal something *beyond* description).

Tcam also manifests a very different relationship with time to the iPad data. A beautiful example of this (and one that continues to resonate as a sensory-poetic encounter) is the subtle light play on the aluminium footplate of a door - the only thing moving in frame during a minute of Tcam footage. The film could be mistaken for (read as) a still image but its slow gazing temporality opens a window into the secret life of doors and rooms. This film-time of thinness and suspension holds a full and fertile emptiness (Marks 2000). A wondering and wandering are activated through the Tcam eye's haptic relationship with materials and time, its grainy texture and silences feeling into the time-space of stiller-than-human things, opening an animistic onto-epistemology. Tcam's unexpected angles 'push against traditional visual ontologies' (Caton & Hackett 2019). It touches and feels the textural materiality of things to imagine how rooms and walls and floors hold movement; how they relate temporally to the sensing presence of other bodies.

Figure 24: Tcam eye, strip on the bottom of the door

Marks (2000) notes how haptic images are unclichéd, so that the viewer must bring memory and imagination to complete them rather than being pulled into an existing narrative. This is particularly pertinent to the haptic, aleatoric and unclichéd qualities of Tcam film.

Thoughts on Cameras: What Might Have Been

While sifting through research data, I noticed a bit of test film from the nursery where I had attached the 360˚ camera to the Tcam trolley. What the 360˚ does while moving close to the ground is radically different to what it does suspended in one place above head height. This made me realise that positioning the camera global eye in the centre of the installation while giving a sense of the whole space, had done so at the expense of a roving 360˚experience. At the expense of the sense in which the world moves and wraps around itself. In this test clip where a child pushes the Tcam trolley, the 360˚ camera eye holds the child and the trolley still, at the centre of the world, while the space and its materiality rolls and curves around them, expanding and receding.

These are the kinds of small details that were so lost when the 360˚ camera was hung in mid-air take on an *extraordinary* life, expanding and curling around the camera eye

as it moves. This made me wonder what new understanding could have manifested through this way of using the 360˚ camera during the installation-event; what thinking might have emerged if I had used a *roving* spherical eye? It also made me think about the difference between fixed and moving, close and distanced perspectives. This roving 360˚ might have helped me imagine movement around a body, the ebbing and flowing, and the animistic advancing and retreating of the world.

The central hanging of the 360˚ that I did employ for this research does not give this ebb and flow but nor does it hold any one body still or centre it. Hung in the middle of things, it holds a complex world together and gives a sense of an interlocking, relational movement of bodies. It is the eye of the installation. I cannot, however, help but think of Haraway's sky gods and earth dwellers (2016) when I think of these two positionings. How the placing of the 360˚ camera at height could give an illusion of seeing everything from nowhere - Haraway's God trick (1988). The idea that the 360˚ eye sees everything is seductive: the lure of an objectivity outside itself, that seduced Gesell into thinking children could become as 'tangible as tissue' (Gesell 1952:132 cited in Curtis 2011). I will tell the stories of my initial encounters with 360˚ data and the call of Haraway's Sky Gods in chapter 4.

Sound without eye

I will discuss in chapter 7 how, after months of watching and writing, I closed the eyes of my cameras and opened the camera ears. Listening disrupted and reinvigorated my relationship with data. While I had sought to glimpse relational movement through the 360˚ camera and had to some extent succeeded, I was able to sense relational affect, expression and intensity through listening in ways that my eyes could not do. My human eyes tend to

pick out, separate and decipher bodies, my ears do not. Sound is not framed in the first place, it carries and evokes ideas, feelings and memories (Oliveros 2005) and tells different stories to the ocular centric.

Afterthoughts

De Freitas (2016) notes how the coding of moving image in terms of a storyline holds an inherent bias of reducing the *non-thinking body* to *embodied cognition.* This bias always leads back to the quest for and claims of the scientific objectification of movement in research.

It is hard to escape the grip of video research methods that run the risk of eliminating, pinning down or ignoring ephemerality and the indeterminate. Unlike Gesell and the purveyors of the objectivity of film, this research and I are not concerned with the fidelity, totality or objectivity of film. In chapters 4 and 5 I will recount how these camera eyes (and ears) told unfaithful, tales that disrupted objectivity, time and memory; how they became disloyal to the myth of adequate scientific control.

I have been greatly helped by the low-tech, glitchy, grainy, haptic eye of Tcam whose unreliable technology can be relied upon to disrupt sky god thinking. Together, the three kinds of camera eyes and I take up De Freitas' challenge to 'study the force of the body without always interpreting bodily actions as enacting rationality' (2015: 566). We, the I/eyes (and ears), human and technology, as a collective pledge, form an alliance with the indeterminate excesses of moving bodies. We slide at awkward angles with what is already *known about* children, resisting the hegemonic stories of *normal* in all their guises.

To Close

In this section I have introduced the cameras and the potential of these very different camera eyes to re-animate how bodies relate to matter over time (MacRae & MacLure 2021). This has foregrounded the relational, polyrhythmic and entangled time of the 360˚. I have also spoken of Tcam's material time and of the thinness, suspension and chance temporalities of the things that it has activated. These work together with the iPad slices of developmental time that do not, cannot remain quite faithful to their subject.

Acknowledging that the history of the moving image and child studies is entangled with a century of adult hegemony over children (de Freitas 2016; Curtis 2011), I have opened the exploration into how my creative research methods may have the potential to decolonise ways of knowing about children. These three cameras have operated in this research to juxtapose and agitate ways of seeing; to disrupt habitual ways of knowing and to work with the *power of the false* (Deleuze 1997), uncertainty, imagination, sense and (k)not knowing (Osgood 2020). I shall go on to discuss how, together, we gleaned, glimpsed and foraged for ephemeral affects associated with the temporal arts that produce, or are produced by, *contagion* (Deleuze & Guattari 1987), *complicité* (Macrae & Arculus 2021,), *glee* (Lokken 2000, 2009; Sherman 1975) and *polyphony* (Tsing 2010; Sheldrake 2022). These things are bound up with phenomena that cannot be easily perceived through the developmental-ist discourses that overlay educational spaces.

By working with very three different camera eyes, I hoped to reactivate hidden regimes of knowledge (Marks 2010; Deleuze 1987), to glean speculative glimpses into other onto-epistemologies and more-than-human worlds. I hoped to disrupt and reconfigure adult developmental temporalities, to make research, that can somehow work-with that which

exceeds meaning. Through working in partnership with camera technologies alongside chance and improvisation, this research-creation heeds the posthuman call to *unlearn* (Osgood & Murris 2022): rather than being restricted to preconceived methodological outcomes, enabling the research to become open to the not yet imagined. This requires commitment to decolonising adult ways of being in power (including power over data) and instead, trusting in the idea that children, cameras and things have something to bring to the research - something that is yet to become known. With MacRae and MacLure (2021) I hope to offer a cautious potential of a 'decolonising method that attempts to 'see' that which escapes classification and codification in language, and therefore tries to avoid 'reading' others according to dominant systems of meaning' (p. 13-14).

I will discuss the camera data, what I did with it and what it did with me in Chapters 4 & 5. But for now, I will turn away from cameras in order to discuss words and ways in which language bears down upon the child, colonising their ways of knowing.

Chapter 3: Finding Fertility in the Gap between Words

Introduction

This chapter is a collection of propositions and essays that interrogate, excavate and explore the notion of the *word gap*. The word- gap is a popular ideology, quoted in educational literature, government policy and public facing literature. There is a current focus on the word-gap and early years, with funding being rolled out and programmes being introduced that affect two-year-old children, their families and educators. It is also under, or in response to, deficit discourses around 'disadvantaged' children that the arts projects and research I am involved in are funded. Therefore, my work and this scholarship are entangled with the word gap discourse which is why I include and interrogate it. It serves as the 'why' to this research, the wider context within which this research takes place.

I begin by reviewing the work of the linguistic educationalists and linguistic anthropologists who have been critiquing word-gap and deficit ideologies that emerge from 'scientific' methods around the word - gap. While statistical, psychometric and lab-based

studies have configured the word gap as an incontestable truth, other perspectives in anthropological and educational linguistics argue that there are fundamental limits in the methodological and interpretational scope of word-gap research if the aim is to truly understand the complexities of the linguistic process (Blum 2017). This large body of linguistic anthropological and educational research demonstrates that language is nuanced, complex and situated; it opens up questions and uncertainties and has just as much, if not more, credibility than the certainty of word -gap research. Yet this contesting body of work remains invisible in public discourse. Such is the power of the answer over the question, the prick tale over the carrier bag story.

The arguments and counter arguments surrounding word-gap research are long. Nevertheless, they need to be discussed as they are part of the current paradigm that my research is situated in. I propose that the dominant stories told about the *word gap* are forms of prick tales (Haraway 2016) in which words (and the ideology that bestows the words) become the heroic figures that will save children from poverty, criminality and an inability to think and express themselves properly. This is not only a classist and raciolinguistic (Flores 2021; Flores & Rosa 2015) ideology with a long history of policing speech (Cushing 2022; Cusing & Snell 2022) but a way of constructing children as *talkers-in-waiting*, blank slates to be configured through words.

My intention in this chapter is not to portray the families I worked with in this research and my artistic practice as the hapless prey to word-gap ideologies. Rather this chapter aims to hold a dominant ideology to account by making visible the political and colonial machinations that drive it. I wish to acknowledge and celebrate the rich, varied, differences and cultural funds of knowledge of families and educators; differences that were

always already able to work productively and generatively with dominant regimes and in doing so, transform them.

Drawing on Deleuze and Guattari's notion of *becoming-minortarian,* I turn towards what could be created and made possible *through* the word gap discourse, the potentials that arise in response to the majoritarian powers and the homogenising systems of education (Deleuze & Guattari 1987). I also pay attention to the gap as metaphor. The etymology of gap relates to chasms, empty spaces and gaping, yawning mouths, also a break, a breach through which things escape. I wonder how the metaphor of the gap relates to the earthy grotesque time-spaces of open and unfinished bodies (Bakhtin 1984). Fertile earthbound stories must surely dwell in this gap, different tales for getting on now (Haraway 2016), for reimagining education. How might the gap be activated to become something other than a wide moat around a castle of white, class privilege, the castle of Man, of Hero on His pedestal?

Background - two-year-old funding

The background of this study and this funded scholarship is the introduction of funded nursery places for two-year-old children from economically disadvantaged areas of England, the subsequent development and growth of two-year-old settings and the educational-political interventions that have arisen around this. Funded places for 'socially disadvantaged' two-year-olds was first piloted by a Labour government in 2006. In 2013, the coalition government rolled out free places for the most disadvantaged two-year-olds. *Disadvantaged* is a commonly used term behind which are racially and economically minoritised children, their families and their communities (Cushing 2022), an othering term

that, I suggest, conceals generative cultural differences, aspirations and resiliences. The rationale for the two-year-old funded places has always been to *narrow the gap* between *disadvantaged* and other *(normal, wealthy, healthy, white)* children. Funded two-year-old nursery places are aimed at helping disadvantaged two-year-old children to *bridge the gap* later, at the point when they arrived at nursery at three years. This faces towards school transitions and a need for children to become *school ready* at age four. I will suggest in this chapter that there are unquestioned assumptions around bridging the gap which result in ideologies which seek (and fail) to homogenise difference while ignoring inequalities of power.

My own freelance practice as a music and arts animateur has been entangled with two-year-old offers in various forms since 2008, as I have been mainly based in a children's centre (one of the first 50 piloted 'trailblazers') since then. This centre was situated in one of the most economically *disadvantaged* areas of the UK, predominantly white working class. My work involved responding to the (then new) Early Years Foundation Stage (EYFS) as a music specialist, working with families with 0-3years olds and working (musically and playfully) with practitioners in two-year-old settings.

Being working class myself, I was aware of a social agenda, particularly when I worked in other centres where staff were sometimes critical of parents for 'not joining in' in particular ways. These perceived deficiencies included parents (from 'disadvantaged' backgrounds) not speaking (narrating, describing, naming) to their children enough, not joining in with group singing (modelling to their children), and not managing their children's behaviour (with words). Over this time, it is my perception that the word-gap, and the ways in which parents and practitioners should speak to children, has become an increasingly narrow focus point for 'intervention'. I have noticed the increase of a particular ways of

talking *at* young children by educators, almost as if the amount of adult talk was being

measured and accumulated somewhere. There is, I suggest, a power differential at play

here, a policing of tongues (Cushing 2022, Cushing and Snell 2022, Snell and Cushing 2022)

and I am bound up with it in my practices. This persistent describing, naming and narrating

the world, reduces everything to words. Brightly monotoned words, forced out of adult

mouths and into child ears. I notice how children operate underneath and in-between this

barrage of words. How the wild life-that-is-more-than words of children, becomes

increasingly invisible and unseen.

I rarely use words in my practices with two-year-old children and I encourage adults

to do the same. Not only is this a practice of improvisation across the borderlands of

child/adult onto- epistemologies but for me, it has become a political and ethical stance.

Directly before I started this PhD, I was part of a two year- long Youth Music funded project

called SALTmusic (Pitt & Arculus 2018). The action research project involved the sharing of

practices between music and arts specialists and speech and language therapists, working

with families of two-year-old children who had been diagnosed with speech and

communication difficulties. The idea for SALTmusic emerged from community and the

multiple practices in arts, health, care and education within a children's centre.

During the SALTmusic project, the phrase, '*tyranny of talk*' was coined as a response

to the sense of pressure that was on both parents and children *to speak in particular ways*.

SALTmusic created 'playful, joyful, aesthetically rich approaches [to] provide a 'non-clinical'

space' (Pitt & Arculus 2018 p. 9), a place for families to hang out with, and listen to,

children. One of the most palpable aspects of SALTmusic was recognising the level of

anxiety that many parents initially brought with them and how this was driven by their

children's lack of words. Over weeks, anxieties and tensions would eventually dissipate as

removing the pressure to speak on both parents and their children began to take effect as we stopped talking and found other ways to engage and express through playful, improvised movement, sound and object play.

Thinking with Burman (2017) Sperry et al. (2018) and Baugh (2017) who argue that there is no explicit understanding of how adult talk relates to how children acquire language, I propose that children's talking is situated and entangled with the world and the act of singling out talk is both misguided and damaging to communication, expression and different ways of knowing the world. I further propose that the gap between not talking and talking is a deep fertile space where the materiality of thought and expression can be encountered. By diving into the word gap, we open ethical possibilities of paying attention to the onto-epistemologies of two-year-old children.

Proposition 1: The word gap ideology is underpinned by research.

The trope of the '30-million-word gap' was coined by Hart and Risley in 1995. It is based on a study in the US, originally comprising of a small sample (42 families) in the 1980s. The study compared the number of words used by professional parents with the number of words used by parents on welfare. Remember Hart and Risley because they are a refrain that repeat again and again in word-gap claims. Despite the questionable and contested methodological and sampling issues of Hart and Risley's original research (Cushing 2022; Johnson et al. 2017; Blum 2015; Burman 2017; Avineri et al. 2015; Benbow 2006; Dudley-Marling 2007; Dudley-Marling & Lucas 2009; Johnson 2015; Michaels 2013; Miller & Sperry 2012; Sperry 2015; Sperry et al. 2018a, 2018 b) and many more subsequent

studies that makes similar claims the notion of the 'word gap' continues to proliferate in early childhood education and policy.

In the US, late talking in two -year -olds has been the subject of various research studies concerned with measuring the effect of late talking on academic achievement, the 'risks' associated with late talking, and the links between late talking and poverty (see for example, Golikoff et al. 2019; Hoff 2013, 2006; Hirsh-Pasek 2015; Leffel & Suskind, 2013; Suskind 2015; Suskind et al. 2013). Scaled-up statistical studies extrapolating findings from the UK's Millennium Cohort Study (MCS) and the US's Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) (for example, Hammer et al. 2017; Waldfogel &Washbrook 2011), claim that late talking at two years impacts on later academic development. Sullivan et al. (2021) use the MCS in order to claim that a lack of parental *vocabulary* knowledge is responsible for children's lack of achievement in schools.

While these studies arguably conflate correlation with causation and uphold a deficit ideology that frames word paucity, rather than social injustice, as responsible for a disparity of achievement, the notion of the word-gap persists and, in the UK, has thrived in the last decade. Somewhere along the line, an assumption that *language is made from, and by, vocabulary* creeps into the discourse around the word gap. For example, in the UK, Oxford University Press (2021, 2018) has latched onto the word gap, publishing reports and marketing programmes which explicitly advocate vocabulary teaching. Ofsted (2019b) cite Hart and Risley claiming '[C]lear and consistent evidence' (p.27) when referring to a *vocabulary gap*. The word gap ideology is ongoingly popularised and presented as fact through blogs, newspaper articles and social media (see for example, Quigley 2018; Civinini 2020; Crerar 2018). The statistical, psychometric and laboratory-based studies that reinforce the word gap ideology (Gilkerson et al. 2017; Marchman & Fernald 2008; Cunningham &

Stanovich 1997; Law et al. 2009, 2017) deploy methods and paradigms associated with the natural sciences which somehow have had a greater impact on policy than the considerable body of research work that contests them.   Johnson et al. (2017:12) note that this 'heavy reliance on a very limited and monolithic body of empirical research, lacking a critical perspective, proves problematic - especially since implications based on them are then made about programmatic next steps and actions. These big studies standardise, white middle-class behaviours as normative benchmarks which then 'reify the existence of the word gap under a guise of scientific objectivity' (Cushing 2022: 13; Flores 2021).

The authoritative nature of 'science says' and 'research tells us', are one of Johnson et al's word gap metaphors (2017) that spring up in public facing discourse around the word gap ideology. 'Science says' omits wider linguistic and cultural perspectives and is presented to the public in the UK and USA as authoritative and inarguable. The claim of 'research says' can, invariably, be traced back to Hart and Risley's (1997) original work. Public facing discourse is simplistic, hyperbolic and sensational. Golikoff et al. (2019:987) consider the phrase '30-million-word-gap' to be a 'catchy phrase that lets the public in on the act'. In the UK, Hempsall (2019) describes Hart and Risley's research as 'iconic' and urges promoting *the message* to disadvantaged parents who lack the 'awareness and ability to support good communication skills. The Head of Evidence for ICAN UK cites Hart and Risley's 'landmark study' and describes the word-gap as a 'neat' way of describing a problem while admitting the study oversimplifies things (Harthorne 2018).

The dangers of over oversimplifying complex research and questions around why research must be simplified in order for the public to 'get it', are as worrying as they are predictable. Is this simplification really to engage the public or is it to prop up policy - or a particular ideology? Reflecting back to the Gesellian Child Study projects of the 1920s and

30s, discussed in chapter 2 during my section on educational research and the moving image, I noted how Gessel's project focused not only on defining what was *normal* in child development, but also on how to disseminate a populist ideology of normality to parents. I argue that this white middle-class epistemology of *normality* continues to proliferate (and subjugate the unnormal) through the valorising of the vocabulary and grammar of *standard English*. I propose that words have become deployed as measures in a neoliberal education that streamline and homogenise children's development through techno-scientific means. Learning becomes an increasingly prescribed and inflexible system (Fielding 2010) for younger and younger children.

The UK has seen a resurgence of what Cushing and Snell (2022) term *deficit discourses and racio-linguistic ideologies* through word- gap programmes, justified by 'science says' and 'research says' (The notion of racio-linguistics comes from Rosa and Flores (2017, 2021) in the USA). Cushing and Snell's work helps us trace the racist and colonial roots of these discourses). These UK programmes cite material which also explicitly names or can be traced back to Hart and Risley. At the time of writing, word-gap closing programmes are being funded, trialled, 'scaled up' and 'rolled out' by: the Early Intervention Foundation (DfE & Hinds 2018); The National Literacy Trust (HM Government & the National Literacy Trust 2018) and The Education Endowment Fund (Nd); The Royal Society for Public Health; The Nuffield Early Language Intervention (NELI) (Sibieta et al. 2016) and a plethora of regional partners. Examples of public campaigns include *Words for Life*, I Can *Talkboost*, *Hungry Little Minds* and the NSPCC's *Look, Say, Sing, Play* - a programme bought from a US based company Vroom, a global organisation that 'provides science-based tips and tools to inspire families to turn shared, everyday moments into Brain Building Moments®' (NSPCC Nd). These low-cost, 'scientifically based' programmes are invariably

based on standardised testing, the precision design and economies of scale so beloved of capitalist expansion (Tsing 2019). Increasing a vocabulary of standard English is framed as a panacea for tackling educational disparities in ways which obfuscate social inequalities created by broader sociopolitical structures, pertaining to white supremacy and global capitalism. Because standard English vocabulary is measurable, quantifiable and testable, it can ignore the issues that elude the counting up and ticking off of its targets.

Word gap interventions and programmes flourish with the express intention of 'closing the gap', by helping racially and economically minoritized parents and educators to use the right, *scientifically proven*, talk. To, as Blum puts it "talk like a teacher" (Blum in Averini et al. 2015), means a *holding forth* that requires a child's focussed attention and requires the child to answer questions to which the adult already knows the answer. The unquestioned dominance of standard English in educational policy and research means that even when the home language (which may be non -verbal) has 'unique skills and language strengths', it is still considered to be a *deficit* if it does not map onto the language patterns of school; if it is not Standard English, it is not the right kind of talk (Hoff 2013 in Johnson et al. 2017). This boils down to a policing of the tongues and utterances of children, parents and educators, part of a long colonial history of trying to stamp out any language other than standard English (Cushing 2022; Cushing & Snell 2022).

It is worth considering how the word gap ideology, its research and associated programmes, relate to Moss & Roberts-Holmes' figure of *homo economicus* (2021), the neoliberal image which haunts children's education, by configuring bodies, minds and futures as investment and human capital. It is here that I suggest we will find answers as to why word gap discourses are taken up and mobilised in policy rather than attention being paid to 'educational inequalities produced by broader structures of white supremacy, global

capitalism and European colonialism' (Cushing 2022: 6). By 'questioning the assumptions and assertions of neoliberalism, both in general and specifically in early childhood education and care. What is happening here? Why is it happening? Why do we talk this way?' (Moss & Roberts-Holmes 2021), we begin to see those who inhabit the gap lands not as inadequate but as submerged and invisible knowers. The neoliberal child is configured as deficient and in need of 'investment' (words) in order to become the neoliberal subject, *homo-economicus or* human capital. Rhetoric and discourse around 'levelling up' and 'closing the gap' are a manifestation of what Rhee et al. (2018: 126) refer to as the homogenising move of 'we are all the same or we are all different but the same'. In education, this becomes a *violence of inclusivity* as the diversity of young children's expression and communication is scrutinised within a 'strange mix of a rhetoric of choice and diversity with a practice of ever-tightening control and standardisation' (Fielding 2010:25).

The word gap ideology assumes that language is a formal system and as such, can be homogenised, replicated and reproduced through techno scientific means. It assumes that the gap can be neatly stitched up into non-existence, that the gap is an anomaly in the system to be fixed: a dangerous ideology because, as any bag lady knows, anomalies make the best stories and leakages are breaches between paradigms.

Hegemonies of scale: why particular ideologies get taken up in education and others don't.

This chapter discusses, in part, why an education focused on, and unquestioning of, standardised systems of language learning, cannot recognise either diverse language practices or the ideological influence that language literacy has on western societies. And this includes considering that the way that children know the world at two years old could

be a fund of knowledge, an onto-epistemology, that is beyond adult understanding and beyond signification and representation (MacLure 2013a). Education, through its faulty optic of standardisation, has become a system designed by those who do well in it, where a certain type of ideologised language is valorised (Johnson et al. 2017; Blum 2015). Scaled up interventions, targeted at disadvantaged parents, are driven by the ever- increasing datafication of education: measurable indicators of vocabulary; a tyranny of the curriculum clock which boils down to cost effectiveness and tidiness in the production of *homo-economicus* (Roberts-Holmes 2015). This scaled up educational project is unable to work with, or care for, difference or anomaly. It is oblivious to the rich diversity of communication and language styles across ethnicity, class and age, funds of knowledge that are shaping and adapting new ways of knowing and speaking. Instead, it is a system designed to reproduce itself and like all scaled up systems, its weakness and cruelty is in its inability to adapt and be transformed by, those it affects (Tsing 2019).

Tsing talks about the malevolent hegemony of scale, how scale has become a verb - as in '*scalability*, that is, the ability to expand – and expand without rethinking basic elements. Scalability is, indeed, a triumph of precision design, not just in computers but in business, development, the "conquest" of nature, and, more generally, world making' (2019:143). Tsing's notion of scalability takes the desirability for making things scalable for granted. It naturalises scalability with a framework that assumes a successful system should be scalable and a non-scalable system is flawed.

Over four decades ago, Margaret Donaldson (1978) gave an account of 20th century conceptualisations of children becoming talkers:

'To Western adults […] languages are formal systems. A formal system can be manipulated in a formal way. It is an easy but dangerous move from this to the conclusion that it is also learned in a formal way' (Donaldson 1978: 38).

The idea that children's talk can be learned in a formal way has not gone away. It is, as Donaldson says, an easy move. Once the move is made, formal systems can be homogenised and scaled up; laws can be made. State and institution, parents and educators can be held accountable to implement the formal system. Those who do not adhere to the system's means and averages can be marked as deficient. Systems of scale are neat and tidy. Reflecting on Donaldson's statement, I suggest that in word -gap research and discourse, language itself is constructed and conceptualised as a scalable and knowable system and this is why it is so popular in a neoliberal paradigm.

Scalability is a form of design that has a 'long history of dividing winners and losers' (Tsing 2019 :143). Education has historically been bound up with capitalist expansion (e.g. Robinson 2009) and still moves along this trajectory with diversity in learning practices, timescales and outcomes that are erased by standardisation. This reverberates in Johnson et al's 'language as wealth metaphor' (2017). The education of the *disadvantaged* in the UK has historical threads that emerge from the European capitalist scalable projects of colonial plantations, deploying the use of displaced slaves and the enclosures of common lands, leading to the clearance of peasant peoples to become cheap labour in city factories: alienated peoples, factories modelled on plantations and a segregation of work and nature (Tsing 2019:151), with an education system designed to serve this project.

Expansion without rethinking basic elements and transversal connections prevents us noticing the heterogeneity of the world. This can be seen when language is

conceptualised as quantity of vocabulary, as will be discussed shortly. It reduces our understanding of the world to homogenous blocks ready to expand - such as conceptualising the child as a homogenous unit within an education machine or the word as a unit of language. The scalability of the educational project can be seen in the obsession with standardised testing and the rolling out of measurable programmes to 'narrow the gap'. Businesses desire to expand without changing the nature of what they do, and education has become business.

For example, the Education Endowment Fund (ND) valorises *scalability* as a key factor of the word gap projects it funds. Through the literature I have discussed, I suggest that underneath the rhetoric around the 'narrowing of gaps' is an attempt to homogenise education in order to streamline, cut costs and produce economically productive citizens. The obsession with words and the technicalisation of language learning systems is synonymous with western modernist enlightenment/colonialist privileging of logic and reason. It is a prick tale, an undeviating, technical, (gendered, dualistic) knowledge that is held up as the epitome of western truth (Cannella & Viruru 2004; Viruru 2001) and is at the root of the hegemony of data driven, standardised testing in education.

Tsing (2019) notes how biological and cultural deviation from this world-making conceptualisation of expansion, become labelled the enemies of progress - and this can be seen in the problematisation of culturally, economically and neurologically diverse children in education. Tsing urges us to ask about this growth, this expansion – what was it? and what has left us with? (Ibid:). We must ask why diversities in speaking must be homogenised, why differences are so problematic in education. Why must we standardise? Who is this for?

Tsing notes how European and North American elitism has not historically lived well with other species or cultures: we have no useful place for those others who get in the way of expansion. And this is seen in how the expansion of standard English has historically ridden roughshod over other ways of speaking (Cushing and Snell 2022). This now includes not speaking standard English in a timely manner, falling behind the curriculum clock. Tsing notes the difference between the kind of expansion that changes as it grows and takes on new materials and relationships and the kind of expansion that does not allow changes in the nature of its expanding project - like both standardised curriculum *and* standard English - where the whole point is to extend the project without transforming it at all. Projects that do become transformed do not add to the 'universal prowess imagined as progress' (ibid: 145); they do not reproduce what is already known, standardised and measurable. The technical feat of scaling up must be stabilised so that expansion can add more and more without changing the programme.

Tsing (2019) calls this the 'precision nesting' of scales: the small is encompassed neatly by the large - but only when it is designed to do so: 'precision nesting must avoid the project-distorting effects of transformation' (ibid: 145). In order to do this, to keep inputs standardised and self-contained, it must be unable to form relationships, those problematic vectors of transformation, those yawning gaps again. Scalable projects are those that can expand without changing; by nature, their design excludes biological and cultural diversity. Scalable projects exclude the wildness and unknowability of transformative, distorting relationships and gaps are full of distorting potential. Transformative relationships are the medium for emerging diversity and so by excluding this diversity, scalability projects in education exclude their own transformation and change. Close the Gap. Only the replicable outcome is worthy of consideration. Tsing calls for a theory of non-scalability and attention

to the wildness of the world. I apply this to thinking about the word-gap as a wild fertile landscape in relation to the dominant systems in education, a chasm with a deep, vertical temporality that resists the clockwork time of curriculum. In this sense, diving into the gap represents a potential to transform.

Proposition 2: disadvantaged parents limit their children through having inadequate vocabulary.

Cushing (2022), never pulling punches, describes the resurgence of the word gap ideology in the UK over the last decade as a 'raciolinguistic industry which attracts major funding, turns supposed linguistic defects into economic profits, and continues to overlook the root causes of educational inequalities by framing the most vulnerable members of society as having linguistic and cultural shortcomings' (7). Blum (2017) cautions that the magic solution of coaching disadvantaged parents and underpaid nursery practitioners how to speak to underprivileged two-year-olds is based, like a majority of scientific claims, on limited Western, Educated Industrialised Rich, Democratic (WEIRD) populations (Henrich, Heine et al. 2010 cited in Blum 2017).

Burman (2017) states that word-gap research has created a new developmental myth which claims a causal link between what comes earlier and what comes later. She argues that the idea that it is in children's interests to be talking as quickly as possible has not been theoretically substantiated. There is essentially no explicit understanding of how adults talking to children – i.e. child-directed speech - relates to how children acquire and progress language (see also Sperry et al. 2018; Baugh 2017). Nevertheless, rhetoric around young children's speech as they enter into the education system at two years old, is laden with anxious futurity. Hackett et al. (2020: 2) note the 'sheer weight of societal and

educational concern that has come to be attached to young children's language'. For example, the Royal Society for Public Health claims:

> 'By targeting preschool children, the aim is to increase school readiness and decrease the risk of poor literacy, behavioural difficulties, mental health difficulties, criminal activity, and unemployment that are associated with poor early communication skills' (The Royal Society for Public Health, n.d.).

The capitalist terminologies of 'word poor' and 'word rich' deploy another of Johnson et al.'s (2017) metaphors: *language as wealth*. This becomes a story of low-income and minority families as having no worth, needing to be saved from their own criminality and ill health by the heroic figure of *vocabulary*. In its promise as 'quick fix panaceas to social injustices' (Cushing 2022: 10) it is a seductive prick tale. The metaphor of wealth manifests within discourses on how affluent language-*rich* households *possess* and disadvantaged language-poor communities *lack* (e.g. Whitmarsh 2011). For example, in the UK, the Head of Evidence at I Can states how a child's (particular type of) language is key to *upward social mobility* (Hartshorne 2018 my italics). This wealth metaphor is extremely powerful in rationalising why some children do better than others and it puts the blame and responsibility on parents and children to close the gap through *enriching* rather than finding meaningful ways to work with existing cultural funds of knowledge.

The promise that the complexities of social injustice can somehow be solved through making parents use more vocabulary is very pervasive in UK government policy, it neatly elides governmental responsibility for tackling discrimination and poverty. As Cushing puts it: 'a perceived 'lack' or 'poorness' of words is taken to be a root cause of social inequality'

(2022:2). For example, the UK Department for Education 2017 plan, *Unlocking Talent,*

Fulfilling Potential: a plan for improving social mobility through education (DfE 2017), has

'closing the word-gap' as its primary *ambition* for early years:

> We must continue to support all aspects of children's rounded early
>
> development, including social, emotional and numeracy skills, which are all
>
> vital to later success. But – because of its broader impact – we also now want
>
> to place a particular emphasis on this pronounced 'word gap' often faced by
>
> disadvantaged children, focusing on improving early language and literacy as
>
> the key enabling skills when children enter school (DfE 2017 p.11).

Within the DfE mission statement, the word-gap is conflated with disadvantage, the home

environment and a lack of adequately skilled parenting: '[D]isadvantaged children are less

likely to experience a home environment that can best support their early development,

particularly with regard to early language' (DfE 2017:12). The term 'disadvantaged' works

as a proxy for economically and racialised children and families, while eliding matters of

class and race (Cushing 2022) - those problematic vectors that distort the neat scaling-up of

standard English. The plan states there are 'clear' statistical findings that a parent's

education level can impact on children's early outcomes:

> A significant predictor of a child's early outcomes is the education level of
>
> their parents. Parents with less education are no less committed, caring, or
>
> concerned about their children's prospects. But they can be less likely to have

the right information and *tools* to support their children's development (DfE

2017:12 my italics).

 The problem with ambition (as in the DfE primary *ambition* for closing the word gap)

is that it tends to already know where it is going. Curiosity on the other hand, delights in

uncertainty as it meanders across unknown landscapes and through gaps. What if the DfE

had curiosities about the word gap rather than ambitions? If it could explore the gap rather

than attempt to eradicate it? Instead, patronising and deficit ambitions elide the racio-

linguistic ideologies that 'equate high quality talk with the language practices of the

idealised white speaker' (Cushing 2022:20). Language becomes vocabulary and vocabulary,

the *right tools.* No curiosity here, just answers to bad questions. The DfE (2017) has

nevertheless rolled out large amounts of funding for research into how to increase - and

measure - *vocabulary* - and this includes the vocabulary of parents:

> There is clear and consistent evidence about the importance of vocabulary
>
> development. In addition, a range of studies highlight the extent to which
>
> there can be a vocabulary gap between children from disadvantaged families
>
> and their peers (Ofsted, 2019b, p. 27).

 In this logic the *clear and consistent evidence* traces, as always, back to Hart and

Risley's racio-linguistic ideology), *language* becomes replaced by *vocabulary*. Vocabulary is

assumed to be at the root of language, an ideology of 'wordism' (Blum 2017) that assumes

that an ever-increasing naming of things in the world is the main function of language

(Cushing 2022). Language is conceptualised as stockpiling of words (vocabulary), words as

currency, the more words the better. Vocabulary becomes conceptualised as the essential building block of language, raised upon a heroic pedestal. The individual 'word' has somehow come to dominate as the primary unit of analysis in children's language; words are 'celebrated, counted, accumulated - or found missing' (Blum (2017:7). By extension, children without words, or with fewer words than others, are invariably problematised, constructed as *impoverished* and lacking the *currency* to prosper in their education.

Hackett et al (2020:10) notes how the trope of the 'word-gap' equates the 'quantity of the words a child hears with their ability to reproduce them', a conceptualisation in which words are *banked* in the mind or elsewhere of an individual child to be used as *currency* in future communicative encounters. The aims of funded research are never focused on children themselves or what children are capable of, or how children make language but rather, on developing a self-serving neoliberal technical infrastructure of 'what works', which identifies, tests and measures those who are seen to be *falling behind*: in other words, vocabulary as indicator. In this system, there can be no open-endedness, transformation or divergence in the outcome; this is the hallmark of a scaled-up, depoliticised, neoliberal education (Fielding and Moss 2011).

In the UK, large amounts of funding have been given to research which assumes the logic of word gap discourse and offers low-cost, scalable programmes, technical solutions to achieve pre-determined ends. These invariably involve ramping up the amounts of words spoken by adult tongues and a conflation of language with vocabulary. Programmes assume a right and wrong way of speaking, requiring the policing of tongues and decontextualised vocabulary instruction (Cushing 2022), as words become extracted from the world in order to be scaled up.

Post covid, the Nuffield Early Language Intervention (NELI) has received millions in funding to increase vocabulary and its programmes are to be rolled out to every reception class in England. These interventions *target and police* the speech of parents, carers and educators of low-income and racially minoritised children (Cushing 2022). Programmes in the USA using Language Environment Analysis or LENA (2018; Gilkerson et al. 2017) such as Providence Talks (2015), deploy methods of surveillance by strapping 'talk pedometers' to young children's bodies to audio record their speech and the speech in their family homes. LENA is currently being piloted in the UK by the University of York. Cushing conceptualises this as a mechanical version of the white listening subject (2022: 12), reading it as a culture of 'sonic surveillance in which the non-standardised language practices of students and teachers [and parents] are heard as impoverished, deficient, and unsuitable'. At the time of writing, I am receiving regular, almost weekly bulletins from Speech and Language UK (formally Ican) promoting deficit, alarmist campaigns which ceaselessly urge adults to talk to children about everything. The narrative links the pandemic to increased speech and language needs. A recent BBC article (2022) linked to both NELI and Speech and Language UK, presented young children as unable to express themselves without words. As I write this (Nov 2022), I have received an email from Speech and Language UK that urges us to 'Stand up for the 1.7 million children struggling with talking and understanding words right now. Without the right help this can destroy their world.'

Nowhere in the rhetoric of these campaigns is there any questioning or critique of the hegemonic schooling systems that children are actually struggling with and are prejudiced by. Nor is there any curiosity regarding the rich, diverse and thriving ways of knowing that endure. There is no room for nuance in world-destroying headlines: only the unquestioned

assumption that children need to be taught to speak (saved) by (neurotypical, white, middle-class) adults and words - the heroic myth.

In another of Johnson et al.'s (2017) metaphors, vocabulary becomes sustenance: words are nutrition. This shows how public facing word-gap discourse is constructed as a public health crisis (Crow & O'Leary 2015; Gross 2017). A parent's failure to use enough words and the right words is synonymous with dietary and mental neglect (Fernald & Weisleder, 2015; Fernald et al. 2013), starving their children of (the right) words. Parents are shamed for their impoverished speech. Children's home language is credited for either feeding or starving a child's development (Hoff 2003, 2006; Leffel & Suskind 2013; Suskind 2015; Suskind et al. 2013).   The UK Government's Hungry little Minds campaign exemplifies the ideology of 'feeding' words as if silence or a wordless sonic world is somehow withholding sustenance. The programme encourages adults to be persistently naming, narrating and describing the world to children. This is seen as nutritious. The Hungry little Minds campaign suggests all kinds of 'creative' and 'imaginative' things to do with two-year- olds but these activities are always presented as serving the crowning goal of talk. A particularly pertinent example for this research is:

Put on some music and play musical statues. Dance together then stop

the music – see who will be the first person to stand still and *talk about* the

silly positions you are stuck in! (Hungry Little Minds n.d. my italics).

Could this *force-feeding* of words be also construed as junk food, deficient of affective, relational and sensual sustenance? This particular type of (standard English) language is constructed as desirable and healthy but in fact functions as an oppressive monoculture.

Here the dance, the game, the deep connections through body, space, rhythm, relation and funniness between parent and child are colonised and made to serve the superior project of *talking about* what is going on. When we measure children and parents by their words, the wealth of bodily and material knowledge becomes effaced, invisible by a requirement for words. This ignores the multitudes of communicative potential that lies under the surface of a reality-mirage made from words, a wealth of diverse communicative modes. Ways of becoming-with between parent and child that are felt, sensed and full of thriving potential.

Proposition 3: language is literacy.

In word-gap discourse, the focus on academic skills is communicated by conflating oracy with literacy. The underlying message is that children who don't speak will have impaired or developmentally tardy literacy   This exemplifies how 'claims about a "language gap" are often based on a flawed understanding of both language learning and the essential nature of language itself' (Johnson et al. 2017:14; see also Blum 2017; Deleuze and Guattari 1987).   Oracy is treated as the precursor to literacy, a function of developing reading and writing and therefore, a particular type of standard English oracy is required of children. It becomes evident that what is really being valued in the word-gap discourse is children's *timely* mastering of the *written* word, the ticking clock of developmentalism, driving economies of school readiness: the child as investment, as proto *homo-economicus.*

This standardisation of children's timelines serves the neoliberal demand for maximum return on minimum investment (Moss & Roberts-Holmes 2021). The focus on future academic skills means that "the right" spoken conversations must always include books. For example, the UK Words for Life campaign run by the National Literacy Trust, is dominated by book and literacy centred ideas (National Literacy Trust 2018: 2) and aims to

'equip parents with *the behaviours and attitudes* they need to best support their children's language development' (my italics) and aims to close the gap in *language* attainment (oracy) through enjoyment of *literacy* activities such as books and mark making (p3-4). This emphasis on books will socialise children in particular, school-orientated ways (Johnson et al. 2017; Averini et al. 2015). Literacy- based activities are refigured as nutritious while a lack of reading to children will, according to Morsy and Rothstein 'impede children's intellectual and behavioural development' (Morsy and Rothstein 2015 cited in Johnson et al. 2017:14).

Interlude: memories of my time in the nursery

I will tell the tale of two rooms, of funded and unfunded two-year-old rooms. Both rooms contained children from a wide range of cultural and linguistic backgrounds. Some of the educators pointed out the gap. "There's a big difference isn't there?" the educators would ask. It wasn't really a question; it was a statement.

The Pebble room children would sit still and listen. They were using their words. They spoke more, understood more words. They followed instructions and waited their turn. However, our experience of Pebble children was that they were shy and unconfident to improvise, experiment, explore, imagine and play while in the circle-time regimes of that room. Although they were curious, when Anna and I came in with an enormous drum, they waited to be told what to do, waited for adults to use words. They did not allow curiosity to move their bodies for quite some time. They waited for us to narrate the world, "spin it into existence with adult words" (MacRae 2022 personal communication). The longer we did not use words, the more awkward it became. They waited for our words or instruction; we waited for curiosity to move them through non-verbal invitations. The educators could not

help but dive into the wordlessness with their words, narrating what we were doing (without understanding what we were doing), asking questions that they already knew the answers to, trying to contain the awkwardness, warding it off with words, with instruction. The playfulness that we were inviting in Pebble room took a while to come. It would have taken a few sessions for the children to use non-verbal expression comfortably with us. A process over time. Decolonising the space from adult words.

Conker room, on the other hand was wild. No sitting still and listening attentively to anything that wasn't interesting. Few words, but a lively, wild curiosity that spilled out in every direction and refused to be tamed. Conker room's funded children had little spoken language. But there was no lack of expression in Conker room; indeed, there was an excess of it. And while they were curious and playful in their relationships with us, they didn't need us to define or shape their world, and I don't think they noticed that we were not using words.

In Conker room, Anna and I and our practices became part of the milieu almost immediately. In the Pebble room circle time, we felt like aliens. This is my perspective of course. Not an educator or parent. Just a visiting researcher, a curious bag lady wanting to tell a different tale about gaps.

Proposition 4: thought is more-than-words

There is, I suggest, a problematic assumption surrounding the word- gap discourse which is that words are thought - or fundamental to thought; that what separates the thinking adult from the thoughtless child is words. Cannella and Viruru (2004) draw attention to the profound lack of interest in the actual knowledges and abilities of children.

The same western modernist ideology that privileges white, European, male adults and labels colonised peoples as primitive and undeveloped, labels children as savage and lacking (Patel 2014). The history of ideas underpinning children's language and communication is fraught with assumptions of the language-less child as somehow incomplete, less than an adult, without thought (Gallacher 2015). The link between words and thought in white, western epistemologies is deeply problematic. Leal (2005) notes that western history and society links childhood to ideas of the absence of experience or something deprived of its highest value and that this has led to the idea of the adult universe completing the child with what it lacks (113). We value childhood as a *beginning* but Leal notes this means the beginning of a predetermined sequence or the first part of a whole. Adults and the education they have made for children, exercise an unquestioned power over children:

> There are still those who consider the child unable to understand or to be understood due to the absence of an adult or refined linguistic repertoire, and as a consequence, in need of a prolonged period dedicated to building that repertoire (Leal 2005: 114).

Cannella and Viruru note how children are described in ways that both embody and reconstruct colonialist views of the world (2004:87). They 'are the largest group of people who have been othered, marginalized and colonized' (Cannella 2004: 9). Constructions of not-yet-speaking children as barbaric and lacking any real knowledge or understanding of the world are a commonplace developmentalist trope (MacLure 2013a; Gluschkof, 2019) and language (the right kind of language) is used as a measure to divide the barbaric child from the civilised proto-adult. As Leal puts it, 'children have been educated much more in

the interests of their submission to the rules of an adult-centred world than to their own possibilities' (2005:114). The child who does not yet speak is assumed to lack thought because what is not language cannot easily be considered as thought by white, western, adult ideology. Language is the human behaviour most deeply accepted as truth (Barad 2003; Cannella and Viruru 2004; MacLure 2016). The risk is that children's thought and understanding of the world, which is not based in language or signification but rather through material encounter (Abram 2010; Manning 2016) is made invisible by a developmentalism that sees childhood in terms of hierarchical stages and describes human maturing as 'progress'. Language becomes betterment and thinking-with-language takes supremacy over other types of thinking.

It is critically important to ask, with Viruru, 'what is lost when language is gained?' (2001: 31) What potential things die in what Deleuze and Guattari (1987) term, the *order word*? What kinds of thinking are privileged and encouraged through language? And what thinking and understanding becomes suppressed?

Conquergood (2002) notes how ways of knowing which are rooted in the embodied, spoken, material possibilities have been repressed by objective knowledges, which are established in text. Meaning and knowledge that is wordless, intoned, gestured, improvised, co-created and undercover has been disregarded by dominant epistemologies that equate knowing with seeing and what is spoken and written. This western knowledge is not attuned to indirect meaning or meaning hidden in context. What is not of books is not legitimate. Viruru (2001) notes that the unilingual hegemony of western understanding of language ignores the poly-linguality of children's understandings of the world.

Abrams (2011, 1997) understands western language, both spoken and written as a spell that we have cast upon ourselves, and which separates us from the sensed, animate,

more-than-human world. Drawing on phenomenology, indigenous knowledge and Deleuzian thinking, he suggests that very young children are in conversation with the more-than-human world. Young children's subjectivities and senses are in relation with the world, their sense of self and other, are not clearly divided but rather constitute each other. This changes as they are drawn into a (western) language which fixes their subjectivity and renders the world inanimate. Manning (2016:114) suggests that the instructing of children to differentiate, single out and assign and categories the world into subject and object, backgrounds their animistic and entangled way of knowing the world. MacLure (2016, 2013a) draws on Deleuze and Guattari's thinking to explore how the way of speaking to children that is advocated in word gap programmes teaches them that it is possible to stand outside the world and comment on it, a dominant, majoritarian form of a prick tale which separates them from the rest of the world. Barad asserts that it has become a habit to give language too much power in determining reality and contests the 'unexamined habits of mind that grant language and other forms of representation more power in determining our ontologies than they deserve' (2009:133). In other words, we are subjugating realities and ways of knowing that we could be learning from if we were more curious and respectful of children's onto- epistemologies.

Hackett et al. (2020) argue that there is a fundamental misconception that underpins the association between language development and academic success. The failure to recognise language as part of a wider multi- sensory, dynamic, relational and more-than-human milieu, places extremely taxing demands on young children through educational language requirements. It is then hardly surprising that 'the lonely burden of speaking in institutional contexts […] is accompanied by anxiety' (Hackett et al. (2020:5) and that remedial interventions are rendered largely ineffective. These word-gap driven demands

abstract speech from the multi-sensory and material within which speech draws it significance and power.

The problematics and vectors of the relational and sensory more-than-human milieu are, of course, particular and unique to each context. They cannot be scaled up, replicated and rolled out. Instead, they require situated and particular thinking. Hackett et al. (2020) argue that the dry prevailing educational model of 'listening and attending' is impoverished and creates many of the difficulties to which it demands solutions because it fails to recognise and accommodate that which is not *meaningful.* Hackett et al. (2020) and MacLure (2010) question the usefulness of adult questions as an 'engine of interaction'; they conceptualise language as more-than-words, syntax and meaning and foreground the sense of language as 'something indefinable and irreducible to linguistic meaning, inhabiting the frontier between language and the body' (Hackett et al.:13).

The tyranny of talk that is encouraged by word- gap discourse brings with it a particular onto-epistemology. It separates the speaker from what is spoken about; it parses and defines the word in particular ways. Words become high currency within this onto-epistemology. They also stand in for the world, taking on the power of the world. However, as MacLure puts it 'Words collide and connect with things on the same ontological level, and therefore language cannot achieve the distance and externality that would allow it to represent – i.e. to stand over, stand for and stand in for – the world' (2013a: 660). While this idea is very difficult for adults, it is not so for children, and this, I suggest, is something that children can teach us: it is a matter of asking interesting questions-without-words. And learning to listen.

This research, in creating a space where adult talk was limited and removed, opens a space to think differently about thought and thinking. In particular, it opens up to the

potential of arts practices to become interesting and experimental questions, to explore

how material, bodily practice and thought co-constitute each other and to glimpse into

onto-epistemologies that are beyond (western) adult language- dominated realms.

Proposition 5: language can be sense production.

Martin-Bylund (2018) explores the material-semiotic movements of literacy through

Deleuze & Guattarian ideas of minoritarian language- making. Noticing and telling stories of

the intensive creativity bilingual children deploy in 'balancing and experimenting on the

cutting edge between things and propositions', Martin-Bylund (2018:23) writes poetically

and sensually to make tangible how through 'becoming minor', children de-territorialize

language. Rather 'than reproducing a standard, already known version of language' (ibid),

children playfully and productively encounter the not-knowing of language, exploring the

overlapping edges of the material and the semiotic.

Martin-Bylund notices that while educators are concerned with' correct'

pronunciations, meanings and translations, children relate to sounds, novel words and new

combinations: 'An intensive – de-territorialising - usage of language that characterises minor

literature' (ibid). This usage resists the symbolic and signifying and re-presentational. It

creates rather than re-produces. Martin-Bylund suggests that children's usage of language

has the potential to break out of meaning as re-presentation and embodiment, in favour of

sense production (Deleuze 1990).

Sense production differs from other dimensions of language studied within

the field of linguistics (denotation, manifestation and signification) that work

as circular equivalence or isomorphism, fixation of a subject, as well as unanimous logics and standardization. In a quite different way, as a complementary dimension of language, sense opens the door for experimenting […], for exploring and inventing aspects of language yet unknown' (Martín-Bylund 2018).

Deploying Deleuzio- Guattarian concepts to think about childhood as non-teleological becomings and subjectivity as collective (Hickey-Moody 2013), Martin-Bylund asks, similarly to Cannella and Viruru (2004), 'If being a child or a stranger is a fugitive stage of life with specific opportunities, one might ask what specific knowledge or skill it is that a person loses in the process of growing up or learning a language/conquering estrangement' (24). She calls for the multiplicitous potentials of minoritarian becomings to raise different questions to those of linguistic competence. Drawing on Deleuze and Guattari's idea of a minor language of sense, constructed within and in tension with, a major language, Martin-Bylund notices the boundless creativity and materiality of children's language-making. Deleuze & Guattari (1987) notice how children make a vague word 'vibrate around itself' by repeating it. They notice the skill and intensity in this working of repetition.

This micro-story is an example of this taken from my data. [Audio clip: https://soundcloud.com/charlotte-k-arculus/got-it-13012021-14/s-NRIUuIPfSSK?si=0c22af8c6f7b43beacf3ef8e95ff8a67&utm_source=clipboard&utm_medium=text&utm_campaign=social_sharing

A child cries out "Got it, got it! … Got it, got it! … Got it, got it!"

Then, in the same rhythm time, two separate adults call "Got it" and "got it!"

Drawn into the slipstream of the repetition and rhythm of the child's language making, the pair of adults do something rhythmically remarkable, each making one half of the double refrain. Four pairs of "got its" with the final pair called by two separate adults in rhythm-time. The momentum of the child's treatment of language pulls the adults into the rhythm time of the refrain. "Got it" vibrates around the room. Later, after the event, "Got it" also hooks me into the data.

During the *"Got it, got it!"* event, a multitude of other things were happening. I heard, and was pulled, like the other two adults, into the slipstream of *"got it, got it!"* in the film data audio, long before I worked out who said what *"got it!",* or what was got. [*The chasing of a rogue ball between the dance of adult feet and children's bodies. The play of lights, sounds of feet becoming refrain, yells, cries, instruments clanging and becoming refrain. Dances, murmurations, conversations between bodies and materials, movement, space*]. The expressive *sense* of *"Got it, got it!"* far outweighs its *meaning*. The sense of *"Got it, got it!"* pulls adults into its sensorium and reverberates through my data and into this writing.

It is worth reiterating that very few words were spoken by children during MTW sessions, and the adults had been explicitly invited not to talk. Would this have happened, could this have happened, if adults were talking-as-usual under the domination of word-gap discourse? What would have happened? How would they have felt they were expected to react? To extend vocabulary? "Oh look, you have got the ball!"; "Shall we roll the ball?"; "Can you get it?"; "X has the ball!"; "Are there other balls" etc. "Got it, got it!" is not a naming of the world or even, I suggest, a narration. It is a lively conversation-song with the

world, a call to movement, an activating refrain. It is a production of sense-rhythm that briefly rides upon adult tongues. It makes things happen that are more-than-meaning:

> Conventional language pedagogy tries to still the body, quell the appetite and muffle the sensorial surround so that children can listen for meaning, mean what they say, and say what they mean. As a result, speaking out and speaking up in class is often akin to coughing up dry pellets of meaning without sense: speech is disconnected from the sensorium, and the immanent relationality in which it is moving, and to which it contributes (Hackett et al. 2020: 13).

Through posthuman and Deleuzio-Guattarian understandings, Hackett et al. (2020) move language away from meaning and communication and remove the individual human child from the centre of language. Looking out of the 'corner of their eyes' (see also Pullman 2019) in order to sense the wild, magical element of language which resists definition and cannot be captured by representation, they notice how children use both language and not-speaking in powerful, sensory, affective ways.

Another data story: [audio clip https://on.soundcloud.com/FPxv1]

> *Floor-dancer moves around the space, jumping, falling to the floor, rolling, jumping up again. Their falling to the floor is an ongoing refrain. Their bodily relationship with the floor, a conversation, a rhythm, and a dance. They chase and fling the string bobbles, so they ping around the room. They call what sounds like - but is not quite: "right in a moogie slot!"*

[adults go "oop!" as if something is nearly spilt or collided with]

"whap!!"

"come 'ere moogie slot!"

"got you moogie slot!".

Hackett (2021) questions the perceived hierarchy in which familiarity (in language) is superior to unfamiliarity. Martin-Bylund (2018) sees the unfamiliar as a 'fugitive state' (of childhood and stranger). Deleuze and Guattari (1987:100) note that: 'Children use language as they use everything, as an improvisation with 'optional rules that ceaselessly vary with the variation itself, as in a game in which each move changes the rules'. The *Moogie Slot* speech is inseparable from the movement of floor dancing, conjured from the installation space, the elastic bobbles that hung from the ceiling to be swung, pinged, batted, the dance between body and floor. *Moogie Slot* is story, refrain, monster and con-versation (con-versation as in turning-with the world (Macrae and Arculus 2020)). This idea of the familiar and unfamiliar plays out in floor-dancing improvisation, seeking and encountering unfamiliar things, producing something new, strange and vital. Improvisation practice actively resists the familiar or juxtaposes it in unfamiliar and incongruent ways, or it repeats the familiar until it becomes strange - or the strange till it becomes the familiar - *Moogie Slot*.

The variability and transformation that lies on the edges of language are where its vitality and creativity reside. Rolling on tongues and in and out of mouths, as bodies jump and fall and tumble, in conversation with pinging and swinging. Language that is made of *hardly any words* is being changed and made constantly in this Gap-of-vocabulary. Here, words join with the world, becoming both sense producing and an expression of affective

forces (Olsson 2009). Drawing on Deleuze's (2004) ideas of a sense as a 4th dimension to language, Olsson argues that although it is inevitable to use the first three common dimensions - denotation, manifestation and signification in language - sense is an unconditioned production of language. She also notes the power of nonsense, not as opposite to sense but as an activator and a way of treating everything as potentially otherwise. *Moogie slot* cannot be extracted from the world and given meaning, nor does it count as vocabulary, but it does perhaps count as poetry.

Deleuze distinguished (1968:2) between the language of science and the language of poetry. In the language of science, a phrase has a single, definitive meaning, like an equation. This can be expressed differently using different terms/words but it still means the same thing. Poetic language has an infinity of meanings and at the same time, every word is irreplaceable, cannot be substituted. These ideas of the scientific and poetic in language map onto Deleuze's later ideas with Guattari of major and minor languages. Poetic language resonates, repeating through time from its original power of happening, like *"got, got it!"* and *Moogie Slot*. The language of poetry roams the edgelands and wilderness of formal language, the fertile word-gap that the child resides in (ATP p.100) - but the language of science is the language which education demands that they speak, the fixed meaning, the quantifiable vocabulary, the scalable project.

Deleuze and Guattari draw attention to what words do: 'Words are not themselves signs, but they transform into signs the things or bodies they designate' (Deleuze& Guattari 1983: 204 footnote). Drawing on Lyotard, they point out 'the irreducible gap between the word and the thing' (Ibid):

Words are not things, but as soon as there is a word, the object designated

becomes a sign, which means precisely that it conceals a hidden content

within its manifest identity, and that it reserves another face for another view

focused on it, . . . which perhaps will never be seen (Lyotard, 1971: 82).

These hidden things, beyond, behind and beside words, things with slippery identities, that

dwell in the irreducible, mysterious and fertile gap between signs, words … and something

else, the monstrous invisible *moogie slots* can only be glimpsed out of the corners of our

eyes - or minds - or senses. They can never be met head on, pinned down. They are

unknowings. Gap creatures.

Major and minor language

Deleuze and Guattari (1987) show how the major mode of language extracts

constants in order to fix language into a set of grammatical rules, as an end point, or

overarching symbol. Language can only be scientifically and formally studied as a system in

its major mode. In this majoritarian mode, language becomes a standard measure and

assumes a state of power and dominion and it is this majoritarian figuring of language that

drives word-gap ideologies. But as young children show us, language is not just a

communicator of information (as questions, promises, orders and affirmations) because

language does more than transmit information: it brings about specific acts; it performs in

the world and makes the world through a sensual dimension. This slippery element of sense

cannot be accounted for through fixed systems.

Yet language cannot be explained away as purely communication or information, which is why attempts to formally and scientifically account for language ultimately fail. Deleuze and Guattari note how not adhering to the rules of grammar, what they term language in its minor mode, is considered by some to be the preserve of 'poets, *children* and lunatics' (1987: 100 my italics). Deleuze and Guattari (1987) recognised the specific focus on language within education as an expression of dominion. They present a dystopic account of the education of grammar - the *compulsory education machine,* 'an abominable faculty consisting in emitting, receiving and transmitting order words' (88). These order-words are little death sentences which forbid expression and deviation.

Language is used to discipline, demand obedience and create order: 'once subject to an order-word, something takes shape at the expense of all the other unrealised potentialities that are closed off, or killed off, by the verdict' (MacLure, 2016: 175). Deleuze and Guattari state: 'The education machine does not inform but rather, issues the child with orders and commands. Words are not tools, but we give children language, pens, and notebooks as we give workers shovels and pickaxes' (1987: 88). This majoritarian hegemony is what is active within the discourse and ideology of the capitalist word gap programmes. But it can neither perceive nor control the minoritarian and poetic language of Deleuze and Guattari's figure of *becoming- child*, a figure of resistance to the subjugating, stratification of grammar and signification of language (MacLure 2016).

Becoming-child remains open to multiple, heterogenous, semiotic connections that do not abide by linguistic forms of representation. This points to children's use of language as a minor mode of creativity and continuous variation and opens a portal for reconceptualisations of the child in their relational capacity *to pull language out of the world*, make sense out of nonsense and vice versa. (Olsson 2009). I suggest this

heterogeneity in minoritarian, poetic languaging is *more-than-words* in all its forms of expression, that in children's bodies, mouths and ears, words are alive in the world. This is what children can potentially teach us when we enter the wild, fertile gap, when we begin to listen and pay attention. As Hackett et al. (2021) remind us, 'the ways in which adults and children are moved by a more-than-human milieu, caught up in something bigger than themselves, and how this affects how bodies feel and relate to each other, is what is at stake here' (14).

Deleuze understood language as having this wild element, exceeding proposition or meaning, resisting representation. Wild seems to claim, embrace and celebrate this slipperiness, rather than see it as a drawback (Hackett 2021). This wild element is always part of language whether we choose to see it or not. It is the part of language that is in constant variation. And in a materialist ontology, movement and variation have an ontological primacy over structure (Massumi 2002). In other words, without this wild slippery, unknowable element of language, there can be no knowable structure. The minor element of language disrupts linguistic frameworks, invents new rules. Deleuze and Guattari's 's becoming-child is a figure through which they understand and articulate their thinking on embodiment and language.

Hickey-Moody suggests that 'Deleuze's children not only de-territorialize majoritarian sites and sensibilities with their bodies, and adulthood with their affective blocks of *becoming- child*, they can also be employed to de-territorialize childhood itself' (2013: 284). The curious becoming-child dances over unknown landscape, moving transversally through modes, with 'polymorphous interests and polysemic capabilities' (MacLure 2016). They are never fully in thrall. MacLure (2016) notes how the *becoming-child* challenges the hegemony of language, remaining curious and open to the

heterogeneity of the world. MacLure also draws attention to the materiality of the child's

body in its relation to language.   Children's bodily curiosity is always rhizomic; it makes

heterogenic connections between things in the world, and this makes them potent thinkers,

able to think through heterogeneous modes, such as floor-falling, pinging, swinging and

dance-speaking with *moogie slots*. Hickey-Moody uses the term *rhizome child* as a nomadic

force of de-territorialisation, whose bodies are 'visceral childhood figures that offer a

corporeal model of experimental life and subjectivity' (2013: 278). A rhizomic curiosity

challenges the linguistic regimes that 'can tolerate no polyvocality or rhizome traits: a child

who runs around, plays, dances, and draws cannot concentrate attention on language and

writing, and will never be a good subject' (Deleuze and Guattari 1987:188). This research is,

of course, concerned with what kinds of thinking is produced by running around, playing

and dancing. What kinds of onto-epistemologies open up when the idea of *subject*, good or

bad, is disrupted away from its binary *object?* How can we conceive of language without

subjects to speak it? How can we understand both language and children as *phenomenon*

(Murris and Peers 2022; Barad 2007; Barad & Gandorfer 2022) at work on each other in

ongoing relation?

The wild, minoritarian, poetic aspects of language are not in a binary opposition to

dominant, majoritarian ideologies: they emerge from the wild cracks and gaps of the

dominant systems because of the way those systems work, responding to them and

changing them. The concept of the minor is always interlaced with the major. Neither are

fixed in advanced: 'The major is the structural tendency that organises itself according to

predetermined definitions of value. The minor is the force that courses through it,

unmooring its structural integrity, problematising its normative standards' (Manning

2016:1). Thinking about this unmooring of establishment, I cannot help but also manifest

Bakhtin's clowns whose function was to make a mockery of the rulers and heroes; to lampoon authority and disrupt rigid ways of knowing. Without a dominant ideology and its falsehoods, the clown has no purpose. Such is the minor gesture, a vital and dynamic force born from the very thing that oppresses it. Remembering this is the way to work with the dystopia of word- gap ideology; to know that the minor gestures that operate in the gaps are the agents of change, not as ambitious heroes but as clowns, bag ladies and nomads. Children operating around and between words, between wild and domestic states, improvisors dancing with uncertainty, poets, make a thousand worlds with a single word. As Halberstam says 'for the child, as for the animal, the opposition between home and the wild/ world is not simple, not a binary, not a choice between the caged and the free; both the wild, and the domesticated offer different modes of living' (2020: 143).

Opening the gap reveals the onto-epistemologies of the more-than-adult child; open temporalities that are more-than-curriculum; open aesthetics and poetics of language freed from teleological scripts. Allow the wildness to leak out and pay attention to the between-spaces and what abides in the tensions between states of power and powers of creation. Here, in this gap-not-gap hinterland, is a potential place of wild pedagogies and interesting questions, where one works with what somehow thrives in the gaps of a broken, racist, capitalist education.

Finale

In this chapter I have sent a tentacle into the dominant paradigm that my research and my practice operate in by questioning the particular assumptions that have been made regarding two-year-old children's speech and how adults should talk to them. I have shown

how the dominant ideology, whilst proclaiming to be to be egalitarian and desirable is neither neutral nor unbiased.

I have shown how particular discourses have been taken up while others remain invisible and how the notion of the word gap has become mythologised, despite a large body of critique. I have explored racio-linguistic roots of the word gap and how it relates historically to the colonial hegemonies of standard English; how marginalised families are blamed for their own exclusion and configured as lacking and in need of remediation. I have discussed how the deficit ideology of the word gap plays into the neoliberalisation of education and how, by assuming that children's language acquisition is a knowable system that can be homogenised, cost-effective- yet ineffective- programmes are scaled up and rolled out.

It is clear that children, what they are capable of and how they understand the world, is absent from these dominant discussions. While the power of the word-gap narrative is a huge, majoritarian force, following Tsing (2017) and Manning (2016), tangential, minoritarian moves are needed in order to transversally shift things, working perhaps on the edges of the word and in the mouth of the gap. The work I do, such as this scholarship and SALTmusic, are funded partly in response to perceived deficits and inequalities between racially and economically minoritised children and affluent, middle - class children. This research does not sit outside of the word gap ideology: it is entangled with it but can also respond to it. I take up the response-ability to tell different stories that counter *childism* (Young-Bruehl 2012) and I take the risk of telling them (Barad 2013). Through my experiences of working with diverse groups of parents and educators as artist, educator and researcher, I have turned to the wildness of children, their embodied, more-than-words ways of thinking, in order to imagine what lies inside the word gap and what

children might teach us if we asked better questions (Despret 2016). This is the inquiry at the heart of this research.

As I have discussed in Chapter 1, I have found that asking adults not to talk is an extremely useful tool in stepping sideways into a place where different kinds of conversations and thinking can take place. I have tentatively suggested that the word-free, aesthetic spaces such as the MTW installation, have a decolonising potential where differences can no longer be distanced and homogenised by words but have to be engaged with and sensed up close. This helps us to imagine children's thinking, language and communication in different ways. It has potential to provide glimpses into child onto-epistemologies that counter dominant and oppressive adult epistemologies.

What I have attempted to navigate during this chapter is that it is not enough to critique the racio-linguistic, adult hegemony of the word gap narrative head on. I must also pay attention to the materiality of imagination (Barad 2013) and invoke the minor gestures of language, bag ladies and clowns, making small creative projects that open a new kind of thinking-with-children and offer a different kind of temporality that resists the clock of the curriculum.

To enter the gaping maw of the gap is an adventure within an earthy cavebody of difference, wildness and uncertainty. In this place, we can begin asking how young children from diverse backgrounds and with diverse ways of becoming-with the world can help us to reconceptualize not only language and language production but thought and thinking. How might children's wild conceptual and communicative capacities, that are always bound to the corporeal realm, shape their own education? How can we think *with* children through moving, experimenting and playing? What opens up? How might education, rather than

being shaped by perceived deficits, be shaped by children's onto-epistemologies towards

the not-yet imagined?

Chapter 4: The Methodological Borderlands

Introduction

This chapter is dedicated to the methodological and theoretical orientation of my thesis project. I sought methodologies that would be capable of moving with me through the troubled and incommensurate problematics of using words to account for things that are not words. This has consequences for understanding with two-year-old children's ways of knowing and becoming-with the world. Situated in the pandemic borderlands between art, education and theory, I tell the stories of how I unpacked the data from the camera bags. I make a tentative allegiance with the methodological concept of *research-creation* (Manning & Massumi 2014; Loveless 2019) which has affinities with and differences to, my bag lady praxis and methods, which I shall discuss. Specifically, I ask how research-creation's relationship with its interstice is able to help me stay with the trouble of accounting for *things-that-are-more-than-words*. In this methodological tool bag, I explore ways that make it possible to start in the middle of things, where creative and scholarly skills meet and produce more than the sum of their parts; ways that help me grapple with my troubled relationship with writing.

Firstly, I discuss methodological strategies for my encounters with complex video data, how I worked with polyphony and improvisation methods of navigating through complexity and resisting reduction. Secondly, I discuss the knotty problems of writing about things that are not words and explore research-creation as a creative methodology. Lastly, I tell the story of what data and I did together.

Knotty Borderland Temporalities

There is no clear line where my (or really, any) research begins and ends. There is an academy deadline and hopefully, a finished thesis. But in between, countless threads fly in and tangle up in this research knot and then fly out again. I will always be bound to it. I do, however, conceptualise a borderland in the heart of the research-knot, perhaps the event-conditions that produce the tangling and interstice - in the middle of it and it is from this place I feel in to and follow out of in order to tell its stories. I conceptualise this borderland as the place and time when research and creation were acting together - the *installation event*.

The multiple and highly diverse vectors of arts, education, parent and child practices converged with future-facing data production during this event. The installation event produced the film data that I would move into the future with - in awkward and tentacular directions. The actual time of the installation-event, where the film data was made, is the porous borderland, the liminal space of my research-creation that leaks into the virtual past and future. In this actual event timespace *bodies moved at the same time as cameras rolled,* that is to say that a transmutation took place from corporal installation time-space encounter into film data. A past consisting of research planning, arts practice and multiple histories has moved towards this event and moves away as a future body/mind encounter

with film data, philosophical theory, memory, readers and ongoing life. I conceptualise this borderland time as a transformational event-time where film, the stuff of time, was produced through creative, uncertain, improvised bodily encounters in a time and space event. This event time, borderland time, loops around and becomes a set of multiple temporalities or polyrhythms.

This draws me to Deleuzian (1968:1) thought regarding how festivals or works of art work through time, that these singular events or haecceities have power to repeat in advance of themselves. This space of encounter, this work of art, this transformation from event to data reverberates and pulses through past, present and future. Bergsonian thought on duration (2000) notes how we gather up the past in order to thrust it, compact and undivided into a present that is created by that past entering into it (193). Bozalek & Taylor (2022) note how events carry and propel potential forwards, reactivating new events such as eventful encounters with data that provoke new insight and conceptualisation. They see event-time as non-linear temporality where past, present and future bleed into each other. The *actual* event-time of the MTW installation leaks through its porous borders into *virtual* pasts and futures. It was the thing that was always taking shape even before it happened, in that my doctorate conceived of it, (drawing from multiple factors, past experience, events and memories) and it moves into the present of thesis writing (and beyond) as an ever-swelling past.

As I conceptualise the installation-event as a transformational borderland of this research-creation, I also conceive the pandemic as borderland temporality that has infected it. The installation-event took place in November 2019, before the pandemic. There followed a time of film data processing. Then, in February, the pandemic changed all trajectories: another borderland between Before and After Covid19. My creating-with and

writing-with and encountering-with the data began after the pandemic hit. I had planned to return to the settings and families with snippets of film data and to share this with the community of educators and artists. Instead, I was rolled in a different direction and spent many months as a solitary human wandering with data in a world altered temporally, politically and socially: a state of shock. As I continued to work in this changed state, the data synthesised itself with other things that were going on around me: music I was making; theory I was reading; the new life I was living; and I wrote some of the emerging themes during this time. At times, it felt like I was living with ghost children because the installation event became a forbidden event, unthinkable during lockdown. The actual event-time became a lost time where multiple bodies in a room were freely moving, encountering, breathing, laughing together. At other times, the privilege of time, de-accelerated time, that lockdown brought enabled a deep insight into short, infinitely complex moments. Sensing temporalities through the pandemic enabled me to understand data as loop-able temporal material, where data and the present become entangled. Slices of time, virusing-with, infecting-with, re-membering-through-a-pandemic, wandering through a messy, awkward uncertain borderland. These past times somehow ooze through each other. By re-viewing, re-membering and re-collecting the poly-temporal rhythms that connected events of installation and pandemic, the past is, in Bergson's words "swelling unceasingly with a present that is absolutely new" (2000 p. 193).

This ongoing synthesis of thought and time, data has travelled, unexpectedly, through the borderland temporalities of a pandemic. Through the dreamtime of lockdown, I have moved with it. It has bled and leaked into my creative life.

Approaching the data

Approaching the data and re-turning to the sessions through the film data, felt overwhelming. I knew that trying to be systematic with the vastness of 360˚ film data could lead me into a nowhere of reductionism pretty quickly. In recognising that complexity is the *name of the game* (Loveless 2019), I have resisted methodological strategies that turn the complex nature of things into straight, neat, singular stories: definitions, taxonomies and hierarchical structures. I have instead attempted to stay faithful to the *polyphonic* (Tsing 2016) nature of the installation-event. I needed to engage aesthetic sensibilities in order to feel my way through the data - what Caton describes as *Video data sensing* (2019:116) - an alternative way of understanding film beyond description and categorisation (ibid:44) rather than attempting to organise it. I began by reviewing the data, looking and listening through it lightly, letting it play on my senses, activating minor gestures that operate on the cusp between consciousness and not-consciousness (Manning 2016: 24). This is my methodological fidelity to the practice of improvisation and sticking with the trouble of *creative uncertainty* (Stengers 2011 cited in Haraway 2016:34) - an improvisation-with data rather than an attempt to control it.

In order to resist the colonising, linear, developmentalist ways in which young children are thought of in education, I have committed to making research that thinks differently, however uncertain and messy this might feel. This has meant, following Springgay and Truman (2018), letting go of procedural and systematic methods and following instead, aesthetic senses, tentacular threads (Haraway 2016) and curiosity (Loveless 2019), allowing myself to be drawn by intuition and sense, and by the data.

This commitment involved trusting that something would spark or open and that it would lead somewhere. It is about acknowledging that data has something to say (MacLure 2013b) and that there can be a conversation or 'turning together' (MacRae & Arculus 2020) with it. This is what improvisation as method has the potential to do, to flatten the hierarchies, decentring the human, object and subject. Truman and Springgay state that 'If the intent of inquiry is to create a different world, to ask what kinds of futures are imaginable, then (in)tensions need to attend to the immersion, friction, strain, and quivering unease of doing research differently' (2017: 203). They are acknowledging the difficulties and awkwardness of not following the safety and certainty of procedural logics but also urging a manifestation of the yet unimagined.

I did not want to make this beautiful data serve a pre-determined method of analysis or system of codes. I wanted to have a conversation with data a creative relationship so it might show and tell me things I did not already know and could not yet imagine.

Polyphonic Problems: how do we listen to everything and keep the lines in play? How do we do polyphony in research-creation?

If certainty is desired, as is so often the case in educational research, then a

polyphonic approach will fail to satisfy. If, on the other hand, a genuine desire

to see richly and to be informed otherwise, is sought, polyphony offers such

an encounter (White 2016:4).

Thinking with music (a theme of this thesis that I explore more in Chapter 8), I now

introduce the idea of polyphony (and mycelium, as coined by Tsing 2019; Sheldrake 2020) to

meet with research. My arts practices involve inhabiting spaces of encounter that are

emergent, improvised and *heterogenically polyphonic*. That is to say, there are many modes

of sound, movement, affect, gesture, material at play. Sheldrake (2020) and Tsing (2015)

understand polyphony through music, mycelium and methodology *at the same time*. They

notice how, in polyphonic music 'many melodies entwine without ceasing to be many.

Voices flow around other voices, twisting into and beside one another' (61). Talking about

'Women Gathering Mushrooms', an Aka polyphonic music from the Central African

Republic, Sheldrake notes:

> Polyphony is singing more than one part or telling more than one story at the
>
> same time. […] If the recording was played to ten people and they were asked
>
> to sing the tune back, each would sing something different' (2020p.61).

What Sheldrake (ibid) is describing, through musical phenomena, is the mutable nature of

knowledge and how position and relation constantly change the way in which the world is

known. Sheldrake and Tsing's ideas of polyphony make me realise that it is a method both

for being in the field of my research - a methodological way of understanding how I am

working with data - a mode of listening in the field and a method of analysis. It makes me

realise that there is no single story here, no truth claims: if ten people looked at the

research data, ten different stories would emerge. Polyphony is practice, research-creation

and speculative strategy. Sheldrake again:

> To follow more than one line at a time is hard. It's like trying to listen to many
>
> conversations at once without flickering from one to another. Several streams
>
> of consciousness have to commingle in the mind. My attention has to become
>
> less focussed and more distributed. I fail every time but, when I *soften my*

hearing [my italics], something else happens. The many songs coalesce to make one song that doesn't exist in any one of the voices alone. It is an emergent song that I can't find by unravelling the music into its separate strands' (2020:61).

This *softening of hearing* that Sheldrake speaks about is not only a critical practice in group improvisations: it is a methodological - and tentacular- tool. It is about feeling into the murmuration *as well as* the birds. Sheldrake notes how 'It was this type of listening that helped me to feel my way through the writing process.' (Sheldrake & Macfarlane 2020) The softness of listening can be applied across all senses and affects so that they also coalesce. Serres (2008:7) notes how senses are not separate islands but are in constant modulation with each other. Heterogenous elements don't keep themselves to themselves: they interfere with each other.

Through soft polyphonic *listening,* multiple refrains may be sensed as interferences and resonances that belong to the emergence of inbetweenness. But this is not always easy or straightforward. This idea of an emergent song, something that emerges from between other things, an interference pattern, something that inhabits the borderlands between things, brings me back to the fertile gaps with generative potential and draws me to the interstice of *research-creation* which I shall shortly discuss.

Manning conceptualises the hyphen between research-creation as more than the sum of its parts - or outside of or exceeding the sum of the parts. The differential between the academic and creative modes produces something that does not properly sit in either part or discipline and yet spills into a hitherto unimagined domain. Sheldrake's and Tsing's polyphonic feeling through their own writing, their telling of tales that thread between

parts, disciplines and individuals, help me attend to how my writing can emerge from things that were more-than-words without reducing more-than-words to words. It helps me to dwell in the spaces between word and not-word and imagine the polyphonic and heterogenous nature of two-year-old emergent language. I will return to polyphony and thinking with music in Chapter 8.

Touching Movement

I worked with film data in order to explore the potential of film to re-animate how bodies relate to matter over time (MacRae & MacLure 2021), as well as its potential to work with polyphony within a complex and multi-focussed environment and to be able to somehow work with the relationality of two-year-old children's worlds. MacRae & MacLure (2021) note the liminality of film, how it flutters between conscious and unconsciousness, how it enables, when played with as data, to occupy a *threshold space* that encompasses how perception and conception constitute each other. Movement is always in relation (Manning 2009). This can be hard to perceive unless you are inside it. These speculative methods are an inquiry into film's potential to sense what Manning (2009) terms *relational, elastic movement* as bodies hover between percept and concept, before thought, after awareness, like murmurations.

It may be that film does not recreate the actuality of past movement but that it allows us to occupy the liminality of virtual movement as we play with and become immersed in, bits of film time. Not only might film provide a transversal movement into a different *regime of knowledge*, but the potential of film might also provide, perhaps, a sensed encounter with the borderland between awareness and thought. For example, Hayward's (2010) notion of *fingeryeyes* understands touch not as a 'site of contact, of

copresence and conflation, but rather the effects of passing excitation that produces this ontology' (577). This offers further ways into re-conceptualising camera data, particularly Tcam's eye as haptic sensors engaged with the world; a relationship that does not require a separation between perceiver and object that is mediated by representation (Marks 2000:164). Film's *power of the false* (Deleuze 1989) which I shall discuss further in chapter 5 and 6 may have the capacity to manifest new borderlands between percept and concept and to let us wander within *wholeness of movement* (Manning 2006); of bodies in motion and bodies in relation; *glimpsed sensing* into the *contagious* nature of movement between children and other bodies.

I used film to explore how the haptic, sensual qualities of film and the moving image has the potential to work with the wholeness of movement (Manning 2006; Marks 2000; Hayward 2010). For me, film was a medium with a potential to productively and imaginatively transect between the corporeal practices of an improvising early years artist and the think-wandering of a creative researcher. I made an allegiance with three cameras' powers of the false to find ourselves wandering and wondering these borderlands and in-between spaces.

The problems of how film becomes made into words.

The problems of how film becomes made into words - these words, are not, cannot ever be settled. Therefore, I pay attention to how the interstice of research-creation may open a space and an ethics between words and more-than-words. Manning (2016:12-13) warns how method is aligned with the major, it seeks to capture the minor gesture and silence it. She urges us to get away from questions that already contain the answers. In other words, it is an invitation to wander, wonder, experiment, improvise. What Manning

urges is to stay with the problem that opens up the ethics and incommensurable problems of using words to speak of polyphonic movement. Somewhere in the middle, there could be something wildly creative that may be activated to produce something more. Loveless (2019), notes how the idea of *emergence* is particularly relevant to research-creation because not only does it describe phenomena, but it also invites us to think about the interdisciplinarity between art and research as more-than, as *exceeding,* its constitutive parts. Speaking on what art can do when brought into relation with philosophy, Manning understands the hyphen differential between making and thinking as bringing the *minor gesture* into activation: 'The minor gesture activates the differential such that the ecology's incipient heterogeneity becomes operational' (2016:13). In other words, I must seek the generative difference that lies between polyphony and words. Manning (2016:15) notes how once the ecology of research-creation becomes active, it exceeds the registers of both art and philosophy, to generatively become *speculation*.

Research-Creation

I will now discuss the potential affinities and differences between research-creation methodologies and this research. I am interested in the theoretical borderlands research-creation opens up between creativity and scholarliness, but I am also aware that while it theoretically resonates for me, this project perhaps moves in different directions between art and theory.

Research-creation as a methodological act can be conceptualised as a conjunction, convergence or intersection of art, research and theory (Shannon 2021), 'A place were two different logics or practices are brought together to create a third' (Truman 2022: 158) in a polydisciplinamorous sense (Loveless 2019). Manning (2016: 11) draws attention to the

hyphen, the differential between making and thinking, not as a problem to be solved or homogenised but as a difference to be activated, to be kept alive. Manning notes that art and philosophy do not need or require each other; each has, and must keep, their singularity. However, it is important to inquire into what the hyphenation does to these singularities of art and philosophy when they come together through this hyphenation.

Research-creation, according to Manning (2016), explores the potential of *making* to open up philosophy, to instantiate it, and to ask how concepts in philosophy are, in themselves, a creative process. Manning asks: how can we bring art and philosophy together in a way that honours their differences? 'In what ways does the hyphen make operational interstitial modes of existence?' (ibid:11). This hyphen is, for me, the fertile borderland where research-creation potentially opens a space to address the problematics of bringing word-based philosophy to encounter practices that are more-than-words and how incommensurate and heterogenous fields of knowledge might somehow cross into each other, via the gap between research and creation.

While this project started with an arts installation project and aims to study arts practices, these things do not, in themselves, make it research-creation. Springgay (2020) notes the distinctions between *research-for-creation, research-from-creation, creative presentations of research* and conceptualises r*esearch-creation* as 'transdisciplinary work of artistic research and practice that emerges co-extensively [and simultaneously] with other research methods, technologies, theoretical frameworks, and writings' (211). In other words, according to Springgay (2022), research-creation is a collaborative and emergent *process* between researcher/s, the more-than-human, ideas philosophy and making. It is not about how research is presented or how it is informed; rather, it is about *how* research and

practice emerge with or over the same space/time with other methods and technologies, *how* it is made, the *way* of it.

Manning understands processes of research-creation as continuing to explore 'how modes of making and thinking become consolidated in emergent, collective forms of practice that are artful, if not necessarily artistic' (Manning 2016:13). This relational and creative thinking is for me a methodological strategy for how I moved through this research creatively, how I think and write, about how I played with data and theory. It has the potential to work with the problematics of writing about things that are not words, at the same time as continuing to explore the relationality between making and thinking creatively and productively.

I have, perhaps, a different background and skill set to the scholars who make up the research-creation milieu. The field of research-creation has arisen from within academic circles in Canada; in this sense, it is a geo-specific term, constructed within the neoliberal institutional mechanisms of knowledge production. (Springgay 2021; Loveless 2019; Manning & Massumi 2014). Research-creation, coming from within the academy yet in resistance and in-tension with it, instantiates the concept of the minor gesture and its relation to the majoritarian or dominant ideology (Manning 2016; Deleuze and Guattari 1987). My own background is not an institutional academy career. I do not come to research-creation from the same direction as the scholars and academies from where it has emerged.

Loveless (2015) notes that the emergence of research-creation came about with a renewed academic interest in socially engaged arts practice (SEAP). I am, in this sense, an object of this academic interest in that I have wandered for decades in freelance precarity as a SEAP with a minoritarian status within the arts. Moreover, I work with temporal art

forms not fine art, art history or conceptual arts. There is a difference in situation: research-creation has emerged, for its architects, as a way to make lines of escape in response to the dominant neo-liberal and onto-epistemological strictures of the academy they are situated in. I have come to inhabit this interstice between philosophy and art as an artist with a research scholarship in education - an *artist-researcher*. In this way, I suspect I differ from other writers on research-creation and speculative research practices, who/which it could perhaps be said to have their home within the academy.

My situation is nomadic and therefore research-creation is a way of anchoring my wayward, errant, bag lady, messy, practices to the disciplines of scholarship in order to make my ineffable work visible somehow - but I have also engaged in research-creation simply for the love of it. The academy, for me, has been a productively enabling constraint. Perhaps I could term my methodological approach *creation-research*, *artist-research* to differentiate it from but also nod to research-creation. I hope this inversion of direction brings something to the ongoing reimagining of what the interstice between art and philosophy can become. Or perhaps it is my inner interstice between *writer* and *writing-hating*.

Becoming-wordy

I suspect my relationship to writing further differentiates me from the academic origins of research-creation and its scholars for whom words are both a creative and academic medium. I have a difficult relationship with writing. I have avoided becoming a word-writing person for most of my life (although I have always been a reader). As a young child, I hated holding pens, my hands hurt, my writing was repeatedly critiqued as messy. In writing, there has been none of the liberational joy I have found in improvising music or

making messy spaces. My feelings about writing are perhaps similar to many people's feelings around improvising music or messy mark making. For me, writing is a bitty and awkward process. However, as I have discussed, I understand this research-creation or creation-research, as a meeting of different skills as well as different disciplines. That is to say it is a potential place where skills in words and skills in things that are more-than-words, might productively synthesise and transform each other.

This research addresses things that cannot be represented. When I wonder how much of the more-than-words installation-event will be tangible or intelligible in this thesis, I understand that all I can do is to trace the marks it made through words and stay faithful to the creativity of doing it and writing it. The potential of research-creation - or at least in the interstice between arts practice and philosophy however it is termed - is in the production of a methodological bordering that is transformative across skills, disciplines and practices: the song that doesn't exist in a single part but arises from the borderland, the in-between. This meeting with words, this transversal relationship between art practice and philosophy as an *artist-researcher* attempts to operate in order to 'create new forms of knowledge that have no means of evaluation within current disciplinary models' (Manning 2016: 28).

These are words that I write now, words that you read. Yet what I did as a research-creation event is not words and my film data is also not words. This represents a generative problem at the heart of this chapter. I have endeavoured to be a creative scholar. It has been a long road for me to come to a place where I can say 'I write'. But I have been transformed through this research and the writing it has required from me. As Manning and Massumi say: 'Language cannot fully describe movement. Movement does not give itself over to the order of language any more than it surrenders itself integrally to visible form' (2014: 40). There is a constant danger of reducing sense-making to meaning-making when

writing about performing-arts practices. The frustration I often feel about the wonder and beauty of the world being inevitably reduced to words. is tempered by the critical importance of being able to somehow articulate, to *tell the stories that matter* (Haraway 2016) about what is beyond words, in situations where young children's ways of knowing the world are at stake.

Loveless sets a central provocation to research-creation: 'the crafting of a research question is the crafting of a story that is also the crafting of an ethics' (Loveless 2019: 24-5). Loveless notes that working with stories, curiosity and uncertainty in this way is neither politically nor affectively neutral. She also raises the notion of crafting as method, the discipline and fidelity to a task. If art is a Way, not yet about an object, form or content (Manning 2016 p.28), then I realise that I must also *write* as a Way. While I am uncertain whether (my own) writing can ever be improvised and emergent in the same way that speaking or moving or sounding (for me) can be, I can almost conceptualise reading as emergent - a becoming-with, as I encounter other people's thought and ideas. Thinking ontologically, drawing on Massumi (2002), I wonder whether perhaps writing makes a position or node or knot out of emergence onto which readers can hook and entangle their own thoughts.

Truman gives me courage as she urges us to relinquish viewing 'writers as pre-formed subjects with distinct authorial intensions represented in unambiguous texts' (2016: 137). She asserts that the 'writer, the reader, the pen, the ink, the paper, the social-economic milieu are all part of the apparatus that produces a piece of writing' (ibid: 136). I attempt to move creatively with words, thinking with philosophy as an artistic process, approaching theory and research as an artistic and creative endeavour (Springgay 2021; Springgay and Truman 2018): doing research as art and art as research. As Manning says,

'art has always been a discipline involving inquiry, producing a form of knowledge in its own right'(2016: 26). The problematics of whether artistic forms of knowledge are commensurate with methodological ordering, are explored in research-creation (ibid) and this project is no exception.

I will finish with two stories of my first conversations-with data at the start of the pandemic.

What data and I did

My conversation with data began in early 2020, with the pandemic just weeks away. I had spent several weeks rendering (processing) the 360˚ film (it takes eight hours to render 10 minutes of 360˚ digital data so that it can be watched in real time. I had over two hours of 360˚ footage). I had sorted and organised film data and started to watch it. These two stories started at the same time, different approaches to engaging with film data.

Story 1: The call of the sky god

I will begin with a tale here to illustrate the ways in which a 360˚ camera might produce very different epistemologies - how I was briefly called by the promise of being sky-god:

When I first started to engage with the 360˚ footage, I attempted to follow a singular child around the space. I am not sure what made me try to do this but perhaps it was a way to make a start with the overwhelming polyphony of the footage. To find a way into it, in order to make sense of it. I desired the polyphonic potential of the footage, yet facing with it the intention to somehow turn it into writing took a few attempts. Research seems to be haunted by a scientific desire to 'to fix and repeat the ephemeral nature of bodily activity'

(de Frietas 2016: 557). The problems of writing something multiple and polyphonic pulled me into these logics, despite my wariness.

While it is entirely possible to follow a single child, when I tried, I actually found it extremely difficult because my attention and curiosity were constantly being pulled away from following this individuated (and slippery) child, by other things that were happening. This is also what tends to happen to attentions during the live installation events, as some of the iPad clips show as they wander away from their child subjects.

I started to make a hand drawn paper map of the child's movements. This map quickly became an intelligible mess and I suddenly realised I could neither seriously nor playfully continue. I was pinning fluid things down to places marked on a map, marking meanings on stilled bodies. Proceeding on this course would require a complex, systematic procedure in order to extract, code and classify an individuated child's journey through the installation; to abstract and reduce complexity to a linear narrative. I would then be using a frameless technology to reframe and recentre the child. I looked at the intelligible map and it looked at me. I was reminded that while video research desires to reach the body 'before discourses, before words' (Deleuze, 1989:172), it nevertheless cannot stop itself from coding the a-signifying and attempting to discipline the unruly body. I was chronically bored with this activity: chronically not wanting time to be used in this way. The chronos of dissection and extraction is not a temporality conducive to improvisation or polyphony. What story would this tell? How could this help me glimpse other ways of knowing, help me work with the affects of intelligibility? Knight 2021 works with the notion of *inefficient mapping* to disrupt the politics and violence of western cartographic practices and attend to "different readings of space, life, community, presence, time and belonging" (2021: 22). I kept the inefficient map that inefficiently mapped the relational mess of movement and

relation- and kept this story to tell. Knight notes how map making "as part of a methodological research practice initiates thoughtful encounters […] that are mindful of the impossibility of being able to capture everything, or even some things, in their entirety" (2012:27). This inefficient mapping became a generative methodological false step towards working creatively with data, allowing movement to move in my thinking and my research methods.

It also occurs to me that perhaps the child, who I have named Buzzer, in film as in flesh, just did not want to be followed by my eyes.
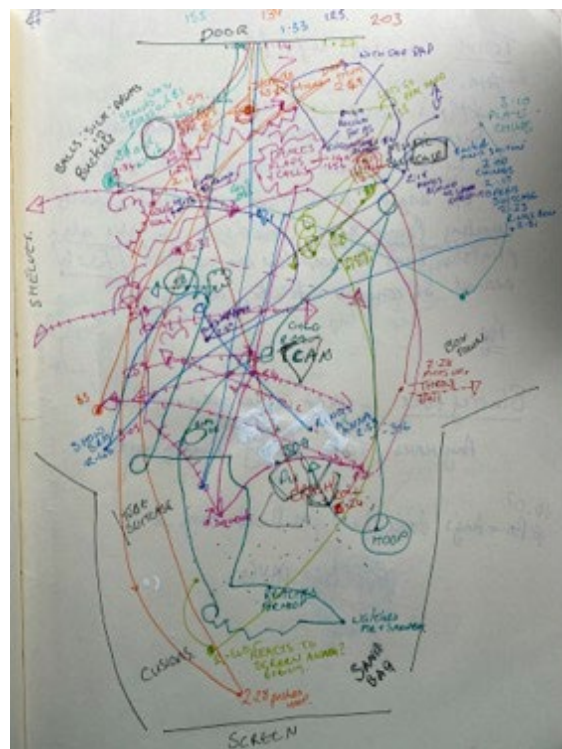
Figure 25:mapping movement

Story 2: Diving into the middle of things

Turning up to my daily date with data, diving into the middle of things, with no particular method other than curiosity, my attention was caught by an iPad clip from the

middle of the second session. This was a choice influenced by a colourful, particularly

beautiful thumbnail on my computer. It is worth mentioning the beauty of these video clips.

The installation itself was beautiful and the data clips are luminous, vibrant, gem-like

thumbnails on my desktop.

Figure 26: data clip thumbnails

The clip, IMG _ 0374.MOV (bottom row 2nd from the right) is about 20 seconds long, filmed

on an iPad, held by a practitioner, initially focused on a child who I name *Child-with-string* in

the research-creation storytelling. Initially, the iPad focusses on child-with-string who is

playing with a ball. Child-with-string wanders out of frame, but the iPad camera keeps

filming, wandering around the space. I became intrigued by the audio sound-scape of the

piece and particularly, to hear a refrain of an unseen child calling out '*Got it, got it! …. Got it,*

got it!... Got it, got it!' and to be answered by two different practitioners calling back *'Got it'*

and *'Got it'* separately but in time and rhythm with the child. This refrain of *'Got it, Got it'*

(repeated eight times) is on the sound audio but not in the frame of the iPad clip. It was not

possible on the iPad clip to see who is saying *'Got it!'* or what it is referring to. So, following

curiosity and tentacularly testing the technology of the three data sources, I turned to the

circular-seeing 360˚ footage and searched around for the piece of time I could see on the

short iPad clip. I was curious to find out more about the child-who-called-Got-it and the practitioners who called *'got it, got it!'* back and to find out what indeed had become 'Got'. It is not lost on me that a refrain made of words, the very things I am attempting to get beyond, becomes this portal through which I enter the data. But *'Got it!'* was more-than-words: it was a refrain, a song that was taken up (as I discussed in Chapter 3). I could clearly hear it and use it to synchronise the film data. As such, *'Got it!'* exceeded its meanings.

When I found the same piece of *'Got it!'* time on the 360˚ footage (and I did this by listening), I could see the practitioner holding the iPad that filmed the clip I had just been viewing. I had the first of many jolts of time and space shifting as something I thought that I knew became unknown. The two different films seem like radically different worlds. They collide into each other. Bertetto (2017) writing on Deleuze, notes how 'the vision of movement images provokes mental processes and intellectual vibrations of a radically new kind in the spectator' (2017: 794), forcing them to think through a shock of the new: the producing of a thinking in motion. The *truth* of what I have been seeing through the iPad eye is suddenly thrown into deep uncertainty, shattered into what Deleuze termed *crystal-images* which produce new imaginaries and reanimations through the *power of the false* (1989).

While watching the refrain of *'Got it'* on the 360˚ camera footage, I noticed that the child-who-said-Got-It moved Tcam around the room and so I reached, tentacularly, following video sensing curiosity, to look at the Tcam film data. The Tcam film does not have sound but has a rich, grainy and intimate quality. Set close to the floor, on wheels and on a slight angle, the image is produced as Tcam is moved around the space mostly by the children. Shockingly different from both the 360˚ film and also very different from the child-centred, adult-held iPad, the Tcam offers up a different world, differently sensed data.

Juxtaposing and synchronising these three sets of (beautiful) film data as a tryptic made this short piece of time very rich, its polyphonic nature and its different temporalities becoming tangible, the visual excess 'operationalised as a multi-voiced polyphonic event' (White 2016:1).

The whole experience of encountering the data became exciting and mysterious, 'providing insights into what observation 'from the inside' looks like and how it [might] be actualised in the early years' (MacRae & MacLure 2021:3). I became fascinated by piecing time and movement together and by playing the three film sets simultaneously. I began to understand something of the myriad threads that led into and out of something, some knot of crystal time that I was drawn to. A particular small, minor, movement/gesture/interaction would take place on all three cameras, and I found these gestures or motifs a way of anchoring my attention and the three data sets in this sea of time. It helped me to manage the almost infinite space of 360° data in such a way that I could travel off in many directions and loop back to a gesture hooked by three different camera eyes, anchoring myself to it and springing off again. I will discuss the power of the false and take different flights from this clip in Chapter 5.

The term anchor, meaning to hold something still in moving water, is derived from the old English 'anga' or hook, angle. Hook is also a term used by musicians and dancers - a repeating refrain to return to; anchor-people hold broadcasts continuities; the televised stories and sections return back to the anchor in the studio. This looping forth from and returning to a temporal/gestural anchor or hook, becomes a tentacular, bag weaving, methodological and artistic strategy for this research-creation. It became a way to be able to work with polytemporal complexity.   I think about how a hook, a turning-together and returning, is also a strategy for developing *complicité* between improvising partners in

music, a collective looping that stitches the improvisation together. The etymology of conversation is 'turn together' or 'turn with'. I follow a desire to turn-with, to make conversation-with data, to turn with it. We hook each other in and anchor ourselves to the other, in order to think in motion, holding ourselves together in moving time: knotting ideas, thought, movement, making enabling constraints (Manning 2009) out of synchronised gestures in order to shape our improvised, symbiotic dance together. In this way, the data and I were able to work with uncertainty and curiosity in a way that was generative of on-going questions. In this way, improvisation with data became a methodological Art or as Manning (2016) might say - a Way.

Bertetto (2017) speaks of how our brains and bodies are hooked into and about crystals of time, in which the film image looks back at the past and announces the future. Bertetto talks about how Deleuze's 'power of the false' affirms an 'eidetics of the spirit', giving way to drifts, knots, detours, lines of flights that in turn, give way to radically new perspectives. In this way, the inherent falsity of film data, its inability to represent truth chimes against itself, cutting from one camera eye to the other, producing something else, something other than itself and what it filmed.

While I certainly felt the splinterings of truth and time as I first engaged with the three film sets, I found myself also thinking with knots and lines as well as crystals and shards: stitching as well as shattering. Perhaps the accessibility of film technologies that no longer need to be made into final cuts, but rather can be left uncut to be played with, wound and unwound, remaining elastic, mutable, lend themselves to tangles and knots. Hooks and lines and knotted time connect me productively to tentacular thinking and my methodological figure of bag lady. Hooks are the tools with which bags (and nets) are

woven from string, from lines, – and these first hooks would be fingers: fingers as both hooks and tentacles.

Weaving and knitting and crocheting are forms of looping refrains that make things which hold things so that new combinations are possible. Thinking with Donna Haraway' s concept of tentacular thinking (2016) and drawing on the etymology of *tentacle* - to feel and to try - I reach through my data in many directions, hooking in thought and theory and memory and sense and intuition. These fingery hooks allow me to feel and try to weave film data time into something that holds something, such as a story. An anchor/tentacle/knot/net holds me to gestural time in order to explore towards and away from that provisional place.

As I lined up the three film sets carefully, watching, wondering about small things, I notice how a set of adult legs looks and feels different on each film source. I notice how a figure/ball/body arrives through time to the point where I stop the film. I dwell upon the *haptic* textures that manifest so well through Tcam. There is a touch of magic when I notice where the other cameras are on the 360˚ film. Sometimes I scroll the film backwards to see where something emerged from. But mostly, I play around with knots of data time where a gesture has been hooked on all three cameras. These knots call to me. I reel them in tightly together and then let them go so that time rushes forwards from the knot. Realities separate and become desynchronised. Time runs in myriad directions, shards and splinters, knots and stitches. This feels amazingly untethered and adventurous, as if anything could happen. Every time I do it, every time I let the film run, it is different; I am different: I see and feel different things. I could go anywhere from these knotty places. *But not everywhere*. So, in order to commit to something, the data and I enter into a relationship of creative uncertainty we follow - or make - a line, hooking it back and forth, taking and offering each

other the thread. Theory joins us, hooking the thread and we catch and pull it back, making

a knot. A pandemic is woven in. The 'I' that thinks and writes, transforms as the thread

keeps hooking me in, hooking and stitching and weaving research.

The gestural hooks and refrains that pulled me into knots of film-time became

stitches and threads that pulled at my senses. Viewing and re-viewing these three sources of

data became a strange and rich process where time looped around itself, accelerating and

decelerating as I moved between data sources: a knotty starting point from right in the

middle of things. It was a creative way to deal with the almost limitless potential of the 360˚

film, a way through the chaos of a complex environment. Feeling along various threads back

and forth through time, through camera to camera, the threads pulled me from one eye to

another, taking me on a curious treasure hunt. The camera eyes acted on me, revealing the

shapeshifting nature of truth making in which the past appears in different present forms,

disorientating and reorientating my thinking.

To conclude

In this chapter, I have unpacked some of the contents of my methodological toolbag:

curiosity, improvisation and polyphony; knots and tentacles. I have explored the potentials

of research-creation to exceed the disciplines with which it makes borderlands: in my case,

the arts, education and philosophy. I have discussed the knotty ethical problematics of

using words to produce a research object out of events that were not words and exceed

what words can do. I have asked how this wordy problematic can act as an enabling

constraint, enabling stories to emerge from data.

Manning's (2016) emancipatory figurings of what research-creation is capable of

reminds me of my own improvisatory arts practices. It is like making an unknown music. It

refigures research as capable of opening up to the present time, to the potential of the

virtual, rather than driven by already-known methodological logics. Research-creation refutes these binaries, and it does so by the 'creation of a problem that is truly productive of inquiry' (ibid: 12). Manning understands study as something that 'delights in the activation of the as-yet-unthought' (ibid); something that, for me, seems improvisational: 'Inventing problems that have no home or reference yet' (ibid). 'Such problems require collective study and what emerges from study/research-creation will *never be an answer.* What emerges will be experimentation, encounter and opening up to another problem' (ibid my italics).

The sense and affects of what happened in the installation-event, the efflorescent and multiplicitous happenings young children made and encountered, can barely be tacked down by words. Yet through technologies, creative-research strategies and *words,* I have thrown tiny hooks and anchors into a wild heterogenous event. I have been guided by aesthetic sense rather than already-known procedures of logic and extraction (Truman & Springgay 2018: 204), weaving material into word speculatively and experimentally, in the full knowledge that I am leaving so much more, sensual, expressive and the wild flapping and fluttering away from these tethers.

My nomadic wanderings through data have felt like the most generative way I could proceed - and the most faithful to the spirit of improvisation: to keep moving with the film data, synthesising it with what is present to me, working with theory and speculation, open to emergence and complexity; thinking tentacularly and polyphonically in order to tell these messy stories. In the next chapter I will continue to tell this messy story of how I worked and played with data and think more with time and Deleuze's power of the false.

Chapter 5: A Thousand Little Lives and Deaths

Introduction

This chapter starts in the middle of things and feels around for edges and anomalies.

It also works with time. I started writing this piece at the beginning of 2020, just as the

pandemic hit. While making this chapter, different temporalities of writing have become

imbricated as it has been worked on, till now, early 2023. It is a risky, speculative story of

the life and death of an assemblage that has been processed through many other 'nows'

since early 2020 but the 'now' of the first global shock of the pandemic etches, marks and

shapes this writing, just as it shaped my imagination, wanderings and feelings at that very

particular time. The world, then, was coping with a death of *life-as-usual,* a huge and

uncertain change. Bodily life was hastily reconfigured to an online format. The vitality of

becoming-bodily-with with other humans in physical space was replaced by the incorporeal

bardo of zoom rooms.

At the end of the previous chapter, I told stories of how the radically different

qualities of the three camera's data *made special* 'things that would be overlooked from an

'adult-centric view' (Caton 2019: 112). There, in that story, I told the tale of how I came to be on the brink of the tales I am now about to tell here. Here, I make allegiance with Deleuze's *power of the false* (Deleuze 1989; Bertetto 2017; Marks 2000) in order to understand how the three camera eyes are able to untether truth and time. Manipulating time, through rolling, looping and knotting film-time back and forth, I explore how time and truth are splintered and remade.

Watching the film-data from the early pandemic time and place was shocking, not only wondering about how children, families were doing (I no longer had line of communication with them) but watching so many breathing bodies in a space, where air and breath and coughs were entangled goings-on, was, at that time, unthinkable. Watching the installation event, at that time, was watching a world that had become forbidden. Such an event had become against the law, harmful, irresponsible, impossible. The world where the beautiful, carnivalesque event of the MTW installation could manifest was no longer in existence; it was a death, the first death told in this story. I came to think of the film-children as ghosts that I had spent time with. I met the ghost of myself there. We haunted each other in the dream-time of film.

Later, I will bring in Braidotti's vital materialist thinking on death and her vital materialist thought on the concept of *Zoë* (2013) to understand how inhuman lives and deaths are playing out in that irreducible gap between the word and the thing.

A tiny gesture in time

Child-who-watched squats by the Hole in the centre of the white silk parachute which lies on the floor. They prod and poke at the Hole, the edges of it. [data from Tcam, iPad and 360˚ film]

The iPad clip is 25 seconds long. The audio of the clip begins with a refrain of *'Got it! got it!'* called out by an unseen child. Centred in the frame, by practitioner hands, holding the iPad, is Child-turning-with-string. Child-turning-with-string is standing on the silk parachute which is spread over the floor. The coloured lights in the room make this silk floor iridescent with colour. Child-turning-with-string moves out of frame but instead of following them, the iPad frame sweeps back and forth around the room, taking in movements of bodies. At the very end of the iPad clip, Child-who-watched crouches down by the Hole in the centre of the parachute and pokes the edge, lifting it a little and then dropping it.

Such a small gesture could easily become lost; it is tiny, inconsequential, banal. However, the gesture of picking up and dropping is found on all three different camera-eyes: 360˚, Tcam and iPad. It is made to repeat and reflect in triplicate; it becomes part of a knot of time that anchors together three very different qualities of film data sources - as I described in Chapter 4. The knotting and anchoring of the data sets together, the re-viewing, somehow amplifies the expression and sense of Child-who-watched's gesture, as it anchors film sets and at the same time untethers the truth of each one.

I described in Chapter 5 how shocking I initially found this encounter with the falsehood of film and how I became fascinated with knots of time. Thinking with Deleuze's concept of the time-image in cinema (1989) and how time-image cinema breaks free from causality and linearity, makes me realise what strange tricks past time plays, firstly, as I began to engage with film data and memory, and later (now) as I write about it. Thinking also with Deleuze's crystal-image, which I shall shortly discuss, has helped me to understand and articulate my relationship with the film data, not as pieces of truth but as reflected pieces of past time that dance and distort, playing tricks in order to reimagine, reanimate and rethink the world. I have delved very deeply into short pieces of film time while other

times have washed over me. Understanding the child-bodies that populate the installation

on film as occupying an unknowable, liminal, interstitial landscape rather than as objects to

be studied, allows a deep philosophical and ethical refiguring. The MTW installation

landscape works very differently as each camera eye produces different textures,

movements, temporality and senses.

Figure 1: the gesture - Tcam

Figure 2: the gesture - 360˚

Figure 3: the gesture - iPad

Time image

As I looped time forward and back to the gestural anchor point, re-playing the tryptic

of films, child and Hole lured me in. I became drawn into, affected and curious by the way in

which they encounter each other, what is expressed by the way in which Child-who-

watched pokes and pulls the Hole, how the Hole drops to the floor. This poke and pull stays

with me as it anchors, synchronises then untethers and unsynchronises my viewing of this

of data-time, as I scroll each film data set back and forth through its particular treatment of

movement and time. Each different camera pulls the Hole and Child-who-watched into their

particular movement and time. Or perhaps the camera eyes are pulled into the gesture in

different ways because of their own particular movements and technologies.

Marks (2000: 40) draws on the Deleuzian *image of time* (which in turn draws on

Bergsonian *duration)* to examine how the image of time is always splitting into two parts: a

present that passes, and the time that is seized and preserved - in Deleuzian terms the

actual image and the *virtual image*. Film (or any kind of data) preserves a virtual image of

time while the actuality of what happened can never be fully recalled. Instances of the

virtual image of time would be: how the MTW installation was set up; who was in it; how

they moved; what things looked like. Such instances are the past preserved on cameras. This

differs from the present that passes, the *actual* image of time (for instance, how exhausted I

felt, and how relieved I was that the MTW sessions felt like an enjoyable rumpus). The

actual image of time is not recalled by the film.

Virtual images often come to stand in for our memories (recollection-images) whilst

also competing with them. Marks notes that there can be no objective record of the past in

this forking model of time; '[t]he past is preserved among various discursive strata that

confront each other with incommensurable truths' (2000:65). But in this splintering of time,

actual and virtual images reflect each other, creating shards of mirror-time that form what

Deleuze called a *crystal-image.* The crystal-image breaks the past (preserved and passing,

actual and virtual) free from its origins and reconstitutes it to produce a new image which

combines real and imaginary, actual and virtual.

Marks notes how this *power of the false* (Deleuze 1989), where nothing can be referred to as true, has the potential to make possible transections between cultural regimes of knowledge, particularly where there are no claims to authenticity. Claims of authenticity merely replicate the dominant culture such as the way in which film has traditionally upheld the power of truth (for example, in research such as Gesell's that I discussed in Chapter 3). Thus, the power of the false contains the potential to make adult regimes of knowledge about the child bump against the child's way of knowing the world so that these knowledges reflect and refract each other, speculatively and creatively breaking down certainty, questioning memory, refiguring time. Deleuze (1989:132) understood crystalline understandings as understandings of the *seer.* His thinking on the time image emerged from post-WW2 film landscapes that were de-territorialised, deserted, re-inhabited. Marks notes that these spaces were intercultural, de-territorialised spaces: borderlands; interstices; places that disrupt the colonial gaze. In time-image cinema, these places are populated by seers rather than actors, people who are 'aware of violent histories to which its dominant population is blind' (Marks 2000 :27-28). I attempt to watch the film data as a seer with an *awakeness* to how childhood onto-epistemologies are being colonised by adults as each camera holds different regimes of knowledge which crash into each other, splintering truths. My three camera eyes, with their different treatments of time, encounter each other and reconfigure progressive and sequential time by shattering it. Through this crystalline time-image the temporal-onto-epistemology of child is glimpsed - or at least, the certainty of adult temporality is disrupted.

Nothing.

There is something about the hole-and-gesture, this *no-thing*, something in excess of meaning (Holmes and Jones 2013) when Child-who-watched picks the edge of the Hole up. It is a different hole to the hole it that it was earlier in the session, when the parachute and hole had been flying around the room, wafted by human hands and installation air. By the time of Child-who-watched's gesture-with-hole, the hole has undergone a transformation.

Running time back and forth with these very different camera eyes makes the familiar strange and makes space for the barely tangible no-things that are almost beyond what is possible to 'know, perceive or even hope to imagine" (Holmes & Jones 2013: 358). The hole/prod/poke borders onto, or somehow speaks to no-thing. A hole is something which is defined by absence. And the child's gesture is absent of tangible meaning. This shifting crystal-image is further splintered, refracted, distorted by the way that each camera eye sees the no-thing differently. The cameras put 'truth' in crisis in their production of the new. Crystal glimpsing cannot help but escape the pinning of meaning, the claiming of knowledge and its containing by signification; it borders onto those other faces of the world hidden from signification and meaning (Lyotard 1971 cited in Deleuze and Guattari 1977). Holmes and Jones note how the no-thing is the potential of something more, something uncontrollable and superfluous in its excess of flows and energies. It exceeds its telling.

My flight, my risky departure from telling a straightforward story, come as I began to think and imagine the poking prodding gesture alongside matters of life and death. Questions of movement and stillness affect me as the gesture, and I push and poke each other during the first months of the pandemic lockdown. As I have already said, I could go almost anywhere from this place but not everywhere. I began to actualise a future, a thread, a story, a tale from the myriad virtual potentials.

I follow the pulling of the hole. I don't know where this is heading. It will get me into trouble, this speculation, because it is not an interpretation or truth claim. I am not assigning the poke and pull or the hole meaning or definition. I am imagining *through* this phenomenon, invoking Deleuze's *power of the false* (Deleuze 1989; Marks 2000) where nothing can be claimed to be true, yet something is nevertheless manifested from fragmented and looping data, memory and feeling. Thinking with the etymological roots of *analysis,* loosening constitutive parts, *untethering*, turning over, I make spidery anchorings and weave tentacular threads. I make knots and detachments (Haraway 2016). Bags are woven, loosened, emptied, and this story is made as I untether the gesture to see what unfolds, spins out.

I think of how Murris and Peers (2022) meet with data clips not as objects or representations of what really happened, but as *sensuous materiality* which deeply *æffects* their analysis. Heartened by this and also Barad and Galdolfin (2022) who ask 'Who/what is doing the thinking and with what and who is thinking happening (because it never happens alone)' (27), I begin to understand this story as manifesting through a set of relationships that are more-than 'me'. According to Barad (2007, 2014, 2021), things (and no-things) are not assumed to exist before they are in relation with each other. They are always already in relation. The 'me' that writes this story is working and being worked on by the story, the sensuous film-matter, æffetive memory, many re-turnings of data and story. An in-the-past researcher-in-pandemic, the poke and pull between the hands of Child-who-watched, a hole, three camera eyes, matters of life and death, are all relational tentacles of this story 'a be(com)ing æffected by the experience of bodies always already in relation' (Murris & Peers 2022: 334).

Uncertain processes

This 'I' that writes must trust in uncertain processes as this collaborative tentacularity (Haraway 2016) becomes a methodological analysis of improvisation. Stover (2017) examines through Deleuzio-Guattarian thinking, how the improvisational moment in music is a 'performed event that cuts into the ongoing flow of time, selecting a singular path into the virtual future and thereby actualising one of its many potentials' (1). I don't know *how* or *why* 'I' take this leap *with* triple camera-eye gesture, *with* Child-who-watched, *with* the life and death of a hole. That spark of impulse is, I think, beyond words or reason, but once begun, everything shifts. This is the story that has been actualised out of a million potentials of the data. The 'I'-that-writes stays with it and all that is risked. I cannot make claims to the truth of any of it, but I am still going to tell it because the voice of this story urged the 'me'-that writes. This leaky story will not be silenced. This mattering of lives and deaths.

This actualisation is, in Deleuzian thinking, an *event* which takes place transversally across multiple temporalities - the pre-pandemic time of the installation and gesture; the encounter of the filmed gesture by data and I during the early pandemic; the two and a half years (and counting) that I have been writing it; the (future) finishing of a thesis. The gesture/hole event constitutes a living present in that it is alive in the world - as I write of this gesture of a child now, and as it is read now by you, the reader. The event interprets and modifies the past as it engages with the present - as I weave data, speculation, theory, pandemic, memory and writing. It marks the present moment, 'the cut or caesura that assembles past and future into distinct, asymmetrical series' (Stover 2017: 2).

From the gesture/hole, I follow the hole back in time, rewinding, unwinding to when vitality, air and bodies were rushing and sweeping through it; when it was a breathing mouth of a silk amoeba: time travelling and time refiguring in order to see what the hole did. What Holes do. And what life and death do with Holes.

Anomalous edges of the middle of things

Data story:360˚ camera. Clip MTWPM4: 1minute 20 secs

The hole is at the centre of a large, white silk parachute. The silk is put into motion by the hands of the adults. The edge-of-silk that meets these hands is a rising and falling line. The adult hands are drawn- or move - into complicité (MacRae & Arculus 2020), a distribution of adult subjectivities becoming-wafters through the silk. Hands and silk catch light & air. Like breath. Together we become a thing that breathes. A pack. A brea-thing through which air rushes through the hole. The upper and lower surfaces of the parachute create an underland and an overworld animated by silk and hand and space and air and the hole is a (brea-thing) portal cutting between the two.

Figure 27: parachute assemblage from 360˚

Figure 28:parachute assemblage form iPad

Edge-dancer (a child who is rarely in the centre of things but always experimenting) is the

first to discover that Hole is a portal through which their body can move between two

worlds - the underland and overworld of the billowing silk parachute. I remember Edge-dancer doing this and it is also caught by Tcam's eye and the 360˚ camera. The hole is a threshold, a liminal space where a body can be in both places at the same time. Edge-dancer often inhabits anomalous positions. Delpech-Ramey writes, 'What is anomalous is not that which is outside of the group or divergent within it, but that individual who forms a porous border between the group and its Outside' (2010: 13). Edge-dancer's anomalous, border-crossing, discovery is that of creative experimentation. They are always finding, looping and tracing cracks, gaps, fissures and portals (their mother dressed them in white so she could easily spot them; such is their power to make lines of escape). Edge-dancer, a child full of expression and curiosity, without use (or need) for words, makes me think with Delpech-Ramey (2010: 16) in recognising Edge-dancer as 'the creative individual who passes to the edge, who experiments most intensely, who is drawn most deeply into that plane of immanence harbouring the potentials for intensive transformation'. Edge-dancer's encounter with the hole is a node where I can feel in another direction or line of drift to send tentacles along. A bud forms, emerging with Deleuze and Guattari's ideas on becoming anomalous and becoming imperceptible (1987) which I will return to in Chapter 6. Edge-dancer often occupies anomalous positions in the world, anomalous in relation to the group. Their ongoing experimentation, such as discovering and occupying the hole in the parachute 'has the potential to change the whole by setting in motion new and unexpected shifts' (Valente & Boldt 2015: 568).

Figure 29: Edge-dancer goes through hole 1. Filmed by Tcam

Figure 30: Edge-dancer goes through hole2. Filmed by Tcam

Figure 31: Edge dancer goes through hole 3. Filmed by Tcam

Figure 32: Edge dancer goes through hole 4. Filmed by Tcam

Scrolling around on the 360˚, I see Child-who-watched is also, at this time, in an anomalous, edge position. As the pack swarms and thickens beneath the parachute assemblage, Child-who-watched's position moves to, and stays by the edge of things. Valente and Boldt (2015) note how the anomalous position is not an expression of individual will or difference but a production of anomaly by the swerving of the flock that transfers one member to the outside edge. Child-who-watched inhabits a watching temporality, a seer perhaps?

The MTW installation, in its heterogenic, shifting and emergent characteristics, calls forth an ongoing production of anomaly which 'changes the whole by setting in motion new and unexpected shifts' (Valente & Boldt 2015: 568). There are many different ways of inhabiting time going on at once. Anomaly works with the alliance and relationality of flocks and packs, bordering the group, finding its edges in order to cut into new ways of becoming; it works with the heterogenic characteristics of the MTW installation, moving in unimagined and unexpected ways. In the improvised and emergent goings-on of the MTW installation timespace, 'the position of the anomalous individual is constantly shifting and […]

157

individuals flow through this role of the anomalous individual in turn as they become the edge of the whole' (Lee 2003: 108).

I start to see how the characteristics, parameters and temporalities within the installation work-with, and produce, emergent and ongoing flows of *pack-ness* and *anomaly* and how the different cameras tell the tales of plurality of time and multiplicity of movement. With the 360˚ and its temporality, I watch the ebbs and flows of pack murmuration, the iPad wanders distractedly in circles and Tcam's thin-time of silence and grainy, haptic, emptiness (Marks 2000: 29) splinters adult time.

I juxtapose this thinking with anomaly and multiple temporality with the tyranny of curriculum in this neoliberal milieu: how it attempts to still the movements of the pack and synchronise its temporality; how it extracts a generality from the centre of the pack and tethers the pack to that generality, cutting it away from the anomalous, the means of its own transformation (Tsing 2014). Un synchronised children, those who occupy anomalous positions (even temporarily) in relation to this domesticated pack, become deeply problematised. Children like Edge-dancer are commonly problematised through their educations, despite their extraordinary abilities. Child-who-watched, by staying on the edge also runs the risk of being problematised by 'not joining in', not doing what everyone else is doing. For example, earlier in the session, an educator put a bell in Child-who-watched's hand, urging them (in words) to 'ring it' so that a video clip can be made for nursery records: one that shows them *joining in* rather than watching.

Anomalous and anomaly come from the Greek 'not-even'. Anomaly is a messy business; it does not fit with the scheme of things. It brings discomfort and awkwardness. While the anomalous can never be in the *normal*, centre pack position, it is always in relation: it works with the pack by finding its edges. Anomaly is 'the cutting edge of de-

territorialisation […] a position or set of positions in relation to a multiplicity' (Deleuze and Guattari 1987: 245). It is of the pack and will always continue to operate and transform the pack; it is a 'phenomenon of bordering' (ibid). Marguch (2018) notes how the anomalous is not visible as antinormative because it is always unstable, always on the edges of things; 'it is not about agency but assemblages. It does not define an identity but creates milieus of becoming. It does not refer to individuals, but sheds light on processes of singularisation' (551). I hold these thoughts in mind, thinking with murmurations, distracted wanderings and thin, fertile timescapes on camera eyes that seem to actualise 'the immanent capacity of bodies to vary' (Margush 2018: 543).

The bodily understanding of being inside and under the parachute is not the same as the bodily understanding of watching from the edges. It is not the same as the *overstanding* that I see with the 360˚ camera eye. The 360˚ view warns me again of Haraway's 'god trick of seeing everything from nowhere' (1988: 581). But its distance also helps me understand, or rather speculate-with, the parachute assemblage as a living entity: a big, breathing silk amoeba; an event-creature that is alive in the world and part of this story.

Invoking Deleuze's *power of the false* (1989), I weave in Tcam's haptic eye as well as my memory and my ongoing relationship with the parachute in order to form a crystal image of parachute life form with a breathing mouth hole. Tcam gives a view from the edge of this silky beast, different again: not distanced but also not fully immersed; a proximity and a sight-line that would be similar to that of Child-who-watched. Close to the edge. Tcam's eye sees the parachute edge as a line and the silk as a turbulent mass block following the line, which passes before its eye suddenly, activating metres of silk behind it (see Edge - dancer 4). An iPad clip wanders aimlessly across the space as silk billows.

Watching the parachute movement through three cameras, untethers time and movement from each other. Smith discusses how Deleuze argued that by liberating time from movement, truth gives way to the powers of the false. 'Just as time is freed from its subordination to the true (the false is no longer 'not true') and like time, assumes an autonomy of its own' (Smith 2019: 30). Not only am I watching different truths, I am watching different times, different intensities. The movements of silk, Child-with-string, adult body, Edge-dancer, Child-who-watched, are not unfolding in homogenous time.

The spherical 360° eye can (amongst other things) transform the parachute/silk assemblage into an amoeba, a time-lapse temporality of a simple biological form. Adult hands move the edge, wafting and activating the parachute in rhythm. I think about this adult positioning, both activating and on the edge of a turbulent, silken happening. Adult bodies are partially but not completely submerged, on a kind of shoreline edge. There is a cooing of adult voices as silk flips up and down, a pleasure of its rise and fall, of the rhythmic pulsing complicity adults are drawn into.

Here, this story sprouts another bud as I wonder if somewhere in this edge wafting there is a *matterphor* (Barad and Gandorfer 2021), a reconceptualisation to help rethink pedagogical relations between adult and child as fluid *edgelands* or *borderlands*? Bordering is a more mobile and complex concept than commonplace child/adult relations of scaffolding. Scaffolding is a Vygotskyian term used extensively in early childhood education. It is particularly used around developmental narratives. For example, 'Scaffolding is a way to support children's learning of language. It helps a child move from simple language to more complicated language' (speechandlanguage.or.uk).

Edgelands, on the other hand, evoke wild lands where adults risk losing themselves and their control of things, where everyone risks experiencing being on the edge of the pack

160

and the danger that comes with becoming-anomalous. Edgelands involve a bordering of child/adult onto-epistemologies where adults inhabit the tidal edgelands of child sensoriums in order to ebb and flow with children in the world. Following Murris and Peers' call (2022) to do 'Justice (ethics) to the complexity (epistemological) of the world of which we are part of (ontological)' (333-334), I linger with this wafting silk assemblage, its breathing, world-transecting hole, its fluctuating edgelands, its packs and anomalies, the way it invites different ways of knowing and becoming with it.

Swan song: death of a Hole (the 360˚ eye, memory and listening to audio)

A swan song denotes the final and glorious expressive gesture of something that is dying or leaving.

A thing so much alive (as this hole, silk, hand, breath creature) cannot last for ever.

(360˚ MTWPM4: 3 minutes, 40 seconds) Child-who-laughed grasps the edges around the hole from underneath. Hooks the edges with their fingers. They dive up through Hole as silk comes down. From the centre of the Overworld they laugh.

"Ah ha ha!".

"Ah ha ha!" replies a chorus of adult voices - those whose hands are tethering and wafting silk and edge and hole. Adult hands pull and waft overworld down and Child-who-laughed can survey Overworld from its centre.

"ah ha ha!" back and forth.

Child-who-laughed's hands hook and push the hole back up over their head. They skip around Underland, flapping their arms to push the silk roof back up.

Figure 33: The parachute amoeba from 360˚

Figure 34: The hole from 360˚ eye

Figure 35: Child-who-laughed from iPad eye.

Figure 36: Child-who-laughed and hole from 360˚ eye.

The life of this silk/ hand/air/hole/edge feature *feels* like it is beginning to wane. This is what I have often *felt* during the many times I have been in assemblages with this parachute. I cannot separate my memory from the 360˚ film. Sensing and accepting endings, the over lapping tidal nature of polyphony, is an important improvisor skill. More children move out from the canopy. Edge-dancer, who appears to have been under all of the time, moves to the edge of the installation space. There is however, one last expressive movement: the assemblage swan song, a group improvisation that expresses the ending. Child-who-laughed goes through hole once more from Underland. Her hands do not grasp hole's edge but elegantly dive up and out, arms smooth out sideways, palms face down feeling silk, like a giant skirt. Child-who-laughed issues a command from the between of Overworld/Underland, hole divides her body into two worlds, hole and Child-who-laughed in the centre of the adult hands and bodies.

"I wanna bounce it!...I wanna bounce it!... I wanna bounce it!"

  "bounce it" echo adult tongues.

And adult hands begin to shake the silk rapidly up and down. There is a sound of fabric whipping and shaking. Child-who-laughed laughs, squeals and grasps the edge of hole, shaking the edge vigorously and laughing, pumping their legs. Child-who-laughed's laughter is the most intense thing in the room. Paroxysms of squarks and squeals. The almost unbearable. The actually unbearable.

[audio clip: https://on.soundcloud.com/nnQck]

The laughter also heralds an ending, a death: an end that has been written into the life of the parachute assemblage. Different kinds of lives and deaths have different intensities. They take place over different temporalities. Hearing Child-who-laughed's expressive laughter as something monstrously alive, puts me in mind of Braidotti's thoughts on *Zoë*, her term for the force of absolute vitality, radical alterity that encompasses both life and death. Zoë is 'endless cosmic energy, which is as fierce as it is self-organising' (2013: 135). We can only bear as much as we can bear. The edge of life's almost unbearable vitality can be heard and sensed and felt in Child-who-laughed's delirious vocal expression. Close to the edge. Their laughter becomes a series of long Uuuur…Uuuur…Uuuuur… sounds: guttural vocalisations, descending in pitch expressing something that has peaked, something that is descending, finishing, changing. There is a pleasure of resolution that does not seek to resist its deceleration. The pleasure of slowing down, moving away from the peak. And it is savoured. Child-who-laughed briefly disappears under hole and adult hands waft silk one last time, high into the firmament of the space. Silk ripples, wafts, falls.

Those who practice improvisation are perhaps attuned to how entangled balls of affect and expression emerge, bloom and subside within spaces such as the MTW

installation. Heterogenous phenomena and multiple temporalities ongoingly happen between people and things (and between things that are not human). They can be seen, heard, touched, tasted, smelled and sensed and they also carry an emotional, affective, felt charge. These phenomena emerge and disperse like waves. We find them, ride them and they carry us to their ends, or we jump into another wave. Improvisations are lives and deaths of assemblages that we are part of, we inhabit.

This makes me wonder with children's leaky, porous sense of self and other (Manning 2012; Stern 1985; Guattari 1995; Abram 2010): I think about how children (excellent improvisors) live and die alongside the flows of everyday assemblages and entangled balls of affect and expression that they are part of. As adults we have come to believe in our boundaried and individual selves as a truth: it is hard to think otherwise. But might children know lives and deaths of everyday things in entangled ways that we have forgotten? I think of how a two-year-old porous subjectivity is not attached to a bounded, discrete, identity and therefore, children's relationship with life/death may radically differ to our adult obsessions with our 'own' mortalities and the death of our personal self. What becomes generated when I think of the living and dying of the parachute assemblage, one of many little lives and deaths taking place during the MTW session? What is expressed by the laughter, which also lives and dies? By de-centring adult conceptualisations of living and dying, I come to an understanding of the thousand little lives and deaths that are playing out constantly. I become aware, out of the corner of my senses and through fractured truths in camera data, how lives and deaths might be understood through (speculative or re-membered) onto-epistemologies of children.

Once the silk falls, children's bodies begin to know that they can it pin down. I see this on the 360˚ camera, but I also remember it and know it from many other parachute events I have been part of. This is a kind of emergent, collective knowing. A contagion of knowing. Bodies come from the Edge of room and Edge of silk, come through hole. Billows become ripples around these body weights. Then it is over. Overworld falls and Underland collapses. The silk and hole amoeba gives out its last breath. Child-who-laughed comes through Hole for the last time, pushes Hole to the floor and steps out on to this new, stilled landscape. Adult hands drop silk edge to floor. Silk becomes floor. Some adult hands send small ripples through the silk floor. Adult and child feet explore this new land. Edge-dancer returns from the edge to roll upon the silk floor. His mother playfully pounces upon him. Hole sinks to stillness. Child-who-laughed jumps beside Hole. Then they put their legs into Hole and pull up the edge and sits smoothing their legs under silk. Flying silk has become transformed into ground. Hole that was skirt becomes Bed (or more) as Child-who-laughed pulls at silk-on-floor and lays their body face down. Still.

Somewhere else, from the edge of the room, a child calls "got it, got it". Child-who-laughed stands, steps away.

Another child, one who watched the life and death of brea-thing Silk and Hole from the Edge-of-Room, steps onto the silk, squats by Hole, pulling at its edges. Lifting and poking. We have come back to where we started - with a small gesture, banal yet magical.

Adult hands bring coloured scarves into motion. Colours fall to a white silk floor. New, small assemblage lives begin. A short time later, Child-who-laughed slips

and gently falls on silk. They weep loudly, their face and body crumple. An adult takes

them far away from the centre to the Edge of Things.

Impersonal time travel

Now, at this late, finishing thesis, time of writing, I have only a vague memory of being part of the parachute assemblage. I am holding the parachute with all the other adults and my own laughter briefly echoes and responds to that of Child-who-laughed as they pop through the Hole. It occurs to me that through this time travelling adventure with data, I have not stayed with or followed myself or my memories of what happened, even though I was in the room at the time. It has become strange and new to me. This seems to be an effect of time traveling. It has somehow depersonalised my relation to myself as I revisit the event as a time traveller for the first time.

This crystallising of time, Deleuze's *power of the false* (1989) has a disruptive, splintering relationship with my own experience of truth, life and death – and also memory. It is an acknowledgment of the infinite complexity of a moment that, through film, can be rolled and re-turned to again and again, how a story can go *anywhere* even if it cannot go *everywhere* (Haraway 2016)*,* I begin to experience how film reconfigures truth; how truth dies as the past is reborn into an ever-swelling present. I stray from the path to tell risky stories about death and get myself into serious onto-epistemological trouble. I let go of attachments to particular children I was fond of. I loosen my grip on my memory as I move in the present and become-future. The more I re-visit the film data of the installation, the more dream-like, mythic it becomes, the more impersonal. From here I can almost glimpse the idea of my impersonal death, the death of myself, the-past-that-was-me, the actual time that has passed and cannot be recalled (Marks 2000; Deleuze 1989). Someone who held a

parachute in Manchester, who I don't actually remember being, is virtually re-membered

through the film. What I did there continues to affect the present, running trajectories into

the future. Time begins to dance with itself, to breathe in and out.

A thousand little lives and deaths

This looping the hole backwards in time, to when it was very alive and productive, is

a generative move in producing this risky story where data, a gesture, curiosity and

something unknowable work on me in surprising and mysterious ways (MacLure 2013b;

Caton 2019). The gesture of Child-who-watched became amplified by its repetition over

three sources of film data. It expressed something *odd* that drew me in. Rolling time back

and forth over the gesture and its oddness was a kind of spell. I followed the hole backwards

through time to encounter the almost unbearable liveliness (Braidotti 2013) of Child-who-

laughed's laughter as they stood inside the hole as the parachute assemblage reached its

peak. I followed the resolution of that peak to the *death* of the hole which seems to be

marked by the way in which Child-who-laughed lays their body down inside the hole in

stillness. Shortly after this, I circle back as Child-who-watched makes the odd gesture, pays

attention to the lifeless state of the transformed hole.

Braidotti's vitalist-materialist posthumanism understands life and death as

counterpoints within Zoë. I referred earlier to Braidotti's thinking on *Zoë,* the cosmic force

that is 'simultaneously empty chaos and absolute speed or movement' (2013:131). It is

'impersonal, inhuman and monstrous' (ibid) and always too much for a single subject,

human or otherwise. The thunder of life, of absolute vitality, is too much, too intense to

bear and so we are always turning away from it; we are only able to face it very briefly as it

will break us. This conceptualisation of Zoë as absolute vitality and difference is what

Deleuze and Guattari call the *milieu of all milieus* (1987:313). A human cannot, generally speaking, continuously surf these intensities of cosmic energy without cracking in the process. For example, the liveliness of Child-who-laughed's laughter expresses a near unbearable intensity which leads to crumpling into tears shortly after. Death is the inhuman, and unthinkable black hole that nevertheless emits and synthesises a creative flow (Braidotti 2013:131). Without death there is no swan song, no ebb and flow with the forces of *Zoë*.

Drawing on Deleuze's ideas of *personal death* of the individualised ego and the *impersonal death* that is beyond ego, Braidotti understands death as the threshold of the power to become. Because the idea of the *individual* does not stand in the posthuman, death cannot be an individual or personal thing. According to Braidotti (2013: 134), death is a deeply subconscious longing to lie silently and let time wash over us in the stillness of non-life. Life is desire which expresses itself, running on entropic energy, reaching its aim and dissolving. I glimpse a thousand tiny lives and deaths, each with their own temporality or life-time through this parachute, hole assemblage tale. Every encounter between human and material, camera and subject, sound and air, dance and floor, every assemblage, is a life that desires, comes together and dissolves. Just as our own human bodies are material conversations between genetic material, bacteria, air, food. 'We' are born, 'we' live and desire, 'we' relinquish desire and sink towards stillness. As I write or read about the longing for the *stillness of non-life,* I cannot help but see the image of how Child-who-laughed lay down with the death of hole, inside the hole, for a moment utterly still.

What do words do with matters of life and death?

The life and time of a parachute assemblage. The ongoingness and fertility of death in everyday, ordinary things. Little deaths and their transformational affects; little lives and their encompassed expressions. More-than-human-matterings of death and life. This raises fecund questions of ethico-onto-epistemological matters of death; how children (and animists) may understand, experience and sense matters of living and dying. How this might generatively rupture our adult, western epistemologies and our attachment to our bounded indivi(dual)ism: 'the story that is written into our bones" Murris 2016:46).

As adults, we have played a psychological trick on ourselves that has bounded our identity within our subjective 'I'. Our understanding of dying is bound up with this separated subjectivity and our perception of the discrete subjectivity of (mostly human) others. The structures that hold this understanding in place constantly leak and fail to hold up and yet, our adult life-as-habit rationality ignores the pulses of living and dying that are happening all around. Our illusion-of-self fails to understand that we are always becoming-with a thousand little lives and deaths. Murris and Kohan notice how '[o]ur relationship with the dead and the not-yet-there, that what is not visible, but still 'there' and 'not there', both spatially and temporally, is an undoing of the Western metaphysics of presence. It is also an undoing of human exceptionalism and […] what counts as an entity, a self or a person in space and time' (2020: 593). Thinking and naming 'this' is 'that' and 'I' am 'I' and 'You' are 'You' is an onto-epistemology constructed through language. (Abram 2010; Kimmerer 2013). Self and other, 'I and you' are concepts with particular relationships to death. Those with more porous senses of *self and other* (such as children and improvising adults) have different onto-epistemological relationships with living and dying.

Language creates a reality that habituates and addicts us to particular and separating ways of thinking about our subjective lives. Words run the risk of stopping the ongoing lives

and deaths of the more-than-human encounters of which children are a part. If adults had

been directing the installation event with words, narrating, directing, describing, asking

questions that they already know the answers to, the emergent and ongoing births, lives

and deaths would have been closed down, flattened, internalised. The parachute 'section'

would have become a set of rules to be obeyed and behaviours to manage. In this regard,

Deleuze and Guattari warn of the death sentences of *order words* (1987: 76) urging us to

elude them and develop lines of escape or even to draw out a revolutionary potential from

them so as to:

> bring forth the order-word of the order-word. In the order-word, life must
>
> answer the answer of death, not by fleeing, but by making flight act and
>
> create. There are pass-words beneath order-words. Words that pass, words
>
> that are components of passage, whereas order-words mark stoppages or
>
> organized stratified compositions (ibid:110)

There were few words spoken by children during the sessions but those words that came

from two-year old mouths opened rather than closed the world. "*I wanna bounce it!*", "*got

it! got it!*" and "*come ere Moogie slot!*" did not bring about the double death of the order

word. Instead, these words were components of passage, moments of change, each bound

in its own way with an anomalous position, *passwords*, creative, expressive and poetic.

Two-year-old children are on the cusp of selfhood. They have one foot in the

breathing flesh of the world (Abram 2010) and another in the language-based world of signs

and meanings. Abram writing about his infant daughter sees how the sensed locus of body

and the otherness of the rest of the world, emerge; rudimentary senses of selfhood and other (in)formation:

> The self begins as an extension of the breathing flesh of the world, and the things around us […] are not first encountered as inert or insentient presences into which later the child projects her own consciousness. Rather, the inwardly felt sentience of the child is a correlate of the outwardly felt wakefulness of the […] animate surroundings. Only much later, as the child is drawn deeply into the whirling vortex of verbal language […] is the contemporary child liable to learn that neither bird, nor storm are really aware, that the wind is no more wilful than the sky is awake, and indeed human persons alone are the carriers of consciousness in the world. Such a lesson amounts to a denial of much of the child's felt experience, and commonly precipitates a rupture between her speaking self and the rest of her sensitive and sentient body. Yet the pain of this rupture is quickly forgotten by the speaking self […]
>
> But the breathing body, this ferociously attentive animal, still remembers.
>
> (Abram 2010: 38-39).

In this passage, Abram proposes how spoken language defines what the world is and how it works, how it separates and individualises and captures our senses. He understands language as magic, as a spell. This makes me realise what not-talking is capable of remembering. Bai (2009) notes how the discursive disenchantment of adulthood affects our relationship with the magic of the world:

Our consciousness is dominated by the spell of the discursive, and by the time

we are out of childhood and through formal schooling, most of us have largely

disposed of the animated sensuous perception of the world. Many of us may

recall how in our childhood the world seemed like an enchanted place, not

because anything extraordinary or spectacular happened, not because we felt

we were very powerful and could make things happen at will, but because we

could feel the pulse of life and mystery of being in everything and being that

surrounded us (Bai 2009: 141).

Writing on time, memory, material, place, Dillon (2005) talks about St Augustine and the

vertigo of looking back into one's own childhood. Writing about his own life, Augustine is

baffled by the idea of when he 'becomes himself'. Attempting to recall his earliest memories

and being unable to remember his mother's womb, his birth, his infancy, he discounts it as

being part of the 'life he lives in the world'. Dillon notes that by imagining *a time before*

language, he is brought to face a time before himself and in doing so, birth and death

collide like:

mysterious twin voids at either end of existence […] we peer back into the

darkness of the past, convinced that there must be some evidence of our own

future being. And we find nothing. We seem to have stumbled onto the stage

of our own lives before the curtain has come up (Dillon 2005: 155).

Dillon plays poetically with how death is written into the before and after lives; how our

becoming ourselves emerges out of this strange, empty place. Braidotti understands death

as 'an inhuman, unthinkable black hole that is nevertheless a fertile force emitting and synthesising creative flows' (2013: 131). These are the conditions from which our personhood, our self, arises - and returns. This mortality is a leaky and liminal, ever-present character that walks with us and synchronises our life-time and life-line – 'the event that has always already happened' (Blanchot 2000 cited in Braidotti 2013:132). Dillon's idea of a *time before language*, an empty time before himself, is an insistent notion that becoming *oneself* and the self-that-dies are somehow bound up with language.

Life, death and time in improvisation

Death is written at our core; it structures our timelines as a porous threshold: the eternal event that has already transpired on the level of consciousness. Death walks besides us as the 'virtual potential that constructs everything we are' (Braidotti 2013: 132). Death is the *enabling constraint* of our becoming (Manning 2014). When I conceptualise the assemblage of the hole/laughter/ parachute/air /human as a life – and a death, I think with ideas of porous subjectivities (Manning 2009; Stern 1985) and with de-anthropomorphising, animistic ontologies (Stengers 2012) which ask questions beyond individual, subjective human experience (Barad 2007). This leads me to understand how 'individual' human subjectivities transverse their boundaries to become distributed within improvising ensembles (Lines 2017; Guattari 1995; Kuppers 2016; Stern 2004) such as the parachute assemblage. These improvised collective lives also have a birth and death; each movement-together emerges and dies. I think about the shape of the life of the parachute assemblage, its physical shape and its temporal shape; how Child-who-laughed's body is positioned in the epicentre of this life, and, just as its life begins to fade, how they use the spell of words ('I wanna bounce it!') to somehow command and affect the whole pack. How Child-who-

laughed's laughter holds and expresses the forces of living and dying and death. The anomalous position of the improvised solo, from the centre of the pack, yet finding its edge, carrying its transformations of becoming (Deleuze and Guattari 1987: 249).

This reminds me of working and playing with dramaturge John Wright (2006) and his beautiful map for improvisors that I discussed in Chapter 1 and return to in my practice over and over again: *Find the Game; Play the Game and entertain each other with it; Recognise when the Game is over; Find a new Game* (ibid: 39). Birth, living and dying are encompassed in Wright's notion of 'Game'. Making a life, living it, recognising its death, finding new life. Wright's games and techniques develop *complicité* within an ensemble as well as the on-going production of anomaly and anomalous individuals, through the swerving of the pack. Wright's clownish games create comedies of anomaly and the recognition of death in everyday things: not the living and dying of an individual human but the living and dying of everyday shifting assemblages.

In the mysterious time before language of early childhood, there are pluralities of movement and time that constantly work upon each other. The removing of words in the MTW installation and other work I make, helps me (and I suggest, other adults) to become sensitive to other ways of perceiving time and movement. We move into temporalities of improvisation, uncertainty and connection. Murris and Kohan (2022) resist the homogenising and dominant universality of chronological clock time - *chronos* – through drawing on alternative ancient Greek notions of time: *kairos, and aion. Kairos* is a temporality of change, difference and conjunction - 'in kairos a moment is never equal to any other moment in the qualitative sense. The same action that brings death one moment, might bring life [the next]' (ibid: 592).

Kairos has a particular relationship to present time and temporal arts (Stern 2004). Kairos is the time in which 'I wanna bounce it!' takes place, a time of change or swerving. *Aion* in its earliest Greek forms, works with the intensity of time and Murris and Kohan note its associations with playful, childhood realms: 'As if the experience of a child passes in aionic and not chronological time, or, in other words, as if the time of a child does not happen under the line of chronos but under the intensity of aion.' (Ibid: 592). Aion is the time of intense becomings and also the thin time of purposeless, open drifting. Practices of improvisation as they drift, intensify and drift again differently, take place in the temporalities of both kairos and aion, times of expression and change, where varying tempos of intensity intersect and synthesise with each other; where anything can happen, and nothing is true.

We know the parachute will fall: this compound subjectivity of which we are part, this diverse ensemble of parents and children and practitioners from a plethora of linguistic and cultural backgrounds, who are, for a handful of present-moments, a *life*, intra-acting through silk and air. Our death is written into our assemblage life; it is this that makes it so alive. Improvisation is as much about letting go between players as it is a connection. Every improvisation has a life and a death. Improvisation is birthed from an anomalous place, such as the middle of a hole, or a place between worlds and things. Good improvisers (such as children) find good endings and accept them. As Braidotti notes, 'it is our nature to die and our deepest desire to self-fashion our own death' (2013: 135). There is somehow potential for improvisation as a practice of resistance to what Braidotti sees as the zombie-like, autopilot of the non-living and non-dying without desire.

Hands and bodies must sense each other in the living and dying of this thing they are part of, through wafting, amorphous movement. Human adults face each other in a circle,

connected. And if a small body places itself within a shifting and unstable hole, a hole that receives all the force and energy of wafting by adult arms, then adults must attend to this epicentre, the safety of its child body. I think again about how adult words are reduced or absent in the installation and how words of instruction and direction and description would kill what is ongoingly distributed, negotiated and sensed. Instruction could never produce this attuned becoming. It is all also quite beyond description. Silk waves carry energy inwards, converge upon this hole. Multiples of body/hand/arm/silk/air feel and think and act together and pay attention to the vitality of this present moment, which cannot endure but demands to be expressed and be experienced. The awareness of the eventfulness; the living and dying of this hand/silk/hole; Child-who-laughed's laughter expressing the almost unbearable nature of becoming in the centre of this event. At the end, a shared knowledge that the end has come, perhaps felt most acutely by those who lived the wildest. Synthesis and dissolution, breathe in, breathe out. Zoë.

Child-who-laughed lays down: 360˚

Child-who-laughed lays down: iPad.

The last breath of this chapter

This essay on the living and dying with the hole is an exercise in what Karin Murris (2016) thinks of as taking the existential beyond the individual human subject. The almost unnoticeable gesture of a child poking and pulling at a (dead) hole in a piece of silk has taken me on a journey in this time of global pandemic, through the overworld and underland of zoë, so that I begin to understand living and dying as a breathing in and out, not as opposition but as a process of connection to zoë.

Murris notes the roots of 'am' and 'is' come from the Sanskrit 'to breathe'. Abram (1996) also points out the etymological links between words for air and breath and words for life, spirit, awareness and thought: psyche, anima, spirit and also ghost. The phenomenon of breathing involves the nomadic entity of air moving between our interior bodies and the larger world we inhabit. Air crosses the boundaries of our animal 'selves'.

We have forgotten our conversation with the air we breathe, what Abram calls the

commonwealth of breath that connects our bodily population of cells (breathe in) to other

bodies in the world (breathe out). The interconnected phenomena of breathing were never

more apparent than during the pandemic's jolting reminder.

Murris (2016) understands subjectivity as a breathing thing: this is a

materialdiscursive or *matterphorical* (Barad & Gandorfer 2021; Murris & Peers 2022)

understanding of subjectivity, a conceptualisation that is materially and discursively

actualised at the same time; how thought, idea, image (of self and other) are produced

through the material world. Breath is a material phenomenon and also a way to understand

and conceptualise, connectedness, living and dying. Thus, the matterphorical assemblage of

the breathing parachute, its animating hole-mouth, its life and death, encourages a way in

which understandings beyond our individual subjectivities might be grasped. The

slipperiness of time can also be glimpsed through a matterphorical engagement with film

where time is breathed in and out, looping, ongoing. Kairos and aion splinter the truth of

chronos, as time's heterogeneity ebbs and flows. I dance (even now) with data through

endless aionic time. Data has grabbed my senses and actualised stories during profound

moments of kairos. Chronos has provided the measures and timeline to which this thesis

and data have been produced. Three cameras and three movements of time.

My final thought in this speculative story is this: Haraway (2016) warns of telling bad

stories that end in *double death*, stories that kill ongoingness. This story deals with lively

deaths.

Through sharing children's encounters with materials and material encounters with

words, we can once again feel the liveliness of the world. In this play upon our senses, we

can let go of the need to know about the world and instead converse with it and wallow in

aionic time. These ideas of animacy help me articulate what I enjoy and receive when

spending time with children and I suspect many EC educators and parents feel the same

way. While the tyranny of curriculum forces us towards thinking and acting within

hegemonic regimes of capitalist structures (Moss & Roberts-Holmes 2021), arts practices

with young children have the potential to work with transformational anomalies, to animate

the world, to kindle magic. By working without (adult) words, we liberate time and let the

wild, entangled rumpus of it all to leak in: a resistance to the chronological fast tracking of

children towards an adulthood that is fallen under the spell of its own signs (Abrams 2010)

Chapter 6: Wild Buzzings

Wild Buzzings

This chapter tells the tale of how an imperceptible child crossed the threshold into the installation space, setting things into *wild* motion. I think about the MTW installation event characteristics and how assemblages of space and practice and people are changed by crossing into each other. I work with the notion of becoming-imperceptible (Braidotti 2013; Deleuze & Guattari 1987) and Halberstam's *Wild* (2020) to reconceptualise the image of an individual child expressing themselves. I work with the image of a becoming-imperceptible child as an expression of the flow of relations that they find themselves part of. I examine how a child becomes an imperceptible, more-than-human, buzzing producer of irritation and wildness.

I think of wildness as an a-subjective, virtual force which is constantly transforming, and which does not 'coincide fully with any specific body' (Bennet 2010 cited in Halberstam 2020: 118).

The origin of the term wild, as an adjective, verb or noun is entangled with woodlands; it is a refusal to be tamed, a creeping in of disorder, it is life without need for cultivation. With Halberstam (2020), I do not put wild in opposition to tameness or order, rather I understand wild as the productive, unknown edges and ruptures of what is known, expected or occupied. Wild is anomalous and sometimes imperceptible. I also explore how wild exists as a mode of displacement and belonging by tracing some of the threads that bring the buzzing child to the installation.

I will also bring in Bakhtin's figure of the clown and concept of the carnivalesque to better understand the potential of arts practice to productively disrupt the habits and dominant forces in early years pedagogy and bring a wild and potentially liberating element to early educational spaces.

Part 1: Buzzer

Pest, sorcerer

Buzzer makes sounds of glee, hurling, chucking, flailing at the string-bobbles. On the 360˚ film, he does not appear to be seen by adults (including me), we do not perceive (or we ignore) how his buzzing body is driven by, and in deep conversation with, bobble and string and trajectory and, most of all, space. His thrilled rapture seems to be on the threshold of adult perception. My memory of that time is of a knat, buzzing and wizzing at the edge of my senses; vaguely, but not consciously, irritating and provoking my awareness. Within seconds of entering the MTW installation Buzzer was flinging and tangling up the carefully installed string-bobbles, and also spinning and swinging the suspended 360˚ camera, which results in what I term 'blurry time' when the camera was spinning so fast (because of Buzzer)

even its compensatory software cannot quite stabilise the image. Buzzer brings chaos,

blurriness, wildness, life; he finds delight.

The above happens during the first few moments of the first MTW installation session. When I view this beginning on the 360˚ camera, I view the edges of many things: a borderland space between art and education occupied by the community of the nursery school, artists and researchers; an ephemeral arts installation set into motion; early education meeting PhD; the overlapping edges of making art and making research data; the edges of the not-known. I view myself opening the space to everyone, the groups of children, educators and parents, welcoming them into the installation space. The virtual time image (Deleuze 1989; Marks 2000) version of this threshold-crossing is captured on 360˚ film. This is what I first watched many weeks after the event. What is hidden but very present in the actual-time version, are my feelings, the weight of the research event, the planning, the sleepless night before, how concerned I was about this threshold crossing into the installation space and the staging of this uncertain experimental event.

When re-viewing the filmed event on 360˚, I noticed with shock and also fascination, how completely oblivious I am to Buzzer at the beginning of the session. Watching Buzzer and myself on the film, it is as if he is invisible to me, on the edges of my perception. On the 360˚ film, I saw that Buzzer was also seemingly not perceived by many other practitioners, and by other parents (his own parents did not attend the session). It is as if he was imperceptible at the time and yet on the 360˚ film, I see Buzzer, on arrival at the door of the theatre, crossing the threshold into the unknown space immediately, whole-bodiedly and without hesitation, embracing and playing a significant role in animating the space, bringing it to life.

My memory tells me this: I was vaguely aware (a buzz) that someone (not really specific – a pest) was rather excited and that the hanging forest of string-bobbles that had taken so much effort to hang were becoming tangled up, that the 360˚ camera, my principle means of data gathering, was also entangled and spinning. I would describe my feelings/instincts as slight irritation, mitigated by the relief I was feeling that the session was going well. My experience tells me when things, with small children, have started to go off piste, transgress, get messy, feel chaotic - interesting things are probably happening. In other words, me the *artist* was relieved while me the *researcher* was irritated. The etymological meanings of irritate are to excite and provoke as well as annoy. Also, to stimulate to action, rouse and incite. These irritating meanings work well with contagion and anomaly, the bringing to life and the invoking of the wildness that ran through the installation event and through this chapter.

Buzzer is the second through the doors, following World-dancer. World-dancer is taking the new space all in, moving slowly, I move into the space with World-dancer in the same spacetime as World-dancer. Buzzer stands for about a second on the threshold, gasps in with excitement, pulling the air of the room into his body. The room inspires him, he breathes it in, is contaminated. He crosses the threshold from one world to another, scampers rhythmically to the nearest string-bobble and flings it with all his might. He watches his string-bobble bounce and swing, and he dances another little prancing rhythm on the floor that is immediately taken up and returned by another child. This child seems to perceive Buzzer and accepts and returns his prancing motif and also repeats the string-bobble flinging. Buzzer makes a little vocalisation: "whu whu!!". This is addressed directly to me. Not only do I completely ignore/un-see Buzzer on the film, but I also have no memory of his attempts to communicate to me, although I remember being with the other child.

Buzzer throws a string-bobble and prances again and then stands near the door as people enter, flapping his arms, pumping his legs and addressing them directly. He turns to the incoming group of children and adults continuing to flap his arms, a gesture of exuberant glee. There is no response from the group's adults. Buzzer flings a string bobble at the incoming people and exclaims 'wow!' This sound-gesture of 'wow' is a repetition, a mimicking of the sound I made a few seconds before as I first opened the door for the children, parents and practitioners. Buzzer mimics and parodies me and makes a set of large, welcoming, gleeful, sounds and gestures, with the same inflections I used. Buzzer continues to be unperceived… and yet he is affecting, and continues to affect the whole space, weaving a spell, bringing in mess and wildness through the porous borders of the assemblage. As I watch the film, few adults on entering the space seem capable of seeing Buzzer's actual body, his energy and movement, but yet, the *Buzzer affect* pervades the room swiftly and begins to set things off; contagions of flinging, pinging and scampering ensue. The space is rapidly animated in a particular yet imperceptible Buzzerish way.

Unsurprisingly, Buzzer scarcely makes an appearance on the iPad or Tcam footage; just fleeting flings in the corners of perception. Of note is a small piece of Tcam footage around 20 minutes into the session, where Buzzer is physically placed, by an adult educator, on one of the duvets with other children. The duvet is then semi wrapped around these child bodies and slid back and forth across the room by practitioners. The duvet burrito slides across the Tcam eye several times but when it unwraps, Buzzer is still inside with other children, beaming and laughing with delight. This *sliding duvet burrito game* is the most perceptible Buzzer becomes on the data. I will return to the *sliding duvet burrito game* moment later in this chapter.

Becoming-sorcerer, becoming-clown.

As an improvisor, my personal improvisation practice is always turned toward the difficult task of losing my 'self' within the larger assemblage (human and more-than-human) that I am improvising with. When I am successful, the edges of myself expand into the group into a kind of symbiosis where I both affect and am affected by the group as we make movement, music, expression and sense together. I also experience this sense of symbiosis through playing with electronic instruments and other creative activities. My becoming-with is not limited to playing with other humans but happens when I become 'lost' in something. Buzzer seems to attain this more-than-human relationship almost immediately with the installation, particularly with the hanging string bobble elements. As soon as he enters the installation space, he seems to become symbiotically absorbed into it. For the first 12 minutes or so of the session, Buzzer buzzes about the installation (inhabiting the edgelands of film data). He is a buzz, an irritation, a little pest entangled with the wild potential of flinging, pinging and swinging string-bobbles. Buzzer becomes-clown in his inept, clumsy, uncontrolled corporality, his lack of purpose and the way he flings himself with abandoned glee, causing a kerfuffle of material and affective chaos that confuses and confounds the order of things (Bakhtin 1981; Arculus & MacRae 2022).

Buzzer is not so much left in the anomalous position by a swerve of the group (Valente and Boldt 2015), as I previously described happening in Chapter 5. Rather, he actively swerves off, imperceptibly, wildly and at high speed, transforming the group while inhabiting its barely perceptible edge. Buzzer's falling off the edges of perceptibility works an anomaly that is also resonant with Deleuze and Guattari's becoming-sorcerer figure: 'Sorcerers have always held the anomalous position, at the edge of the fields or woods.

They haunt the fringes. They are at the borderline of the village, or between villages' (1987: 287).

Buzzer's clownish ineptitude in flinging makes me think of the kinship between clowns and sorcerers and the clown's global associations with shamanism (Turner 1982; Wright 2006; Bakhtin 1981). Delpech-Ramey notes how clowns are hopelessly drawn to an 'obscure lure within things' (210:134), *things* which seem to come to life and spiral out of control and that occupy the 'nonhuman world of objects' (Delpech-Ramey 2010: 133). The string-bobbles lure Buzzer, and he is hopelessly entangled in their beguiling affordances; swing, ping, fling, pull, flap arms, zoom off, repeat. Buzzer-the-clown weaves a pesky spell, messing things up, spinning my very expensive, carefully positioned 360˚ camera, creating blurry-times on the data where everything becomes less perceptible. Pesky comes from pest: it means infectious and annoying and is used often to describe children. Buzzer the clown-sorcerer makes corporal, affective and anarchic *sense production* (Martin-Bylund 2018) that infects the whole space. His wild expressiveness seems to exceed the limits of his own bodily control. Buzzer's awkward, uncontrolled, shambolic incompetence had no humanly discernible purpose. It is beyond *human* will or desire (Delepech-Ramey 2010), a wild, ecstatic, more-than-human phenomena of child-string-bobble becoming.

The anomaly of silliness

Buzzer was being very 'silly'. His clownish antics make me think of the inhuman quality of the clown (Delepech-Ramey 2010) and the clown's ability to show the ridiculousness of those in power (the adults) and to turn the world upside down. This involves a clownish disruption and a foolish refusal to understand stupid and hegemonic conventions. Fools and clowns are both emancipated and emancipating and have deep

affiliations and associations with children (Kennedy 1989). Bakhtin noted how the figures of clowns are able to create their own special little world around themselves which is not subject to ordinary rules and laws. Bakhtin considered this place of clowns to be between life and art (1981), an in-between space. Buzzer was somehow what Bakhtin described as a 'constant, accredited representative of the carnival spirit in everyday life out of carnival season' (1987: 8).

In the nursery or installation, it was absolutely impossible for adults to 'do' anything with Buzzer to capture his attention for more than a moment. I suspect the plonking of him onto the *duvet burrito* by an adult after 20 minutes or so was an attempt to somehow curb his disruptive string-bobble obsession. It worked but only temporarily. Marguch notes:

> The anomalous seems to act in a molecular level: not as visible as the antinormative, because of its instability, always on the border. Its politics are always micro: it is not about agency but assemblages (2018:551).

This makes me think of how silliness is never against anything but erupts in little kerfuffles, upsetting pretences to order. In the production of silliness therein lies an affinity between young children and clowns (Arculus & MacRae 2022). Silliness is often an anathema to education: silliness must be stamped out, reduced, controlled, even punished. Silliness is an infectious epidemic, a highly contagious and disruptive force. It transgresses. I have frequently heard adults say how children are *spoiling things* by being silly. Silly has etymological roots with happiness though it later came to mean feeble in mind. But silly always sprouts from anomalous positions. Like Halberstam's understanding of *wild* which I will discuss later, silly never opposes anything, even though it disrupts everything. Silly

children and silly people are becoming-clowns who bring the spirit of the carnival to the world (Bakhtin 1984). Silly children within a carnivalesque time-space such as the MTW installation, take on special wild qualities. There is perhaps a generative and ethical potential in silliness.

Becoming imperceptible

I watch on the 360˚ film how S, Anna and Christina each had micro-encounters with Buzzer, as he manifested out of imperceptibility, coming briefly into focus (for them) and buzzing off again. Brief, intense encounters between string bobbling, flinging, flapping, pinging, getting tangled up. S managed best to track Buzzer as she was making a case study of him, which I shall discuss later. But Buzzer was tangible mainly by his affects rather than his individual, bodily perceptibility. Watching the first 10 minutes of the session on 360˚, it seems that Buzzer moves in a different temporality than everyone else. His encounters with other children are brief and intense, as he suddenly emerges out of his particular tempo to express glee, or to fling a string bobble and then back into buzzer time and off! At one point he collides with Floor-dancer who is also in a particular, intense time-space with string bobbles and *Moogie slots*. They bump, or are bumped out of their bodily tempo, and each stare at the shock of each other's body before moving off again.

Buzzer's anomalous 'potentiality is encrypted in matter' (Marguch, 2018: 551), encrypted in swinging and tangled string. The inhabited movement of the imperceptible Buzzer leaves a residue through the installation and on blurry, spinning camera film, aftereffects of his passing. As Deleuze and Guattari put it: 'Movement has an essential relation to the imperceptible; it is by nature imperceptible. Perception can grasp movement only as the displacement of a moving body or the development of a form' (1987: 281).

Braidotti (2006) understands becoming-imperceptible as a merging with one's environment, all that matters is the going, the movement and the plunging into an affirmative present. This inhabiting of the on-going and unfolding present, is the more-than-human, more-than-adult realm of clowns, sorcerers and young children. For adults, grappling with anomaly requires a letting go of the sedimented habits we are addicted to, it requires a sense of wonder, a practice of improvisation.

Early on in my relationship with the film data, I attempted to follow Buzzer on the 360˚ film and map his movements. I told that story in Chapter 4. I found it almost impossible 'to fix and repeat the ephemeral nature of [Buzzer's] bodily activity' (de Frietas 2016: 557). Even filmed with the capacity of film to be endlessly re-viewed, even filmed with the panopticon vision of 360˚ video, it is hard to keep up with the imperceptible Buzzer. The ruptures Buzzer made (in both event and data) forced me to relinquish safe ways of being a researcher. Buzzer, like Deleuze and Guattari's becoming-sorcerer is on the edges of his own world, of the nursery milieu, of the installation and, the edges of the research data. He is somewhere else, he is movement, affect; he is the liveliness of this edge-dwelling. His border crossing is infecting the space, the installation-event, the film as data and this research. He sets the first tones of the session, and everything spirals from these tones. He forms a 'porous border between the group and its outside, its becoming' (Delpech-Ramey 2010: 13).

From a posthuman understanding (Braidotti 2006; Murris 2016), Buzzer is not expressing him*self* as an individual identity but rather, expressing the flow of relations and encounters that his body is part of. Braidotti (2006) notes that in order to trigger a process of becoming imperceptible, the 'self' as we adults understand it, has to undergo a transformation. She considers becoming imperceptible to be a fusion between the self, its

habitat and the cosmos 'ultimately all we have is what we are propelled by, namely: affects' (2006: 155). Becoming-imperceptible is a strategy to slip through normative discourses and logics to create new possibilities, exploring potency and intensities of becoming. It resists fixing the identitarian boundaries that contain us (ibid). Thus, the anomalous does not define an identity but creates milieus of becoming. It does not refer to individuals, but sheds light on processes of singularisation (Marguch, 2018: 551). When Braidotti says 'becoming-imperceptible is about reversing the subject towards the outside' (2006: 156), I start to grasp, with affirmative sense what this 'event for which there is no immediate representation' (ibid) does and how it relates to improvisation. Becoming-imperceptible is a merging with the environment, it floods the present with possible futures, and breaks from a past of sedimented habits 'the institutionalised accumulation of experience whose authority is sealed by memory and the identity it engenders' (Braidotti 2006: 155).

As adults, we bear the ever-increasing weight of experience and memory, the ever swelling past that defines our identities and habits of thought. Adult practices of improvisation are for me, an ongoing attempt at breaking free from the *institution of self* to transgress my boundaries and its habitual rhythms. Improvisation is becoming-inhuman, becoming-clown, becoming-child. The asking of adults not to speak inside the installation, was an invitation to improvise. The relinquishing of words and the order that words place upon things, opens up to a wild uncertainty - a slight melting identity and individualism. It jolts us adults into a different time-space.

Two -year- old children are, I would argue, less encumbered by molar edifices of self and the subjectifying effects of language, they easily slip through the cracks and fissures between self/other. I wonder if Buzzer, a young two-year-old had even yet inhabited more than a *demi-self.* He seemed enchanted by a world that pushed and pulled on all his senses,

and it was, at that time, impossible to tame or even keep up with that wild relationship with the world.

I have a memory of Buzzer in the nursery, playing musical computer games on the large interactive screen. I noticed his affinity with technology, the pleasure with it. He would jab away at the screen in haphazard abandon, squealing with glee, and yet somehow making the technology do interesting things. To try and channel, explain or direct his play, to use the tech *properly*, would either end in chaos or him swiftly moving away. Attempting to channel and direct children like Buzzer in early education usually involves copious amounts of words, the naming and directing of things. It involves his being identified as a discrete individual rather that a becoming. The future subjectifying of Buzzer and the objectifying of the world will be done through words (Abram 2010). The separation of Buzzer from his becoming-with things had not yet happened and Buzzer seemed to have little interest in, or use for, words. Unless they expressed something sensual, like "wow!".

My understanding of Buzzer is bound up with memories of Buzzer/tech symbiosis, fleeting encounters and a deep, uncontrollable, relationship with *things* (Delpech-Ramey 2010; Arculus & MacRae 2022). Critically, he was left to get on with it, and leaving children to get on with it, without always having to know what 'it' is, was thankfully, a pedagogical commitment in the Conker room. Buzzer was truly adept at evading adult stratification, and I start to think about how, in my inability to perceive and follow him, there might also a be response-ability (Barad 2013; Haraway 2016) not to.

Buzzer's case study

As I have already discussed, during the MTW installation sessions, the nursery practitioners were filming children on the nursery iPads. Some of this data constitutes my

research data. iPad video and photos were also used for making case studies of children who took part in the project. On the day of the installation, S, the Conker room lead practitioner was closely following Buzzer in order to create a case study of him (Amin 2019). Case studies are common practice in early childhood education. They document children's learning as a way to share what are commonly called 'learning journeys'. These documentations work both to share children's learning with parents, as well as performatively to demonstrate how the Early Years Curriculum is being intentionally addressed through children's activities in the nursery classroom. I had the chance to read Buzzer's case study, months into lockdown, after some time of living with the data and my own thoughts and memories.

Buzzer's case study is a rich story with Buzzer at the centre, it notices many threads of Buzzer's doing/thinking around the period of time that Anna and I were in the nursery. It is a snapshot in chronological, curricular time. But it is more than that. These case study threads are linked to theory and pedagogy in a way that is both accessible and celebratory and can be easily shared with both parents and other practitioners.

The case study revealed to me that Buzzer, the child whose imperceptibility I had been thinking about, was actually more tangible to S, as she had been specifically focusing on him the week of the installation visit as part of her role as pedagogue. S 's practice of keeping her awareness with Buzzer enabled her to travel with him through some of the anomalous realms he inhabited.

When [Buzzer] walked into the theatre space, he showed his excitement by jumping up and down and running towards the suspended pom-poms. He pushed them and they were set into swinging motion. He reached out to grab the string. He pulled it and felt

it's stretchy-ness: he felt the texture of the pom-pom in his hands. [Buzzer] screamed

with excitement, running and flapping both his arms. His face lit up and his eyes

opened wide.

(Excerpt from case study by S)

S 's writing conjures the excitement of physical senses, movements, textures. It manages to

keep a crack of the wildness of the world open. It avoids reducing things down to learning

moments or pedagogical achievements. There is sense of wide possibilities. To do this is a

kind of becoming-imperceptible of the pedagogue; a *(k)not-knowing* (Osgood 2020) that

embraces complexity and uncertainty. At the same time as celebrating an actual, individual

child, the textured, swinging elastic flapping in the writing conjures something of the virtual

potential of the emerging child/installation encounter.

I learned a little about Buzzer's family from this case study. I spoke about Buzzer in

Chapter 1, when I came to realise that in anonymising children's names, I was also erasing

ethnicity, cultural and migrationary tales. I was in danger of eliding the ever-present threads

of colonialism (Tsing 2015). Threads of possession, boundaries and displacement, resilience,

community and belonging that run through populations and histories of England,

Manchester, and this nursery.

Buzzer's family were from Afghanistan and their family mother-tongue is Farsi. Many

of the children in Conker room were from migrant families and a wide diversity of cultural

backgrounds. All the children were from low-income families. My tiny insights into home

cultures through meeting parents at nursery pick up and drop off and spending time with

them inside the installation, were minute encounters during a brief arts project in a

community where I don't live. As I have already discussed, I did not collect facts about the

children and families I worked with, but as I encountered this insight into Buzzer's life, it jolted me and brought into sharp focus the wealth of difference, knowledges, practices and differences that abounded in the nursery. The discrepancies in power, opportunity, the legacies of colonialism, war and racism. The displacement of peoples through war. There were so many journeys and experiences woven into Conker room threads that tied children and families to this place.

S's case study again:

I invited [Buzzer's] dad to look at the Case Study with me. [Buzzer's] dad was absolutely delighted, and he made several comments: "I can see he's making so much progress, he's playing with everything. Thank you so much, even at home he doesn't want help he want to do by himself." "[Buzzer] loves watching the TV cartoons. He speaks some words in English, he understands everything we say in Farsi very well, but speaks to us in English, he finds it easier.

I found this glimpse into a family's relationship with language and education fascinating. There seems to be an ethics at play; parental hope, delight, gratitude, pride and difference are somehow folded into this story of Buzzer: where a child refusing adult help is trusted, where a child's way of being in the world is celebrated without being fully known or made visible. This is a way of working with imperceptibility, with the yawning gaps in what we know about children. In this tale, Buzzer has authority. I never heard Buzzer speak any words other than "wow!" I was both surprised and not surprised to read about these language capabilities.

Using words takes a certain temporality and Buzzer seemed, to me, way too fast for words. Requiring Buzzer to speak words or listen to words would have required forcing him into a different (adult, educational) temporality, pinning his movement and thinking down, squeezing it into the subjectifying restraints of language. And yet Buzzer was somehow able to manage a transversal languaging between Farsi and English, able to assimilate and absorb language and put it to work. For me, this exemplifies how language manifests through children in mysterious, entangled ways. Martin-Bylund (2018) talks about bilingualism and how encountering a new language is a slippery encounter of mastering estrangement. This makes me think of the displacement and estrangement of Buzzer's family, how being a child or a stranger is a fugitive state, but one with particular opportunities (ibid). Bilingualism is not an 'attribute of an individual but a situation or circumstance' (ibid: 27); in other words, bilingualism is an anomalous position. Without being pinned down and bathed in rich standard English, spoken at him through adult -directed speech: "Ooh! Can you swing it Buzzer? How does it feel?", Buzzer was nevertheless occupying the borderlands between fugitive states where language was somehow emerging. Martin-Bylund notes how 'children seem to attach their movements to [the] material presence of language as, at the same time, they relate to the physical artifacts that surround them […] between the things or the bodies in the room and the propositions or the expressions' (2018: 29).

This idea of language bubbling out of the relationship (or gap) between corporality and expression, is what Hackett understands as 'how young children's literacies [are] entangled in more-than-human sound and movement' (2021: 77). Language emerges in mysterious ways that are different for each child, each situation, each encounter. String-bobbles meant different things to different humans: wild-becoming, Moogie Slots, irritating tangling. Hackett understands that the pedagogic role in language practice must 'hold[s] in

tension the impossibility of humans authoring their own meaning making in a pre-intentional way, with the possibilities for human bodies to respond to what happens in different ways.' (Ibid). In other words, we adults, artists and pedagogues must hold possibilities, and meanings open while remaining responsive and aware. This is an act of trusting the world rather than dominating it; it requires repeated acts of improvisation, both active and difficult. It also needs to acknowledge that 'the seeming randomness and unpredictability of young children's literacies, the way in which they seem constantly in likelihood of dissolving back into not-literacies, is important for their emergence' (Hackett 2021: 80).

This Buzzer, the Buzzer I write about here, is a virtual Buzzer, a creature born out of a jolting encounter between film and faulty memory, a Buzzer manifested through Deleuze's *power of the false.* I discussed the *power of the false* in Chapter 5 and its potential to detach truth and time from movement (Deleuze 1989; Marks 2000). Marks notes that '[p]eople whose lives are built in the movement between two or more cultures are necessarily in the process of transformation' (2000:65). Powers of the false are at work when nothing can be referred to as real or true, 'there can be no objective record of the past' (ibid). Marks asserts that when film reflects on its own process and absences, rather than explaining or resolving them, it has potential to undo the colonising move of presenting the authentic voices of minority people. Thus, Buzzer's imperceptibility on film combined with case studies and research stories presents an uncertain betweenness rather than a child.

In this first section I have introduced the wild, more-than-human, anomalous kerfuffle of Buzzer. I have followed his imperceptibility and mapped the marks he has made

on my data and upon me. In the next section, I will follow the wildness and the wild

characteristics of the MTW installation and what was manifested through them.

Part 2: Wilding

Max's Room

The character Max's room in *Where the Wild Things Are* (Sendak 1967) is an ongoing

source of inspiration to the artist, animateur and installation builder in me. Over three

pages of Sendak's book, Max's bedroom becomes the *world all around*. The walls, door

frame, bed and table transform into forest, the moon is released from its window frame

into wild. starry sky and the door leaves not a ghost of its presence. The trees that grew

from things within the room are lost among other wild world trees and by the third page,

even the boundary of the illustration has disappeared and the ink flows to the edge of the

page. The flatness of the room becomes alive with the possibilities that distance, depth and

movement hold. This transformation of enclosed boundaries into a deep and on-going

world full of possibility, distance and travel, resonates directly from my own childhood. Max

is my own wild wolf child time echoing over the years, in and out of weeks, through night

and day into the expanded present moment . Max's room was a key idea for the making of

the first early years installations I made over two decades ago. The string-bobble forest in

the More-than-words installation was a ceiling hung with vines that transformed how the

space is moved in and through.

I will explore in this section how a boundaried space becomes a *world all around* and

how it deliberately invites a wild rumpus. Max's transforming room/world is never far in my

imagination. The room as it transforms, becomes a liminal space, the portal from the

domesticated restricted world, into the wild *other*.

Wild rumpuses and Buzzings in early childhood are invoked through spells of

transformation. They involve transgression and encounter without (or with permeable)

borders. Wild abides in the tensions between perceptible time and space: 'ultimately the

wild is an affective space where temporality is uncertain, relation is improvised, and futurity

is on hold' (Halberstam 2020: 126). The transformed world-all-around that Max's room

transforms into and shapes temporality as well as space, as did the MTW installation. Epic

journeys take place in the time it takes to warm supper up in *Where the Wild Things Are*.

Epic encounters with all sorts of things (including string bobbles) can happen too quickly for

adult perception. In a small moment, something can happen that may be later understood

in completely different ways. Perceiving the kerfuffles and tangled residues that mark the

wake of his encounters, Buzzer could be labelled as an irritation or understood part of a

collective phenomenon. Both are true. Different understandings unfold over time if a

practice (art or education or research) stays with the trouble of uncertainty, mess and

chaos.

Possession

As I discussed in Chapter 3 and throughout this thesis, education has possessive

tendencies, founded on capitalist expansion principles (Patel 2014; Dahlberg 2016). This

form of possession seeks to enclose children's wild, unbounded becomings. Both the

systems and the actual spaces of education, seek to enclose children and submit them to

procedures intended to tame their bodies, their tongues and their wild onto-

epistemologies. Nurseries are full of security systems, enclosed spaces and locked doors.

The colonial history of land appropriation (Hayes 2020) and human displacement is deeply

entangled with the taming of tongues, eradication of languages and the racio-linguistic

policing of speech practices (Cushing and Snell 2021), that I discussed in Chapter 3. Western

history tells tales of children tamed and possessed through adult observations and

epistemological claims, different bodies mapped to white, colonial ideas of normalicy such

as Gesell's observation work in the early 1900s, that I discussed in Chapter 2 (Gesell 1934; Ossmer 2020; Curtis 2011). Gesell, in seeking to possess knowledge of children and their development, conceptualised them as a series of still images and in doing so, effaced movement and becoming and othered difference. This is an enduring developmentalist concept of *ages and stages*. Thus, children's imperceptibilities, multiple temporalities and movements are tamed and possessed by what Moss and Roberts (2021b) describe as a 'mode of subjectification [where] the identity of both educator and child [are] inscribed by developmental norms' (127). The subjectifying and possession of children's bodies through education, reaches beyond the apparatuses of measurement and controls the physical spaces, binds bodies to demarcated enclosures of capitalist possession.

Possession enacts a type of boundary-making, one that that lacks porosity and attempts to act as an impermeable membrane, designed to tame. Possession stops on-goingness, and wild becoming-with the world (Hayes 2020; Tsing 2015; Haraway 2016). Wild land according to the Oxford English Dictionary is uninhabited and unpossessed. Through colonialism and power, a spell of possession has been cast over wild spaces. Possession has enacted taming and subjugative powers over wild land and wild inhabitants - and as wildness has become possessed it has also been demonised:

> Wildness, indeed, has simultaneously provided the lexicon for massive
>
> systems of violence and the justification for the removal of native and black
>
> peoples. Wildness, in other words, has historically been weaponised and has
>
> provided some of the language for what Sylvia Wynter has called the"
>
> coloniality of being" (Halberstam 2020: 7)

There is a lack of space in early childhood education: literally and metaphorically, a lack of material space and conceptual space. This squeezing has become normalised, synonymous with the way that people on low and middle incomes, in England, live in small houses with small gardens, or small flats with no gardens. In England, 92% of the land is possessed and private (Hayes 2020). I heard that during lockdown, Buzzer, who will be 5 years old now, and his family, displaced from Afghanistan were living in a small, high-rise flat. Matters of disproportionate suffering, injustice and inequality play out in England through the allocation of space in early childhood (Christian et al. 2016) and the pandemic went some way to bringing into sharp focus how little space there was within both education settings and homes - particularly for marginalised communities. Space to fling and spin and run and fall and dash and prance are not freely available to all children.

Inside nurseries, the demarcation of space encloses and divides children by ages and separate children whose parents can afford to pay from children whose parents receive benefits. There is a minimum requirement of 2.5 square metres per two-year-old child (DofE 2021). Outdoor spaces are currently not a legal requirement.

I counter the above image of the ever-shrinking spaces of early childhood education that seek to restrict and possess children's bodies with Halberstam's *epistemology of wildness* and Sendak's *Wild Rumpus.* Thinking with wildness swaps the image of an interior room - the secret, boundaried self for a 'wide open space across which an unknowable self is dispersed' (2020: 10). This research project is an example of art and education coming together with diverse groups of parents and children in order to widen horizon and boundary - to transform spaces. As I recounted in Chapter 1, the project took place over two weeks and began and ended in the nursery space with a trip to the installation during one day in the middle. When dancer Anna Daley and I hung out in the nursery, we changed the

way that the space was habitually used. We didn't intentionally try and do this: it happened as a consequence of bringing our particular practices and materials (string, duvets, projections etc) into the nursery.   In this way, the installation-event had permeable borders with the nursery milieu where relationships, practices and materials passed between nursery and installation spaces. Both spaces, nursery and installation were opened out in particular ways because of this relationship.

The MTW installation was made within an urban sprawl where sky gazing is entangled with traffic noise and industrial beats and drones. Lying on the earth is reduced to allocated spaces free from the dangers of dog shit and syringes. Trees are dwarfed by sky piercing buildings. Plant life is tiny and between the cracks in things. This techno-organic world of Manchester pushes and moves our bodies and disperses ourselves in different ways to Abram's mountains and lakes. The wild characteristics of the MTW installation space were far from Abram's idealised animistic world of sky and earth and horizon and star. The string-bobbles and silk parachute borrowed, from imaginary landscapes such as Max's vines and oceans but did not seek to represent these things. Rather string-bobbles and silk parachutes were included for their unique wild potentials. They worked, to some extent, with the trickster-like ambiguity of depth, 'its mysterious concealments and transfigurations' (Abrams 2010: 93)

The spatial characteristics of the MTW installation, both physical and conceptual, offered a wilding potential: A room large enough to scamper around so that the pattering rhythms of feet and bodies on floor becomes a language between children and the world; space to move, space to become and think differently. A ceiling that appears, through lighting, to be as vast as a sky. Space reduced of the crush and bind of words and signifiers, reduced of the machineries that make the world into stilled objects, emptied of the names

and knowings of those stilled objects. Not emptied completely but reduced enough to make space for wildness in movement. This kind of space opens up to different temporalities, as space and time speak to each other. This installation space unfolds the present time and in doing so, welcomes in multiple possible futures (Braidotti 2006) as well as diverse communities. It opens the potential to jolt adults out of our habitual adult ways of being with children into wide spaces of uncertainty and possibility.

Wild Rumpus

Halberstam (2020) thinks with Sendak's *Where the Wild Things Are* to explore relationships between adults, wildness and children. Halberstam (2020) reconceptualises and troubles wildness to imagine and feel wildness as something outside the order of things. Rather than in opposition to tameness/nature/ Halberstam conjures a wildness that is outside, anomalous, imperceptible. Different modes of existing, wild and tamed somehow exist at the same time together, decomposing and recomposing each other. Space, place, milieu are critical parameters to where and how wild erupts and how it is somehow accommodated. Sometimes wild is imperceptible or unrecognisable, sometimes sensed and liminally contagious. The MTW installation space produced affective atmospherics for wild encounters through its vitalised, expansive floor space, its swinging suspended string bobbles, its darkness and colourful lights. It invited wildness and removed the taming power of words.

Crossing the threshold into this space of difference means different things for different people. It is not a straightforward move to embrace wild uncertainty either full or partially. When things begin to go off the path and into the wild, this can be an anxious time for educators and parents who, in very different ways, carry responsibility and

204

accountability for children's behaviour. Children's (wild) behaviour carries consequences for the adults who care for them and the removal of words from adults throws behavioural relations into unpredictable territory. It takes time for adults to settle into the space.

Halberstam pays attention to differences and relations between adults, wildness and children:

> When the child is King, adults are ruined; where adults are wild, children cohabit uneasily and precariously with them; where children are wild, adults enforce rules and regulations. Wildness in other words is a set of relations, a constellation really, within which bodies take up roles and scripts in relation to one another (Halberstam 2020: 134-5).

Halberstam's wild, ever-shifting relational constellations are manifested in particular ways within the MTW installation where things take a turn towards the wild. However, even in the everyday middle of the nursery, Halberstam's constellations of ruination, wildness and authority are always alive and acting upon the world. Authority fails to contain and possess as wildness leaks out of every carefully controlled system. The material and fleshy life of the nursery disrupts the regulatory structures that seek to tame it. Wildness, uncertainty and authority constantly eat and decompose each other in the nursery milieu. Those who work in early years settings know this only too well. Practitioners such as S relinquish their authority and instead wander and wonder with the wild thinking of young children but there are always many other relations at play. Unleashing wildness has disruptive consequences. It can be difficult for both children and adults to close wildness down once it is opened. Wildness is a parameter, in relation with other things such as calmness, routine, care.

Practitioners, such as S, are constantly sensing and adjusting how parameters of routine, care and wildness are affecting the already highly diverse agglomeration of the nursery milieu. However, when the nurseries are made to enforce rules around 'good' behaviour, such as routines of sitting and listening, wildness becomes overly marginalised and disciplined as errant becoming. In other words, taming also has consequences and can create the conditions that mark some children as problem, others as knowable. There are ethical implications and responsibilities as to how the parameters of wild and tame are set and managed.

Being inside the installation and its emergent improvisationary field, has a particular way of putting everyone in the middle of things. In this it differs from, but perhaps potentially complements, the educational space. As Deleuze and Guattari say, 'It's not easy to see things in the middle, rather than looking down on them from above or up at them from below, or from left to right or right to left: try it you'll see that everything changes' (1987: 23). The installation is a disconcerting and unknowable place, and yet I was delighted by how readily the children crossed the threshold of the installation space, embracing the strange, new milieu. Perhaps the intersection of arts practice in early years education can offer an ethical potential to play with wildness, to experiment with different settings and parameters. For example, in the installation, wild was turned up, routine was turned down. But the responsibility for this lay with the artists rather than the educators. There was the safety net of the return to the nursery milieu. It was an ephemeral event, a festival, a celebration of wild.

Carnivalesque

206

I will now discuss the *carnivalesque* (Bakhtin, 1981,1984) aspects of the MTW installation, as an artistic strategy to both resist the dominant authority of education and, at the same time, work in fertile tension with early years pedagogy. According to Bakhtin, the carnivalesque is a different time-space to everyday, habitual life; it is a second life of the people who enter a 'utopian realm of community, freedom, equality and abundance' (1984:9). Carnival, according to Bakhtin has a particular relationship with time in that it is a time of becoming, change and renewal (10). During the carnivalesque, ways of behaving which are normally repressed and controlled are untethered and liberated from established order. The prevailing structures of everyday life are turned about in topsy turvy ways. Particularly, the carnival demands ever-changing, playful, undefined forms and dynamic expressions. It resists all that is completed and already known (10-11). Thus, the carnivalesque in relation to an educational arts project such as the MTW installation, has a particular relation to prevailing educational structures. It offers a time-space where children's wild ways of becoming-with the world, preside, shaping the event while adult authority is *displaced*.

In a carnivalesque time-space everyone enters a strange temporality. 'Time, as it were, thickens, takes on flesh, becomes artistically visible'. (Bakhtin 1981: 84). Chronological time gives way to the *aionic* time of playful intensities and the *kaironic* time of relational change that I discussed in chapter 5 (Murris and Kohan 2022, Stern 2004) [2]. No one can be outside this rumpus: all are encompassed within the carnivalesque. Thinking with the carnivalesque helps me understand the installation as a time-space, not in opposition to established structures, but rather as a vital dimension to them - a

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[2] Murris and Kohan (2022) draw on ancient Greek notions of time: kairos, and aion. To resist the universality of chronological clock time in early childhood

transforming minor gesture, a relational and liberational set of expressions that exist *because* their prohibition also exists.

Those who have not yet learned to purposefully structure their time according to the chronological laws of curriculum, become free in the Carnivalesque, to wander at varying speeds and intensities in no particular direction. Those who have not yet been taught to name the world and pin it down with words are free to express their becoming-with the world. In the carnivalesque, the subjectifying and objectifying powers of words dissolve as they no longer have adult mouths to speak them. Instead, words such as "*Come 'ere Moogie slot!*" manifest through the mouths of children, as juicy, physical vibrations, in deep temporal and spatial relation with the material milieu (Martin-Bylund 2018). Rules (such as not being too silly) become confounded, transgressed and confused by becoming-clowns who find themselves in their proper wild domain.

The carnivalesque time-space of difference starts to work on adults after a while. I was fascinated by a moment caught on both Tcam and 360˚ camera eyes about ten minutes into the first session. A practitioner kneels in the space with nothing much to do. It feels like time surrounds her as she looks on into the space, a *seer*, taking all of it in as things unfold around her - encounters and becomings such as a Floor-dancing-becoming-with-string-bobbles calling out '*come 'ere moogie slot!*' play out as the practitioner looks on. The practitioner's time cannot be filled with words or purposeful business, so instead time has to be fully experienced. The practitioner inhabits an intense, still emptiness, its intensity is magnified by the buzzing and *moogie slots* around her. She briefly touches her watch but does not look at it. This evocative juxtaposition is manifested through the parameters of the MTW time-space and later on, through the camera eyes.

This topsy-turvy nature of the MTW installation reverses roles of adults being in charge so that children's relations with the world become the conditions for what happens and emerges; adults are led into experimentation and improvisation in a present time that thickens and thins about us. Adult bodies become the servants of the sliding duvet burrito upon which children's bodies ride. Adult hands are pressed into service as wafters to the great parachute that divides the world in two. As we sink into the trickster-like, changing perspectives and shifting assemblages that are making, unmaking and remaking themselves through varying temporalities, I feel, as I often do in these circumstances, something grow between us. Parents begin to relax and play. Perhaps we adults are beginning to feel into a sensed and emergent responsibility rather than the weight of our individualised roles: educator, parent, animateur, researcher.

A clear memory, that I have carried through lockdown, is turning to a group of parents towards the end of the session. We all had drums in our hands, and we drummed and laughed together for what was probably a very short time of intense yet meaningless conviviality. The temporality of the installation had worked upon us. The anxieties that we had entered with had given way to playful encounter and a universal laughter expressing the 'wholeness of the world' (Bakhtin 1984: 12). In a carnivalesque event such as the installation, the way in which two-year-old children roam wild, 'not following a logical order, but [by] following a-logical consistencies or compatibilities' (Deleuze and Guattari 1987: 292) is liberated from the futurity of outcome-driven curricular demands.

The carnivalesque with its wild expressiveness, is a vital affirmation with the potential to jolt us out of habitual ways of being. It is a strategy for becoming-with the visceral ambiguity of a wild, re-enchanted world (Abram 2010). While the carnivalesque has the potential to turn things upside down so that they become seen and understood anew, it

is a temporary festival, an ephemeral and liminal timespace. That is its power. It can activate new understandings and enliven the world because it happens only for a short time. It can never be about what is established and known. Therefore, the carnivalesque is the potential *second life* of the educational assemblage, the event that breathes air into the everyday.

Art and pedagogy

The above suggests that the carnivalesque nature of open-ended arts practice in the early years offers a potential second life to early education, that is to say not in opposition to, or instead of, but as a vital aspect that celebrates, disorders and liberates everyday pedagogy from the capitalist ideologies that seek to possess it. This means understanding temporal arts practices as strategies that have the potential to resist taming, territorialising and closing down children's becoming-other; strategies that do not demand individuality or visibility from children and are capable of working with anomaly.

Biesta (2018) has proposed a *world-facing* pedagogy, imagining art as an on-going exploration of what it means to be in the world. He proposes art as the dialogue between humans and the world, 'the ongoing attempt at figuring out what it means to be here, now: to be — here — now.' (pg. 17). However, Murris (2017) critiques Biesta's world-facing pedagogy as not going nearly far enough in smudging the boundary between subject and object or decentring the human. Art that is made by the human as an anthropocentric expression of a world does not do enough. Art exploring existential and subjectified *meaning* does not enough. There is, and I would say particularly in the pre-verbal early years, potential for art to work in the borderlands between subject and object, before getting entangled with and contained by identity (Colebrook 2009). This can be seen in the

creative expressions that emerge from the conditions of the MTW collective space. *Moogie Slot* for example exceeds the floor-dancing individual who spoke it.

"right in a moogie slot!"

> *[adults go "oop!" as if something is nearly spilt or collided with]*

> *"whap!!"*

> *"come 'ere moogie slot!"*

> *"got you moogie slot!".*

Moogie Slot emerges from string-bobble becoming-with-child (and other things). *Moogie Slot* has its own transforming existence as it bounces through this thesis. Art (*Moogie Slot)* has anomalous potential, breaking free from both meaning and subject. *Moogie Slot* does not represent Floor-dancer who spoke it; *Moogie slot* does not *mean* a particular thing. *Moogie Slot* is a creative expression that does something in the world. As Colebrook writes,

> Art would not be the representation or formation of identities but the
>
> attempt to present pure intensities in matter, allowing matter to stand alone
>
> or be liberated from its habitual and human series of recognition. The
>
> sensations presented in art are not those of the lived subject but are powers
>
> to be lived for all time, allowing us to think the power of perception beyond
>
> the selves we already are (2009: 21).

Marguch notes how '[Art] projects are particularly good at capturing [a] sense of the anomalous, since [art] always works in the domain of the pre-personal, and therefore is

capable of exploring what is happening at the borders' (2018: 551). This research and my

professional practice are concerned with how art and pedagogy speak to each other. Murris

(2017) calls for not only decentring the learner but also, the (western) human. Murris and

Haynes (2020) explore *sympoetic* approaches to trouble ideas of authority and boundary-

drawing in education and pedagogy. Sympoesis is a term coined by Haraway (2016), taking

the heterogenic self-making of *autopoesis* (Guattari 1995) and acknowledging the symbiotic

relationality of everything: *sympoesis*. Murris and Haynes imagine how shared authority in

future education might be created sympoetically: a making-with through experience, rather

than adults bestowing experience or learning. They note that working with young children

necessitates an engagement with 'concepts, affects, and experiences related to authority

and boundary making' (p25); that it is impossible to ignore these things. Enactments of

authority shape the educational possibilities that will emerge. The authors argue however,

that authority is given too central a position and that this is highly contestable when

working with young children, families and diverse communities. They contest deeply held

beliefs about adults being *in charge* of children's movement's interactions and appetites,

and also ideas about who gets to have epistemic credibility and what forms of knowing are

legitimised. They take authority beyond issues of behaviour management, into ideas of

emergent, *sympoetic* education:

> We want to argue that imagining and creating such negotiating relationships
>
> in education contexts, for children and adults, serves to make education more
>
> democratic through establishing diverse approaches to negotiation out of the
>
> habitual way of doing things, negotiating with each other, beyond words
>
> (Murris & Haynes 2020: 39).

Practices of negotiation beyond words require tentacular sensibilities and micro-ethics as enactments of authority set the conditions for wildness and order to play out - or not play out. I suggest a sympoetic education might have a particular potential to engage with diverse funds of knowledge in education.

The *sliding duvet burrito game* that I mentioned at the beginning of this chapter, is an interesting story that seemed to emerge playfully as an invitation from the educators to the children; and yet the authority of the adult body was also at play. The physical placement of Buzzer into the burrito is a physical command or direction as well as a suggestion and an invitation. It is both at the same time. It is, I would say, a successful offer and brings great delight to Buzzer, but in this physical placing, there are the incommensurable tensions of education playing out. The placing and controlling of Buzzer's body brings him into (Tcam) perceptibility. It is a risky strategy of engagement and authority with Buzzer that appears to be an improvised impulse on behalf of the educator. But it also might well have been exasperation. Becoming-with the sliding duvet burrito is corporeally affirmative and vital: it potentially widens experience (of sliding, being wrapped-up-with) without subjectifying. The dangers of these adult impulses of authority arise through trying to reproduce sliding duvet burrito games to pre -existing rules or fixed ideas as to how things (such as sliding duvet burrito games) should go. This sliding duvet burrito game was being born into the world experimentally, emerging and improvised between stripped-of-words adults, duvets and shiny floor. It was still an experimental game between adults and children but not yet a fully pre-conceived activity. In this small event, authority, hilarity, creativity and transgression sit in relation.

Vanishing horizons, wild landscapes and multiple depths of timespace are not easy things to deal with. They are difficult and nearly always awkward. Being jolted out of our

habits and the safety habits offer us is disconcerting because suddenly there are no clear

rights and wrongs anymore. There were, for instance, irresolvable dilemmas around Buzzer

and the sliding duvet burrito event, where actions of authority, restriction, wildness and

uncertainty played out against each other. I argue, however, that these tensions are not

problems to be shut down; rather, they are the generative problematics of ongoing

thinking-with order and disorder as we navigate uncertain terrain between art and

education.

Chapter 7. Becoming-Music

Introduction

While studying for this PhD I have had a second life. The stability that the bursary

and longevity of the thesis project enabled me to rekindle artistic practices in music that the

relentlessness of the freelance artist life had squeezed out of me. I reconnected with free

improvisation, playing regularly in gloriously uncertain ensembles and, during lockdown, I

journeyed into unexplored electro-acoustic experimentation and sound synthesis,

something I had long desired to do. I breathed in the music of the world. I wandered the

borderlands and interstices between electro-acoustics, free improvisation and sonic arts:

worlds that lie on the edge as what is commonly understood as 'music'. It is a rich, vital and

playful strand of my life that I share with other humans and tricksy machines. Experimental

music works on the edges of intersecting art forms. By definition, it cannot be pre-scored or

reproduced even by the musicians who make it. It exists in a state of actualisation (Holmes

2020: 156). This practice is woven into the very bones of this thesis. I move from writing it

to playing and back again. How I think and how I write is contaminated by musical

encounter, and the wild music I make is infected by feminist materialist, posthuman philosophy and animistic relations (Stengers 2012).

In this chapter, I work towards some of the many ways in which Deleuze and Guattari conceptualise music in *a thousand* plateaus. I found my Deleuzio-Guattarian affinity and way into their thinking, through their understandings of philosophy-through-music. Their thinking through music hooked me into their thought because they attempt to do something very difficult - and very simple. I have come to realise through their work (and my deepened music practice) that I also understand and sense the world through music, rhythm, pattern, sonority. I have great respect for the way in which they managed to write around music.

This chapter is therefore dedicated to music and what music does. Music in its sonorous and more-than-sonorous forms (Shannon and Truman 2020). Deleuze and Guattari return to music throughout *A Thousand Plateaus* (1987) They mention music hundreds of times. They recognise that there is a spark of *magic* in music that somehow evades all the rules and restrictions it lays down for itself, something ineffable, indescribable (Jankélévitch 2003; Grosz 2008). They even apologise for trying to describe what musicians do in words. They dedicate a whole chapter in ATP- *Of the refrain* - to music in order to unfold music as philosophy as biology as music. Antonioli and Heuzé (2012: 87) note 'how music appears in the most intimate part of Deleuze's thought because it is the closest to his process of thinking'. And in his introduction to *a thousand plateaus,* Massumi states 'In fact, Deleuze and Guattari would probably be more inclined to call philosophy music with content than music a rarefied form of philosophy' (Massumi in Deleuze and Guattari, 1987: xii).

In the first part of this chapter, I discuss music education in the UK and Euro-west and how the practice of music remains under the colonising thrall of western classical music. I use the Harawayism (2016) of *prick-tale* to describe how western classical dominance continues to strip all but the elite few of the liberating potential of doing music. My academic background is in early childhood music education (ECME), and I introduce this field not only in relation to music education but also to discuss the relation between - and various discourses around - early childhood music education and children's emerging language.

In the second part of the chapter, I go on to discuss theories of the musical nature of communication in infancy and early childhood and the musical nature of intersubjectivity and intersubjective time (Trevarthen & Malloch 2009; Stern 1985, 2004). From there, I open up posthuman understandings of these theories and explore how music operates through time. I revisit the concept of polyphony that I briefly discussed in Chapter 4 and open it out to think about how we listen and how sound operates as a situated, entangled expression of the world. In the final section, I shall discuss how music, rhythm and refrain are the movements, the *how and when* processes through which the *what and where* of the world emerge (Kleinherenbrink 2015). I suggest that thinking through improvised music such as the MTW installation helps to give us glimpses into children's emergent onto-epistemologies. I ask what might be opened up in early childhood education (ECE) through the arts practices that think with musical phenomena (sonorous and more-than-sonorous) such as polyphony, refrains and deep listening.

Part 1: The making of the 'musician'

Music in the Euro-west

I have worked with young children and music for over three decades. I trained as a community musician in 1987 and have worked closely with children's centres and nurseries for over two decades. I have a master's degree in early childhood music education (ECME). I work with music education hubs across the UK, teaching music teachers to improvise and *play with* music. I perform music regularly and have a rich emergent practice. I think and sense through music and understand the world as music in ways that I will discuss in this chapter. However, I am very much on the edge of what is considered to be a musician in the Euro-west. For instance, I would not be employed by the music education hubs (whose workforce I teach to improvise) as a school music educator because I do not use or practice methods of musical reproduction such as notation. Notation reading and the technical reproduction of particular kinds of already-existing music, are not only required to teach music in education, but have become the hallmark of deciding who gets to be called a musician and who does not.

We, in the Euro-west, that is to say, in cultures shaped by the Renaissance, the Enlightenment and expansive colonialism, live the under the shadow of western classical music. The way we do music and the way we feel, sense and express as musical becomings is entangled with, and dominated by a particular musical epistemology that seeks to reproduce and uphold a particular musical ideology. I suggest this ideology, rooted in white supremacy (Molk 2021; Ewell 2019), colonises the liberating potential of music. This results in an alienated relationship with music that is neither playful nor experimental, but rather

governed by notions of right and *wrong* and the fear and shame that becomes attached to notions of wrong.

The term *musician* is haunted by the ever- present spectres of Mozart, Beethoven and Bach, the supremely *gifted and talented* white, male individual. The ultimate *prick tale* of the doomed hero and his high and lonely destiny to whom all other musicians must be measured and found wanting (Haraway 2016; Delpech-Ramey 2010). The doing of music is constructed, in this Euro-western regime, as a difficult, technical exercise of *reproduction* that can only be mastered by particular people and only at great cost.

Who gets to be taught to read and reproduce this music is further bound up with privilege. For instance, even pop music in the UK is dominated by ex-private school pupils (Music:ed 2019; Malt 2019). The massive ongoing global impact of the African diaspora in music is barely reflected in UK music education. *Levelling up* in the new National Plan for Music Education (2022) is heavily weighted towards providing access to western classical music for marginalised children (72), echoing the racio-linguistic drive for minority communities to speak standard English that I discussed in Chapter 3.

I have found it increasingly curious how Euro-western music education resonates with ways in which literacy education also attempts to subjugate non-dominant linguistic practices (Cushing and Snell 2022). Could this be because dispersed attentions and polyphonic sensings that emerge through doing music (or interaction) *freely* are disruptive to the order of things and carry liberating potential? An improvising culture cannot easily be contained and dominated. It must be shamed out of its errant ways. The attempted stripping of the languages and musics of colonised and subjugated peoples is, I suggest, reflected by the hegemonies of standard English and western classical music.

Music education in the UK is bound up with un-examined colonialism, hierarchy and capitalism. It upholds a powerful neo-liberal ideology rooted in jingoism, utility and impact. For example, the National Plan for Music Education (NPME) was published last year. It opens with:

> This country has a proud history of music- making. Down the generations,
> music has enriched our national identity, our community and our economy.
> Music education is essential to safeguarding and extending the musical life of
> our country for generations to come (DfE 2022:2).

In this colonial *ritornello* of *Rule Britannia*, talent is mentioned 43 times, progression 58 times. The Henley review for music education (2016) which underpinned the NPME, began with Darren Henley's introduction:

> I am lucky enough to have spent the best part of two decades working at
> Classic FM, surrounded on a daily basis by some of the greatest music ever
> composed, performed by some of the greatest musicians ever to set foot in a
> concert hall (Henley, DfE 2016:4).

The NPME barely considers early years children. While years of lobbying from ECME factions has ensured the words 'early years' are repeated whenever the word 'school' appears in the NPME, nothing of substance is there. The teleological refrain of progressing the child with talent, 'developing ability and interest' (DfE 2022: 13) puts responsibility for ECME upon low paid EC educators, suggesting that they seek support from music hub specialists while

providing no resources to do so. The NPME justifies itself through two strands: firstly,

'levelling up'*,* which comes to mean providing access to western classical music education to

those who are currently lacking access: a familiar refrain of gaps and deficits which has

haunted public arts funding for decades (Jeffers 2017; Small 1996; Hope 2017; Moriarty

2014). Elite conservatories are given large amounts of public funding to deliver programmes

to children from minority backgrounds. Thorny questions of 'cultural value' and

unquestioned assumptions around what counts as 'cultural capital' are elided as distinctions

between education, voluntary groups, industry and commercial arts become hazy (Belfiore

2012).

The second strand of justification in music education is through the economic

potential of music technology: the *'*pathways to industry'. For example, research reports

around music technology and youth music in the NPME are bound up with UKmusic, 'the

collective force of the UK's world-leading music industry' (UKmusic). UKmusic is a self-

proclaimed lobby group for 'music industry leaders' that undertakes research, promotes the

music industry, guides policy making and supports initiatives to grow the music industry's

(multi billion) 'talent pipeline*'* and 'future workforce*'* (ibid). These territorialising refrains

call the tunes of music education; they are colonial riffs, capitalist drones, played so loudly it

is hard to listen otherwise. Progress, development, standardisation, profit; TV talent shows

that shame those who dare to try and glorify the perfect replica, attempting to, but failing

to completely to silence the musicking of playful and experimental production. While Grosz

(2008: 29) notes, 'Of all the arts, music is the most immediately moving, the most visceral

and contagious in its effects, the form that requires the least formal or musical education or

background knowledge for *appreciation*' (my italics). It is worth reiterating how, at the same

time, in the UK, a musician seems to require the *most* formal and technical education and background knowledge to be seen as a legitimate music performer.

Yet the productive practice of music somehow manages to find ways through. A recent Youth Music report (2020) recognises that an increasing number of young people are making music and understanding themselves as being musical through self-taught, non-school-based, non-western classical routes. DJing, sampling, experimental manipulation of sound materials through analogue-digital-acoustic hybridisation, repurposing extinct sound technologies; ever-shifting music practices that aim to *express* a resonating, vibrating universe, rather than to reproduce and copy. This is the listening-doing of music, the minor gesture on the cutting, de-territorialising edge of what is commonly understood as music.

For Deleuze and Guattari, music is always a minoritarian becoming. Western music (classical and pop) may be elitist, majoritarian, popularising, imperialising and the most capitalisable of all art forms (Grosz 2008:57) but it also has its productive de-territorialising edges. These edges are never occupied by heroes and famous people. Experimental electronic music, for instance, has been shaped by its women pioneers. While electronic music arises and responds in parallel to emerging technologies, Tara Rogers notes the void, the lack of acknowledgement, representation and the underestimation of women in sound. Despite a 'curious lack of representation that profoundly underestimates the presence and diversity of expressions by women working with sound as a creative medium over the last century' (Rodgers 2010:2), electronic music has at its pulsing heart, a network of inspirational women who are not familiar names - bag ladies of experimental music who have defied normative modes of capitalist reproduction in music. I will name a few of them: Daphne Oram, Delia Derbyshire, Pauline Oliveros, Elaine Radigue, Suzanne Ciani, Lauri Anderson, Susan Rogers, Pamela Z, Laetitia Sonami - there are many more. The

documentary *Sisters with Transistors* (Rovner 2020) tells the story of women who embraced the liberating qualities of machines, who have transformed the way music is produced. The power of machines to emancipate music was recognised by Deleuze and Guattari who understood the synthesiser as a way to also unfetter thinking. Machines, as the Youth Music report (2020) shows, are also liberating young music makers from the shackles of western classical music and the elitist, colonising (and increasingly redundant) figure of the *gifted and talented* musician.

I consider myself extremely fortunate to be a *useless* musician, free to make wild *purposeless* music with people and machines. My music practices help me feel movement, pattern and entanglement in particular ways that transverse and transect the sonic. Deleuze and Guattari, as I shall explore in this chapter, use their philosophy of music as a way of avoiding transcendent principles. They reject any supreme ideology, abstract truth, historical progression or transcendent entity that unifies or legislates over all of being (Kleinherenbrink 2015). With this, I argue, it is time to flatten the transcendent ideologies that have become attached to Euro-western music and its educational tyrannies. To begin to grasp that everything is becoming-music all the time.

Early Childhood Music Education (ECME)

Despite the low status of both early childhood education and music education in relation to mainstream education, Early Childhood Music Education (ECME) is a contentious field with a lively critical, scholarly element (see for example, Young 2017, 2018; Gluschankof 2019; Niland 2012; Huhtinen-Hilden & Pitt 2018). I was fortunate as a practicing early childhood musician to find an academic home in ECME, doing a master's degree which led to this scholarship. In the UK, ECME is a mixed bag of commercial

223

providers, freelance practitioners and a patchwork of publicly funded arts and music

projects. Funding, commonly through Youth Music or Arts Council England, is aimed at

providing access to music and arts activities to minority groups who are deemed to be in

need or lack the means to access art activities. Funded music projects, either in nurseries or

for parent and child groups, are characteristically short term (Belfiore 2021; Young 2018).

Therefore, access to music education in early childhood is potluck and short term, unless

paid for (Young 2017).

Calls for greater investment in music education in early childhood tends to be

framed by two arguments that I will now discuss. Firstly, there is the teleological argument,

laying a foundation for the future, maturing and ultimately adult musician. This future

musician is an already known destination with a pedagogical map set to serve this project.

Terms such as *pathways* and *progression routes* are commonly used as a way of providing

and tracking a developmental line of musical progress towards a particular, western

classical, figure of *musician*. For instance, the 2022 UK National Plan for Music Education

(NPME), while not actually funding ECME (as I stated earlier), urges music education hubs to

provide 'training for leaders of partner organisations, early years educators, and key stage 1

teachers to enable them to *understand and support progression* from early years.' (DofE

2022, my italics). Dominating ECME are three pedagogical approaches - Dalcroze, Orff and

Kodaly - named after three, dead, white western men. Young (2018) notes that each of

these methods 'encapsulates a strictly defined and distinctive image of childhood and what

children should become musically' (14). Allegiances to particular approaches in ECME result

in defensive positions and a lack of curiosity about other ways of thinking about music

education. Regelski calls this unquestioning reproduction of a musical approach

'*methodolatry*' (Regelski 2002 in Young 2018: 14); a dogmatic and territorial positioning based on weak evidence and taken for granted assumptions.

The second argument justifies ECME as a mechanism to advance other developmental aims of education. For instance, the Australian organisation Bigger Better Brains 'empowers music teachers' to be able to advocate for music by presenting the argument that 'Playing an Instrument Benefits your Brain' (Bigger Better Brains online Nd). Its founder Dr Anita Collins runs a highly successful commercial business delivering 'world leading' training and giving talks that include 'translating the scientific research of neuroscientists and psychologists to the everyday parent, teacher and student' (ibid). A two-hour course on understanding the link between Music Learning and Language (understanding the link between) costs $170. In the UK, the NSPCC's Look, Say, Sing, Play campaign that I mentioned in Chapter 3 advocates musical singing activity as a way of boosting brains and accelerating talk. In other words, ECME is deployed by, and entangled with, the word-gap discourse and is associated with other developmentalist agendas that I discussed in Chapter 3*.*

Young (2018) provides a critical perspective on ECME, pointing out that it is the 'interpretations of powerful groups and individuals - white, middle class, able bodied - that become embedded in prevailing ideas about music, children and what is valued - or not' (2018:3). Furthermore, the *methodolatry* of music teaching in ECME is deployed by commercial forces who have a financial interest in pushing a particular method - and charging for it. Young calls for new ways of thinking about ECME and a spirit of open mindedness in rapidly changing times; new theories, concepts and terms in order to engage with how technologies are transforming young children's musical lives. I draw a little bit more deeply on this developmental thread woven into the early childhood approach to

music to show how ECME is tied to word-gap discourses and how the same constructions of child as proto-adult and proto-musician not only subjugates young children's onto-epistemologies but also relegates music to being a mechanism to advance development in non-music subjects. Music is valued as an instrument for improving areas that are given greater value in education, such as literacy or maths.

As the early years has become increasingly framed by neoliberalist thinking in public policy (Moss & Roberts-Holmes 2022), the importance of 'investing' in the early years has become a driver for future economics and there has been an equivalent reaction of what Belfiore terms *defensive instrumentalisation* (2012) in the arts - and this includes ECME. Defensive instrumentalisation addresses decreasing public arts spending by attaching arts activities to popular public policy, thus defending and instrumentalising music education by positioning it as being good for other things, such as cognition, language, behaviour, industry, economics. For example, the uncritical deployment of scientific research echoing the populist 'science says' (Johnstone et al. 2017) that is attached to young children's speech (as I discussed in Chapter 3), also becomes a justification and defence for music education. This can be seen in the way randomised controlled tests measure the academic impact of doing music (see Schellenburg 2004 and Rauscher 2002) but leave unexamined what kind of music is taught, the way it is taught and ignore socio-economic and cultural factors. The two studies mentioned above make claims from small samples of children whose families are affluent enough to own keyboards.

Belfiore notes, how this *defensive* instrumentalism of the arts leads to nothing beyond itself. It bypasses positive and constructive articulation of values and beliefs and fixates instead on legitimising culture through targets , performance measurements and 'evidence' - a powerful neo-liberal ideology rooted in (scalable) utility and impact (Belfiore

2012). Belfiore notes how the arts are not necessarily 'good' for society and yet they become a kind of auxiliary to public policy and stripped of their transformational and disruptive powers. Arts practitioners such as early years music providers find themselves justifying their field through neoliberal discourses in order to maintain their precarious freelance livelihoods. Artists have to somehow operate between dominant regimes and ethical practice. Moriarty asks the critical question of community artists: 'Does our work unsettle unequal power relations, or does it confirm and support the status quo?' (2014 online). Music practices in early education, I would argue, are doing both.

I have argued in this early part of this chapter that ECME continues to support the white supremacist prick tales of western classical music that holds the centre ground of music education. I have discussed how it continues to re-construct children as adult musicians-in-waiting. But at the same time, as I have intimated, there are ways that music simultaneously is a force that has the capacity to unsettle these dominant narratives, and that adopting experimental, improvised music practices can potentially de-territorialise and decolonise western understandings of music. I also want to suggest that music is so much more; it is (like language) in excess of the instrumental ways it is so often framed taught and progressively measured. Music is, as I shall discuss in this chapter, quite literally, world building.

Part 2: The excessive temporality of music

Communicative musicality, the musicality of language

The theory of *communicative musicality* (Trevarthen & Malloch 2014; Dissanayake 2015) is influential in ECME. Examining the musical nature of carer-infant relation, it draws

on fields of biology, psychology, cognitive semiotics, musicology, anthropology and neuroscience. Trevarthen recognises the musical qualities of vocalisation and gesture between carers and infants. He argues that this is the place from which language arises both in biological and evolutionary terms (Trevarthen & Malloch 2014). Dissanayake similarly speculates how music formed early, evolutionary bonds between carers and infants, how the earliest narratives were musical (2015, 2012) and how music has, in evolutionary terms, shaped human communication.

While the theory of communicative musicality foregrounds the productive operation of music and its relation to spoken language, it has a tendency to do so through an anthropocentric position, putting music at the centre of *'what it means to be human'* (Malloch & Trevarthen 2018 :1). I have discussed Malloch and Trevathen's work elsewhere, critiquing the way in which 'aesthetic behaviours are situated as a beginning to what comes next in both developmental and evolutionary terms; a pre-verbal proto-music or proto-*conversation*, and the first step towards the preconceived outcome of a modern, talking, adult human' (Arculus 2020: 65). I have also flagged up the dangers of how communicative musicality might be used to conceptualise the way that young children do music as *proto-music* in the same way that children are treated as proto-adults or adults in waiting (Arculus and MacRae 2022). Communicative musicality, as a theory in partnership with human-centred paradigms, becomes a teleology where children's musicality becomes constructed as a foundation to both their future musicianship and also, their future spoken language.

I want to look beyond the human exceptionalism that has, unfortunately, come to be attached and embedded in theories of communicative musicality and move towards the Deleuzio-Guattarian understanding of music as a 'creative, refrainic force that makes the world rather than something human beings do to make contact, interact or grow a musical

identity' (Arculus 2020 :66). The idea of language emerging out of music becomes posthumanly resonant once the human is decentred. With Grosz, I maintain that music cannot be considered to be a product of mankind, distinguishing Him from the animal, but rather a nonhuman cosmic force ' that runs through all of life and connects the living in its various forms to the nonorganic forces and qualities of materiality itself' (2008: 19). Grosz notes how Darwin considered music to be an instrument of seduction and selection before humans were fully human (2008:34). Re-thinking with Darwin and the music of birds, whales and humans, Grosz' work pays particular attention to the difference between Darwen's concepts of *natural selection* (what is needed for survival) and *sexual selection* (the productive force of expression, creativity and differentiation). She notes how, unlike most of his subsequent followers, Darwin considered music to be part of an *animal heritage*, an elementary fragment of ancient animality.

It is the excessive expressiveness and creativity associated with sexual selection that Grosz draws out from Darwin's thinking*:* a relational, vibrational in-between of people and the world. Whereas Trevathen's *communicative musicality* potentially frames music within an evolutionary teleology (we made music in order to survive and evolve), Grosz, argues, from a posthuman and vital materialist understanding, that music is not reducible to a function of survival; rather it opens ups to an excessive expressiveness, and thus brings something new into the world. In this way, music becomes human-making, as well as language-making. Deleuze and Guattari conceived of music as an intimate link with the flow of lived time and cosmic life. They argued that language and music are both part of the same pluralised substance, ontologically joined in cosmic rhythm (Gallope 2018). They consider language to emerge through synthesis rather than a structural process; to emerge from varying conditions that can be understood as music. They repeatedly contested

arboreal understandings of linguistics: 'You will never find a homogenous system that is not already affected by a regulated, continuous, immanent process of variation' (1987: 130).

Deleuze and Guattari were highly influenced by biosemiotician von Uexküll, who understood the world and its complex, context-specific relations *literally* as 'musical laws of nature' (2001a, 2001b). Uexküll understood *lifeworlds* [Umwelt] according to connective, creative-responsive conditions rather than causal impulses. In other words, music is operational in the world, the world's way of moving rather than a reason for, or by-product of, other things.

Thus, I propose, with a posthuman, materialist understanding, *communicative musicality* can be understood in carer/infant musicking, as an 'ongoing, emergent and immanent operation at play in the relations between people and the world, rather than the foundation of a transcendent outcome of spoken language or boundaried musical identity' (Arculus 2020 :66).

What children can tell adults about the *ontological* workings of music is hidden in plain view; we need only to tune in to young children in order to feel how music is alive in the world: 'To understand music as a becoming, the becoming-other of cosmic chaotic forces that link the lived [...] body to the forces of the earth' (Grosz 2008: 26).

The temporality of music

Trevathen's communicative musicality draws on the work of psychologist Daniel Stern (1985, 2004) whose empirical work, like Trevarthen's involves the micro analysis of infant/carer relationships. Stern also understands parent-infant interactions as musical dancing. Stern is interested in what music does with time, what he terms *relational intersubjectivity* and the sense of self. He argues that music and dance require a

foregrounding and thickening of the present time. He notes that music is heard and felt to occur in a moment that is neither instantaneous nor parcelled into sequential time (like music notation). Instead, it is a flowing whole, converging past and future into the present moment. As Stern said, music cannot be divided up. 'It is not a summary of the notes that make it up. It takes form only over time' (2004: 367). Stern sees the present moment as having a temporal thickness in which intersubjectivity, change and temporal arts play out.

Drawing on Stern, Manning (2006), who improvises dance as well as writing philosophy, recognises how leaky subjectivities reach into the world when *time becomes present* in improvised relations. With Stern, I would agree that there seems to be a relation between present time and intersubjectivity - that is to say a reaching out beyond experiencing ourselves as separate - into a mutual space where subject/object binaries become blurred. I suggest that improvised temporal arts practices have the potential to open adults up to the emergent, aionic spacetimes that young children inhabit. The uncertain conditions and relations force improvising players into present time, opens time up. Stern used the Greek term *Kairos* to name this time in which change, relation and connection take place. The time in which change happens: musical time. Present time is disintegrated by plans, purpose and curriculum. Stern contested the *Chronos* view of time moving inexorably and evenly, eating the future and leaving the past in its wake. In this view, the present is effaced as it is too short. There is no now. This helps me understand how the music of the world cannot be sensed without a foregrounding of the present.

While both natural science and psychology inhabit a chronological or Newtonian view of time, it is clear that the lived and felt sense of life has a 'thickening of time' around the present. Abram notes how, for many oral cultures, the present time has great power and holds archetypal pasts and futures within its cycles (1996: 186-7). Time is not the

'linear, sequential, uniformly flowing time that Western civilization takes for granted' (ibid: 190) This temporality is hard to grasp for the westerner, impossible to write as 'it defies the linearity of the printed line' (ibid: 186).

The Newtonian clockwork universe assumes that absolute time is separate and independent from absolute space, and this has made the present into a tiny, infinitesimal speck separating past from future. Abrams calls for present-centred, present expanding practices that dissolve past and future into an expanded present time and space. He notes the time-space relationship between a subject being present and the *field of presence,* which is vibrant, sensory and immersive and has the potential of working with 'the thickness of the pre-objective present' (Merleau-Ponty 1962 :433). Pre subjective, pre-objective time somehow, I suggest, reside in music. In doing music, one accesses a different temporality where 'Time, as it were, thickens, takes on flesh, becomes artistically visible' (Bakhtin 1981: 84). I suggest that young pre-verbal children with their porous subjectivities and flexible temporalities occupy this musical, intra-relational spacetime effortlessly and therefore have something vital to bring to the aesthetic and educational spacetime they share with adults.

Time did funny things during the MTW sessions. Not only kaironic time but playful meandering time of aion, as Murris and Kohan (2021) understand it (I touched upon aionic time in chapter 5). The sessions lasted longer than expected but felt as if time passed very swiftly at the same time as having unfolded and expanded. This stretchy time and lost time are common feelings for me during improvised activities. I remember short connective interactions lasting a few seconds being deeply filled with shared affect, feelings and change. Operating a pulley with a child to our mutual delight and hilarity; pulling a child around the space on a fabric train; drumming on the big drum and then turning to a group of parents, also drumming, to laugh and share our rhythm and pleasure in each other.

Uncertain, improvised, emergent time where we, with our vast differences in power and subjectivity were present to each other. Multiple temporalities including the thick time of encounter and change and the spacious time of deep listening. As we encounter the world in this opened, present time, our sense of corporeal and conceptual separation breaks apart a little.

The rich, polyphonic, fertility of present time, children's time is continuously gobbled up by Euro-western chronological time, a temporality deeply entangled in colonial discourse and notions of progress (Macrae 2019). Readiness for school demands that *time is not wasted* and reduces the 'complexity of temporal matters […] to the logics of urgency, speed and 'early intervention'' (Bates 2019: 413). This limits the way that time may be experienced and learned by children (ibid). Curriculum time, colonial time ignores the complexity and diversity of the present (Tsing 2010). It is screeching feedback of time repeating itself. Murris (2016) notes how the tyranny of the curriculum 'Clock', dictating short term decontextualised achievement goals, swallows the *time for listening* or real time. Murris understands time for listening as outside chronological time: it is 'a time full of silences of long pauses, and interior time' (p.200).

MacRae (2019) notes how time is sliced to make children tangible and (di)visible as homogenous, developmental projects. Pacini-Ketchabaw talks about 'an almost-perfect synchronization exists between the clock's hands, the children's movements, and the educator's bodies' (2012: 154). Pacini-Ketchabaw goes on to describe how songs are deployed to mark time in 'clocking practices'; how 'tidy up time' becomes a dogmatic and monophonic refrain. Clocks and their songs perform transformations upon us and shape the music the human/clock/other assemblage is able to produce.

Music does things with time and time does things with music. Deleuze and Guattari, understanding the generative potential of rhythm, which I discuss later in this chapter, warn of the dogmatic nature of meter, of how 'nothing is less rhythmic than a military march' (1987: 313). This brings me back to the difference between polyphony and monophony which I will now discuss.

Thinking more with Polyphony

Present time is polyphonic. Tsing uses the idea of polyphony and the *polyphonic assemblage* (2010: 23) to disrupt the monophonic and unified timeline of development and progress. I have discussed polyphony as a research-creation strategy in Chapter 4. In that section, I explored the polyphonic nature of my work, the MTW installation, and my desire to work with polyphony in this research. I explored, with biologists Tsing (2010) and Sheldrake (2020), how the musical phenomenon of polyphony is a way to think in situated and multiple ways. Tsing and Sheldrake can be understood as using the musical concept of polyphony to think about things that are not music - such as mycelium. But they could also be understood as noticing, like Deleuze and Guattari, how music is operating in the world beyond what is commonly understood as music. How affect, movement, memory, language, time - and the cosmos itself - can be considered to operate *musically:* as polyphony, synthesis, rhythm, refrain. Thus, the boundaries of music and not-music, disintegrate and polyphony becomes the movements of a heterogeneous assemblage. Tsing notes that:

'Polyphony is music in which autonomous melodies intertwine [..] these

forms seem archaic and strange to modern listeners because they were

superseded by music in which a unified rhythm and melody holds the

composition together.' This unity has been considered to be progress - a unified coordination of time. We are now 'used to hearing music with a single perspective' (Tsing 2015:.23-4).

She notes that polyphonic methodologies attempt to notice moments of dissonance and harmony, of relational awkwardness (Lorimer, 2017), to appreciate differences in *temporal rhythms*. The lack of a single point of focus in a polyphonic assemblage (such as the MTW installation) can be unnerving for adults used to a single shared focus and temporality. Clocks lose their powers when adults no longer enforce them. Temporal hierarchies begin to flatten out. Time does funny things as felt time and measured time collide.

The magic of polyphony is the emergence of refrains that do not belong to individual parts. Sheldrake and Macfarlane (2020 Nd) both discuss how through listening to polyphonic music, 'multiple parts somehow coalesce into something that does not exist in any single part alone'. Sheldrake notes how he has to '*soften his hearing'* and '*distribute his attention'* (2020: 51). For Tsing, learning polyphonic music was a '*revelation in listening;* [she] was forced to pick out separate, simultaneous melodies *and* to listen for the moments of harmony and dissonance they created together' (2015: 24). The softening of hearing that Sheldrake speaks about is the ineffable skill of the improvisor, how during the MTW installation, Anna, Christina, S and I try to gather a soft sense of the whole. It is a skill that temporal artists and educators share. It requires uncertainty and tentacular sensing. Through this soft, deep listening, multiple refrains may be sensed. In other words, paying attention softly to multiple stories/threads/tunes *and at the same time* noticing how each effects the others. Noticing the birds and the murmuration. Being in, or watching film footage from, the MTW installation requires a soft sense with how children are in relation-

with multiple materials and temporalities in multiple places; how parents might be feeling; how educators are doing without their words; how the soundscape is sounding with its bells ringing and feet prancing and bodies falling; how Buzzer/Floor-dancer/Edge-dancer are dissonating or harmonising with the space; how string is swinging.

A monophonic way of doing the MTW installation would have been to have had a pre-existing plan of what the children would experience and then controlling the space in order to implement this; keeping the group together, sticking to the pre-existing score and encouraging everyone to pay attention to a single narrative or story. This approach would maintain and support education's existing monophonic tendencies. Disruptive, experimental or tangential behaviours become problematised or pathologised even though they are relational expressions to the dominant regime. For instance, Edge-dancing (or floor dancing, or buzzing about) is commonly problematised as 'disruptive' (feet make rhythms not of the clock), 'not joining in' (with normalised behaviours), 'encouraging other children to mess about' (deviating from normality and the clock). Edge-dancing leaks out of monophony. It is the clown troupe infecting the military band. In the MTW installation, Edge-dancer's tracking of the installation's perimeter was a *welcome* relational response to the installation and those in it. This edge-dancing set a tone, a movement, a rhythmic pulse which played into the whole of the event as a vital strand. Edge dancer's coming into the middle to discover the hole in a soaring parachute or later, to roll and play with their mother and other bodies upon white duvets with coloured scarves, marked particular, affective, harmonising, joyful moments, expressed as different tones and tempo. Affects, movements and expressions make up the shifting chords of polyphony, drifting in aionic time. Differences. It was all welcome.

Monophonic time demands a unified temporality without interior time or time for deep listening - or time for edge dancing. This conquest of mass attention by the adult performer/teacher is justified as developing children's *listening and behaviour.* This is a common model in education, performance and arts participation for young children. It is prevalent in commercial paid-for adult-musician led early childhood music groups where the parents of edge-dancers and other polyphonic listeners are commonly shamed out of attending. Monophonic unification is greatly privileged, and polyphony can be seen as deficit or disorder. Polyphony as practice, in education, as in music, opens us up to pluralities of subjectivities and temporalities (Guattari 1995: 1) and to our interconnectedness; it is a way to listen, sense and find those threads that do not belong to a single part alone; songs that exist in-between spaces and are impossible to perceive, hear, think through monophony. Polyphony, as a way of listening, lies at the heart of practices of improvisation: it is an uncertain and situated way of working with the plurality of the world.

I have made some film clips for this thesis with 360˚ footage that have been treated to make it both anonymous and abstract [Beginnings Buzzing https://vimeo.com/803459445 password: MTWarculus] [Got it! Got it! https://vimeo.com/803462367 password: MTWarculus). These technical treatments helped me to gather a sense of the polyphonic whole of the film data in the same way as listening to the audio does and which I will now discuss.

Interlude: listening

After many months of viewing film data, writing stories, following ideas in the ways I have described in Chapters 5 and 6, I was curious to listen to audio recordings of the MTW installation, to just listen rather than watch.

On listening, I was struck by various things: how sound expressively rings out into the event [for example https://on.soundcloud.com/cpqXh]; how emotion and expression were suddenly palpable rather than fractured and uncertain as they were on film. Listening disrupted and refreshed my relationship with the MTW data and also my memory of the MTW event. Very surprisingly, I regained a sense of what the sessions *felt* like at the time, how it felt being in the assemblage, moving together through time. I sensed the affect in a way that I had not felt through all the hours of viewing the data. I could hear and *be affected* by the joy and exuberance on the recording. There is a difference between seeing and listening that relates to Haraway's god trick of seeing everything from nowhere and the shapeshifting, situated trickery of sound (2016). It was an extraordinary shift. This *Deep Listening* draws attention to how sound carries intelligence; how ideas, feelings and memories are evoked through sound (Oliveros 2005), paying a thoughtful attention to polyphonic time and connection in an expanded present.

I listened to the rhythm of feet and objects on floor the emerging voice play, the vocalisation or non-vocalisation of the children, the squeaks, grunts and calls. The murmured chat of adults at the edge unable to relinquish words. The sonic landscape is overflowing with expressions emerging through the vibrating relations of human and more-than-human encounter. Sonic elements work upon each other in a way that is impossible to see but possible to listen to. The present-but-quiet swinging and pinging of string-bobbles with the more-than-audible whoops and foot-beats; an excess of feelings and affects. The *contagions* of sonic elements- such as bell ringing or vocalisation ("weee!" "Got it! Got it!")

can be felt and understood in a way that somehow, at this point, became much more tangible through sound than through the visual data.

This sounding somehow becomes backgrounded when watching the visual elements of data. When I watch, my eyes take me on certain journeys. But when I listen, my ears take me to a concert and I hear and feel the interconnectedness, the musicality, the *machinic opera* of the event. This makes me think how listening leans towards the polyphonic while it is hard, maybe impossible, to watch polyphonically. Only through processing 360˚ footage in tiny-world mode and through abstractive treatments do I begin to see as I hear, in rhythms, contagions , relations [contagions of bells https://vimeo.com/manage/videos/813567176 password MTWarculus]. Daza & Gershon (2015) on *sonic enquiry* note the 'ongoing hegemony' of the ocular and it occurs to me how the centrality of the visual capacities of my cameras have together told me particular stories. Daza and Gershon note how 'Sonic methodologies avoid ocular binaries of framing or an Othering gaze'(639).

The soundscape has its own life and as I listen, I can no longer tell and it is no longer important to me, if sound makers are adult or child. Ideas of leading and following are no longer relevant – and cannot be heard in these terms, what matters is how sound shapes, forms, moves, compacts, expresses, dissipates and ruptures through the *machinic opera*. Symbol crashing, feet beating, squeaks, squarks, squeals. Space and bodies. Quiet and breath. I resist the urge to look at video and decipher the soundscape because when I watch, I cannot listen in the same way. Even adult chat becomes part of the sonic texture. The difference in engaging with the data this way is profound and radical for me. It is a relief, like coming home to sound.

For experimental musicians, the line between sound and music is porous, negligible. We explore sounds that do not reside under dominant, western understandings of language

or music. It comes down to how we listen. 'Listening is not the same thing as hearing and hearing is not the same thing as listening' (Oliveros 2005: xxi). Listening differently, Gallagher et al. note how sound transects and 'transcends bodies and places through its 'multiplicity, ephemerality and fluidity' (2018:1). Paying attention to non-linguistic sounds, they argue that 'unlike words, non-linguistic sounds (both human and nonhuman) seem to offer greater potential for slippage between different kinds of representation and non-representation' (Gallagher et al. 2018: 466). This more-than-meaning is explored in music by Cross and Morley who note that the 'floating intentionality' of music, has an 'ambiguity that is much greater than that of language' (2009:68). The difference between sound and music is situated and contestable but sound and music can be both seen as world-making and language-making phenomena and practices. It is not possible to reduce sound or music down to representations or meanings without changing the whole. Sound is slippery, conditional. It carries its polyphony with it.

Sound takes place in time; it comes with time attached to it. Oliveros' practice of *Deep Listening* is a way of opening up present time and 'developing an awareness of all sounds across spacetime' (Rodgers 2010:19). I understand deep listening as a feminist practice of attending to sound as a mindful, constructive *polyphonic* experience. Through electronic practices such as synthesis, sound material and its time can be combined, atomised, molecularised. The temporality of sound matter can be manipulated by changing its speed, and time itself is manipulated through sound practices of reverb, delay, granulating, looping and sequencing. For example, using audio delay or reverb as a 'time machine', Oliveros explains 'when I play something in the present, then its delayed and comes back in the future. But when it comes back in the future I'm dealing with the past and also playing again in the present, anticipating the future. So that's expanding time' (Oliveros

in Rodgers 2010: 29). This gives the sense of sound being rooted in the present, facing and moving into to the future and working with the past by planting seeds of it into the present. Oliveros' work with sound is congruent with Stern's thought on music. Time and reverb are deeply cyclical but somehow reside in an active present moment.

On drawing a distinction between noise and music (signal), Cox (2009) notes that while we think of 'noise' as a secondary, derivative, phenomenon – or the 'muck' that accumulates around the 'information', the distinction is always relative rather than absolute: 'a noise is a signal that the sender does not want to transmit' (Moles 1966:78 cited in Cox 2009: 20). This relativity gives an ontological parity to both noise and signal. Every signal comes from noise, from the background hubbub of life, rush of wind, hum of electric appliance, rumble of traffic, temporarily drawing our attention. Noise is not an empirical phenomenon; it is the condition from which the possibility of signal (and music) arise. The signal is a sign in movement, pulled out of the noise and chaos of the universe - the ceaseless sonic flux from which speech, music and signal emerge and return (Cox 2009: 22). Sounds signal, voices signal they 'can represent and communicate meanings, but […] also work on more visceral, a-signifying registers by affecting bodies (Gallager et al. 2018: 468). Signals have floating meanings and polyphonic intentions. They escape the bodies that produce them and transform the bodies and machines they enter. Cox understands signal as actual and noise as virtual: 'a flow of sonic matter that is actualised in, but not exhausted by, speech, music and significant sound of all sorts' (2009: 22). Deep listening opens up to the virtual element of sonic noise, excesses of the world expressed in sound.

Part 3: 'We have fallen into the place where everything is music'.

(Jalāl al-Dīn Muḥammad Rūmī)

The refrain

I now turn to discuss Deleuze and Guattari's s refrain or *ritornello* (little song), to which they dedicate a whole chapter in *A Thousand Plateaus* (1987). Here they explicitly work with child song, music and improvisation as key themes to unfold their univocal, flattened ontology (Kleinherenbrink 2015). This third section digs deeper into what music does beyond what is commonly understood as music, its more-than-sonic sonority (Shannon and Truman 2020); how it operates across 'diverse milieus of which musical sound is only one component' (Campbell 2021: 35).

Strictly speaking, in western classical music terms, '[a] ritornello is defined by variation, whereas the translation often used for this, refrain connects different elements by means of a repetition of something that is always identical' (Kleinherenbrink, 2015). However, I do not share Kleinherenbrink's understanding of the term *refrain*. My own understanding of the term *refrain*, which Massumi uses in his translation of ATP has a much wider linguistic familiarity, beyond western classical meanings, which is presumably why he used it. As I have made clear in this chapter, I do not align with western classical understandings of music and for me a refrain may vary as much as it likes or as much as I want it to, while ritornello is one of many obscure terms for talking about a particular dominant (white, male, elite) form of music. I therefore use refrain and ritornello interchangeably but stick mostly with refrain.

The chapter of *the refrain* (Deleuze and Guattari: 1987: 310-351) foregrounds thinking about animal behaviour-as music-as-animal behaviour. Deleuze and Guattari insisted that the formation of the (biological, geological, social, linguistic, semiotic, aesthetic) world through refrains and territories, milieu and rhythm can be understood in

musical terms (Kleinherenbrink 2015). The chapter opens with the three movements of the

refrain: first, the making of shelter from chaos, in which a child hums in the dark; second,

the making of territory, a home, a self, forming milieu and rhythms to protect it from chaos.

Thirdly, the act of improvisation as a way of breaking free from territorial constraints,

(including the constraints of self) in order to 'join with the forces of the future' (ibid: 311). I

will discuss in this section how the relationship between the *refrain* and the *territory* is

inextricable in Deleuze and Guattari's philosophy, even though the territory seems to

receive wider attention in Deleuze scholarship (Kleinherenbrink 2015). Territories are made

and unmade through the movements and temporalities of the refrain.

I will now discuss some of the key terms associated with the refrain.

Milieus and rhythm

Territories and refrains are made from milieus and rhythm. Milieus and rhythm pull

components out of chaos to make themselves (Deleuze and Guattari 1987: 312-3). Chaos is

what Deleuze and Guattari refers to as a universe without organising or transcendent

principle. That is to say there is no ground or foundational place from which anything

emerges. Chaos is the plethora of forces out of which every living thing must select its

components and make its territory (Kleinherenbrink 2015) in much the same way as signal

comes from noise, as discussed earlier. Milieus and rhythm are the cosmic movements that

make the building blocks and the movement of the world. 'Rhythm and milieu are the

slowing down, the provisional formalisation of elements of chaos" (Grosz 2008: 47). A child

in the dark sings to themselves, locates themselves, forms a calm and stable centre, a

milieu, a rhythmic song, a pulsing signal. Every living organism (a child, a cell, a social

structure) vibrates; '[l]iving organisms are organised material that is sensitive to and

producing of vibrational rhythm' (Grosz 2008:51).

A milieu is a fragile selection, elimination and extraction of heterogeneous components from chaos. It creates the experience of a beginning and end from the forces of chaos. To exemplify: a child (whose body is an interior milieu), entering into the (exterior) milieu of the installation, might construct a kinetic-sonorous milieu by focussing on body and floor and string-bobble expressing their bodily rhythms with a "moogie slot" refrain. Other elements such as light, walls, buckets and other elements become reduced to background as a milieu of body-floor-moogie slot is formed. The fragility of the milieu to becoming exhausted or intruded on by chaos is answered by the rhythms (of swinging, voicing, bodying). Rhythm, according to Deleuze and Guattari (1987:313), is generated when there is a passage between one milieu to another, a communication between heterogeneities, such as perception and material or movement and sound or imagination and language: child-swinging-string-bobble-moogie-slot. [See Moogie slot

https://vimeo.com/manage/videos/813565944/privacy] password MTWarculus].

Rhythm deals with 'discontinuous series of events and fragmented parts of time characterised by disturbances and changes' (Kleinherenbrink 2015: 214); it 'ties together critical moments (Deleuze and Guattari 1987: 313). Take for instance, a child's encounter with string-bobbles, the repeated swinging or flinging is different each time, in a different position, different string, pulled rather than pushed, pinged rather than swung. Or a child's repeated bell ringing is answered each time by different sounds, making different resonances. 'It is the difference that is rhythmic, not the repetition' (Deleuze and Guattari 1987: 314). Rhythm is a contingent encounter, "it is never entirely within one's control' (Grosz 2008:18). Rhythm pulls together a species of child-swinging-string-bobble-singing to inhabit the landscape of the installation milieu. Children are familiar with rhythmic forces.

Rhythm and milieu work together to formalise elements of chaos. 'Rhythm is what connects the most elementary and primitive bodily structures of even the most simple organisms to the implacable movements of the universe itself' (Grosz 2020: 19). Kleinherenbrink (2015: 215) further explains: 'If milieus are concerned with what happens where, rhythms are about how and when things within and between milieus happen, and hence the flexibility and survivability of a milieu is a rhythmic concern'. Rhythm deals with time and movement, milieu deals with space and things. Or, as Grosz puts it, 'If milieus primarily refer to spatial arrangements and the constitution of components, rhythms are the particular temporal form that maintains a certain measure of continuity and coherence' (Grosz 2008: 47, 48). Thus, the milieu of the nursery enters into the milieu of the MTW installation. Rhythms of encounter synthesise to produce new pulses and temporalities. The rhythms of running, pinging, floor dancing, edge circling, bell ringing, drum beating link sense and body, condensing chaos into 'forms, shapes, patterns, the extraction of rhythm from buzzing vibration' (Grosz 2008:84). Rhythm is a way to think with temporal arts and milieu is a way to think about spacial art forms.

What chaos and rhythm have in common is the *in-between*. (Deleuze and Guattari 1987: 313). Rhythm is located *between* milieus: between perception and colour, hand and swinging, ear and drum, installation and people, body and movement, 'it is the force of differentiation of the different calibres of vibration that constitute chaos, the body and sensation, and their interlinkage. (Grosz 2008:84). In other words, how sound plays upon sense, how bodies play upon sound make rhythms though their relation.

Entering into an installation such as the MTW installation or other spaces of multiple goings-on that I make for young children, can seem like chaos. It is impossible to take the whole thing in; one has to form a milieu of perception, follow the threads of rhythm and

invariably, one will become distracted and jump to another thread: 'Even though there is always more to the world than that which is presented in a milieu, the world necessarily and only expresses itself in a variety of milieus, because only a milieu can distinguish something from chaos' (Kleinherenbrink 2015: 212). With practice, one can widen the milieu of one's perception and listen to multiple rhythms. This is polyphonic listening. But there is always more. Always.

Refrains and territory

Deleuze and Guattari (1987) explain that a refrain makes a territory from *matters of expression* that are drawn from milieus and rhythms. The string-bobble swinging, for instance, is not just rhythm and bodies; it expresses things, such as glee, and this swinging glee 'marks' the space with affective, tangled motifs. This expressive mark is the refrain: Buzzer's gleeful refrain expressed in swinging, gleeful tangles. Refrains are 'signatures in the world' that by their expression begin to form a territory (Kleinherenbrink 2015: 216). They are rhythmic, expressive melodious patterns 'that shape the vibrations of milieus into the harmonics of territories' Grosz (2008: 54), organising them and protecting them from returning to chaos.

Kleinherenbrink explains that 'the territorialising movement of ritornellos logically precedes language and culture: the entire process starts with experimental and contingent expressions, postures, gestures, sounds and colours' (2015: 216). Deleuze and Guattari (1987) go on to argue that *art* is the activity that makes marks of expression and constructs territories from milieus and rhythms, art that makes things become expressive. Furthermore, they argue that subjectivity is only able to emerge from the relational and

expressive qualities that make up a territory. 'Hence the mark or signature does not refer to a person preceding it. Rather, it is by marking and signing that we become a subject insofar as a concrete territory will determine 'who I am'' (Kleinherenbrink 2015: 216). Thus, the expressive, artful marks of Buzzer's gleeful swing-pinging or World-dancer's twirls, or Floor-dancer's *Moogie-slot* poetry signal subjective territories-in-formation and territories-in-relation. By relatively marking our territories, we become 'ourselves'. A subjective territory can be a boundaried, individual self or a wider compound self, an expression of group belonging.

Guattari (1996) understood the production of group subjectivities such as an improvising ensemble, as a plural and polyrhythmic assemblage of refrains or *ritornellos.* In the same way that an individual human becomes a subject through their expressive marks and signs, a group or ensemble also marks the territory of their shared subjectivity. This, for adults at least, requires a cracking open of the territory of self. For children, I suspect subjectivity and selfhood is still attuned with the relational and vibrational. Expressive marks and signals made by children (such as swinging, whooping, scampering) tend to become contagious and plural. They are similar to the expressive contagions that adult improvisors strive for, but better, more fluid, effortless. Expressions rapidly shift modes, mutate, disperse and converge as subjectivities and subjective sensings contract, expand and merge.

When improvising music - or when entering into an installation, or any situation of uncertainty, refrains are ways of making a home, a rhythm, common ground. As MacLure notes, 'The refrain does not need to be a tune or melody.[…] Rhythmic repetitions of facial expressions, laughter, body postures, movements, and words can all be mobilized in the improvisatory work of the refrain.' (2016: 177). Working with an art installation for parents and young children, Trafi-prats & Caton (2020) note how ritornellos emerge out the chaos.

They recognise that entering into a strange territory such as an installation (or into an unknown music-to-be) holds chaos and uncertainty for those who cross the threshold. They observe that 'it is because bodies engage with the chaos of a territory that they develop specific milieus and collective rhythms' (2020: 9). Materials (sound material and other material) and bodies in relational motion express their relation with the territory by producing rhythms of expression, habit, signs and materials (ibid). Thus, an ensemble of improvising musicians or an installation of diverse subjectivities such as the MTW installation or Trafi-Prats and Caton's installation can be understood as an improvised, open-ended, space-time; a 'lived non-linear time that is made through dwelling in place' (ibid). This spacetime opens onto a 'ethico aesthetic logic that connects signs, materials, biological codes, enunciations, sound and affects to provoke and intensify relationally' (ibid).

By conceptualising children's pre-verbal, poly-subjective ontologies though the refrain, I begin to sense how language, culture and self-hood emerge from milieus and rhythms of gesture, sound and affect. This *musical* operational ecology sets the conditions from which children's experimental and contingent expressions arise. The installation-event is a microcosm to study and sense how cultures of running, pinging, twirling, voicing, watching, glee marking and wording become cultural contagions, meaningful games, shared languages, selfhoods, understandings. In this microcosm, music is indeed the condition from which language arises, not music as an evolutionary *proto-language* as Trevarthen & Malloch (2010) might understand it, but as the cosmic movement from which all life emerges.

Music and the refrain

Milieu and rhythm, refrain and territory are not yet, not quite music. They form the building blocks of musical spacetime but Music itself somehow exceeds them. Deleuze and Guattari speak of the power of *music* to de-territorialise the *refrain*. I am drawn to this enigmatic statement:

> We are not at all saying that the refrain is the origin of music, or that music begins with it. It is not really known when music begins. The refrain is rather a means of preventing music, warding it off, or forgoing it. But music exists because the refrain exists also, because music takes up the refrain, lays hold of it as a content in a form of expression, because it forms a block with it in order to take it somewhere else (1987: 349).

Thus, music is something ineffable, productive, improvisational (Jankélévitch & Abbate, 2003). Something wild, expressive and of the cosmos. Something which may somehow be summoned, cajoled, borrowed or held at bay by the refrain: 'The refrain prevents music while at the same time being the smallest anticipation of music to come' (Grosz 2008:52). Music is something that makes refrain more than a repetition of the known. Music de-territorialises the refrain; it is a line of light from the home that the refrain constructs: the liberation of harmonic and rhythmic patterns (ibid: 54). Music is something that makes and also resides in the *in-between* of rhythm and territory. The idea of the refrain as 'warding off music' makes me think about Sheldrake and Tsing's strategy of following a single pattern in order to find a way into the in-betweenness of polyphonic music. Thinking the *refrain*, as a thing that constructs and organises a home and *music* being the thing that somehow, like

the *in-betweenness* of polyphony, emancipates and transforms its elements in order to explore, make and become something new: 'Music sounds what has not and cannot be heard otherwise' Grosz 2008:57).

 I think about the unified rhythms of standardisation and progress in education and the territorialisation of children's learning that treats the child as an individualised, homogenised subject rather than a poly-subjective becoming. Closed, monophonic refrains (such as standardised curriculum), territories that cannot change or transform that attempt to make the world fit into a single idea. Education 'not only anticipates the kind of people it will produce but enjoins such production to an a priori image of life to which students are interminably submitted... a closed and self-referential educational territory of standardisation' (Wallin, 2014: 117 - 118). This is tragically exemplified by music education, the interminable prick tale of western classical music. The only way out of this stultifying territory is to embrace uncertainty through ethical, deep listening practices of improvisation in order to sense the *magic* of the in-between; in order to improvise.

 At the beginning of this section, I laid out the three movements of Deleuze and Guattari's refrain. The first movement deals with carving a little shelter out of chaos; the second deals with forming a territory from rhythm and milieu; the third movement of Deleuze and Guattari's refrain makes - or risks - a transversal connection. The territory that has become dominating rather than protective is cracked open by the act of improvisation. This opens the space between the refrain as it is and the refrain becoming-music - something new, not more of itself, but new.

> [Music] does not utilise the bricolage technique of the refrain, whose
>
> inventiveness consists in the juxtaposition of elements that do not without

external intervention belong together, but the inventiveness to follow a line

(of flight), a musical theme, a polyphonous interplay of themes, a particular

melody, range of tones or tempi, as far as they will go, giving voice or sound to

what has not been heard before (Grosz 2008:57)

The act of improvisation - the cracking open and breaking out of habits into something

unimaginable, open to risk and unknowability, follows, according to Deleuze and Guattari,

'the customary path of a child' (1987: 311). The child's movement always contains a more-

than-sonorous sonority (Shannon and Truman 2020) as it loops, knots and gestures over

different temporalities.

Outro

In this chapter, I have journeyed from dominant understandings of music in music

education and early childhood through musical conceptualisations of communication and

time. From young children's music groups to experimental sound practices, from the

musical nature of language to the musical conditions of subjectivity and by way of

polyphony and deep listening, I have explored some aspects of Deleuze and Guattari's

musical philosophy.

As I have already stated, my academic background is in early childhood music

education. In this chapter, I have tried to weave thinking between music, philosophy and

young children's onto-epistemologies. Although I sense and operate through music in my

practices and deepest thinking, I find it almost impossible to write about music from the

inside. Even Deleuze and Guattari apologise for trying to do this: 'Pardon that sentence:

what musicians do should be musical, it should be written in music.' (1987: 300).

I am an artist who works across art forms and modes, a bag lady, synthesising the vibrational affects between the things, bodies, movements that I work with. I feel things in my gut, as music, long before I think them, name them, know them. I understand the situations I find myself in through a musical-gut sensibility; this is how I work as an improvisor with uncertainty and unknowability. It is however, a long and winding road to be able to write about this work. Such is the tyranny of words over musical expression.

As I have discussed, Euro-western culture has a peculiar estrangement, a disconnect from *doing* music in anything other than monophonic ways. I have discussed how music education is framed by the NPME as serving elitist colonising traditions or huge economic industries and how in ECME music is framed as serving developmentalist ideologies including the word gap. For these reasons I argue that music education in the UK continues to uphold redundant myths of elite musicianship and fails to engage with what music can do at the same time as promoting a particular inaccessible image of musician.

I argue that the liberating potential of music lies in its polyphonic and polytemporal dimensions, dimensions that are marginalised by dominant understandings. The clockwork march of progress, the dogmatic beat of timely curriculum, the supremacist ambitions of colonial anthems teach us to fear, deride and suppress the emancipatory and transformative powers of musical expression. I propose, with Deleuze and Guattari that music is a more-than-human form of expression the conditions from which language emerges. In other words, music makes us not the other way around; it makes us and our words from the in-betweenness of diverse and heterogenous milieu.

Language and music are inseparable. This is not the tale of exclusive groups called musicians. I write, speak, sense and sing from the de-territorialising edges of music education. I, bag lady, am made by music and young children. Musical play from the inside

has to be done to be known. This is not the tale of the gifted and talented musician. It is the tale of becoming-with the murmuration *at the same time as* becoming-with the bird. We *play* - children, friends, machines, music and I - in the cracks of understanding-music, dancing to cosmic, world-making refrains and neatly avoiding the tyrannies of crotchets and Mozart. Not quite ourselves; *becoming-music*. Young children are the stuff of music; just listen to them. Try not to break it.

Epilogue: Synthesis

Synthesis is a placing together of things in movement. It is not a linear process, and it does not pin things down. Rather, synthesis can be thought of as a set of parameters or conditions that work with continuous flows of movement. This places emphasis on the flow of energy, stimuli, sensations and ideas that allows for mobile understandings of the world and the entangled relationships within it.

The synthesiser, for Deleuze and Guattari (1987), was a way of understanding how everything is situated in complex, interconnected, heterogeneous systems. They understood synthesis as the way in which things - biological, ideological, social, material, discursive - are interconnected and working upon each other in ongoing, complex ways like parts of a great machine rather than a linear cause and effect.

This bag lady research-creation has operated by placing things together in 'the vast sack that is my inquiring body/mind' (Adsit- Morris: 2006: 6). Synthesis acknowledges the mobile nature of all that has been collected and placed together. Le Guin and Haraway's

carrier bag theory understands myself, as bag lady, as a situated and nomadic methodological figure. The bag becomes a container of both knowledge and synthesis, able to produce mobile ways of thinking. A characteristic of music synthesis is the way in which discrete synthesising assemblages, systems or modules can be transformatively and rhizomically plugged into each other. Synthesis is a messy connection of wires, transecting thread-portals through which assemblages move into each other through oscillation, current, pulse, vibration. Small arches of movement, as in my name, Arculus. Passages between one thing and another. As my body/mind sack continues to constantly plug itself into things such as philosophy, electronic music, improvisation, working and playing with young children, this (syn)thesis will come to stand alone as an assemblage, a bag, a container, plugging itself in to the world. Unplugged from me.

My intension is not to stop the movement of my research by finding answers but rather, to keep synthesis moving and in-tension by asking more questions, to stay with the generative trouble of things (Haraway 2016) acknowledging that 'what emerges from study will never be an answer' (Manning 2016: 13).

This project has journeyed from the making of an experimental installation - itself a synthesising machine - through the parameters of a global pandemic, through modulating borderlands between research and creation, filtered through words and not-words. I have become engrossed by tiny changes that shift transversally to open up problems as *adventures without answer*, the '*what else* at the heart of all speculative pragmatisms' (Manning 2016:15). In other words, the journey will never be finished in thought or practice. However, this synthesis of seven chapters, each chapter a synthesis of theory, experiment, speculation and words must undergo the transition and transformation of becoming-ready

for submission. This (syn)thesis therefore contributes to uncertain forms of knowledge production towards an onto- epistemology of unknowing.

I have laid out the experimental conditions of my no-talk, multi-art installation for two-year-old children in Chapter 1 and introduced my camera eyes in Chapter 2. In Chapter 3, I discussed the wider context in which this research takes place and critically discussed the way in which two-year-old children's talk and not-talking is problematised. In Chapter 4, I recounted how I began to work with film data and navigated the incommensurable problematics around writing about things that are not words. Chapters 5 and 6 tell speculative data stories and Chapter 7 discusses philosophy-through-music and is accompanied with film clips to offer a way of reconceptualising young children's heterogenous onto-epistemologies.

I will finish by returning to my research questions with a short discussion.

I asked:

- What happens when adults stop talking in early childhood settings?

- What is the potential of arts improvisation as a pedagogical method?

- Can camera technologies, including 360˚ film, work in ways that are not perceptible to the adult gaze or traditional video technology?

Not-talking

As became clear from the audio, not all adults stopped talking. I gave adults an invitation rather than an instruction to not talk. However, while there are many muttered adult-to-adult conversations, there is very little directing, narrating or questioning children

with words. This version of not-talking seemed to open up time in strange and particular ways. I suspect that the adults who did not talk for periods of time, entered into the installation's aionic and kaironic temporalities. I would be fascinated to know how the diverse subjectivities of the adults who took part felt about time in the installation and this is a potential area of further research. The vignette of the practitioner kneeling alone with nothing much to do, that I discussed in Chapter 6, is an example of an adult, usually busy and verbose, finding themselves occupying and experiencing a spacious temporality without words to fill the time. Not-talking is not always easy or comfortable, but it is felt.

There is not a straightforward transition into this no-talk time-space for adults, particularly when working with diverse parents and multiple, complex relations of power, citizenship, language, English, belonging and knowing. Being asked not to talk might fly in the face of parental aspirations and pride for their children. Turning down the talk always involves care and sensitivity around how this emptiness might feel for educators, parents and children. Being asked to not-talk might be a difficult, lonely or awkward experience for parents or educators. For instance, I hear across the data, during one session, a parent repeatedly calling out her child's name, wanting, perhaps needing, her child to come and play more closely with her.

The conditions of the installation displaced adult talk to an edgeland of muttering. Adults who chatted, did so quietly around the edges of the room. Monophonic regimes of naming and describing directing and questioning could no longer dominate. Words that were uttered from children's mouths took on strange expressive, polysemic qualities. The inhibiting of words made the sensuous, felt, affective and multiple somehow become more tangible as children's becoming-with the installation created the emerging atmosphere.

Not-talking seems to open the film data to multiple modes of awareness. This is evidenced by the wandering eye of the iPad clips, that cannot settle upon their child subject for long but instead wander, drawn across the field of multiple becomings. It is also evidenced by the interlocking dance-like qualities of the 360˚ clip that begins with *'Got it! Got it!'* [https://vimeo.com/manage/videos/803462367] (password MTWarculus).While words do not alter the polyphonous nature of the world, they perhaps desensitise us to it. It is worth considering that while children, arguably, already inhabit a heterogenous, polyphonic, poly-temporal milieu, polyphony can be disconcerting when initially encountered by adults. It is an uncertain space that requires time to gradually attune to not-talking and to what not-talking is doing.

Edge Dancer

Edge-dancer usually inhabited the edges of spaces. For the MTW sessions, his mother dressed him in white so that he was clearly visible as he tried to find the gaps in the edges of things. However, during the MTW sessions, he increasingly took a position in the middle of the installation. For Edge-dancer and his mother, the talk-free installation temporality and its creative, open-ended materials seemed to provide a joyfully connective physical space. The data vignettes of their playful pouncing and rolling are caught on all three camera eyes, their playful game bound up with a more-than-human milieu of scarf throwing, duvet rolling, parent-child becoming. This time seems to be an intense aionic playtime for parent as well as child. The MTW installation time-space parameters that Edge-dancer danced in were set to work with heterogeneity and not be dominated by a single mode. No-talk opened space for Edge-dancer, who avoided single-channel demands of education such as listening to or understanding words. Without words, Edge-dancer's

becoming-with the middle of things can be tangibly understood and sensed as inventive bodily thinking. His going through the parachute hole as I describe in Chapter 5 is an example of his radical, corporeal experimentation.

Not-talking as an adult practice in early childhood education flies in the face of the dominant word gap discourses around young children's emerging speech that I have discussed in Chapter 3. Yet my data shows, not-talking opens time and the polyphonic nature of the world. It stops adult educators from entering into habits of word use and instead places them into a less certain, less hierarchical relationship with children that encourages a multi-sensory listening (Davies 2014). It is worth considering how not-talking might be a proposition for rethinking how listening in early childhood education is understood. Not-talking emphasises children's spontaneity, play and experimentation. It is an improvisational practice across the borders of adult/child onto-epistemologies and also an ethical and political stance.

I am curious to explore further how practices of not-talking are experienced by adults from diverse cultural and linguistic backgrounds. Did stopping talking help adults to become more attuned to a widened sensory field? Or experience an expanded present time? And if so, how did these changes feel? My generative and on-going questions around time and talk are: What kinds of temporalities are created by talking and not-talking in early childhood settings? When we talk in early childhood spaces are we talking in present time? This calls for further research into experimental and creative practices of not-talking in early childhood settings. The simple, yet often awkward, practice of not-talking requires a subtraction of a dominant parameter that may have the potential to open vital spaces of shared thinking and bodying with two-year-old children.

What is the potential of arts improvisation as a pedagogical method?

This research examines an experimental creative project that took place at the intersection of arts practice and early years education. It focusses on a creative and playful process rather than a product or outcome. The bordering of artist and educator praxis, such as was undertaken in this project, is an emergent and uncertain domain that emphases the variable conditions in which the creative work is taking place. It shifts the focus away from the known, the expected and the predictable, and towards the unknown, the unexpected and the chaotic nature of things. The project aimed to engage with young children's understandings of the world in creative, curious and open-ended ways and to explore how to work with emergence rather than adult certainty. The installation sessions examined how children, artists, educators, parents and researchers from a wide and varied set of cultural and linguistic backgrounds might become-together-uncertainly through creative techniques of relation (Manning 2016). It asked how finding playful and artful ways of 'sensing into' the more-than-human milieu together might produce new ways of understanding each other across difference.

I argue that an ethics of uncertainty through creative practices opens up to not-yet-imagined possibilities. Uncertainty resists the teleological treatment of children as if they are already known. Uncertainty strays from the path of developmentalism into wild lands. A pedagogy of improvisation, if such a thing is possible, must carry the anomalous potential to work with the dynamic forces of borders, edges, contagions. It works with synthesis and situated conditions, rather than linear understandings. There is no template or map because improvisation always arises out of an ever-changing milieu. It is a process of slowly becoming unencumbered by the habits that grow to contain us, a process of ongoing decomposing and recomposing our practices and relations.

As I have discussed above, changing the conditions of time, power, certainty within an early years milieu, can throw both adults and children into difficult and stressful positions. Careful and sensitive strategies are needed to acknowledge these difficulties and work toward a sense of group trust. Schulte conceives trust as an unstable, provisional, multiple and incomplete open network that conditions and reconditions connective engagements (2013:2). He notes that not everyone will enter into, move or think with inventiveness during moments of uncertainty but urges a practice of sensing into the intensity of a particular moment, its relations and qualities. In other words, trust is another vector or parameter that runs through the milieu and affects the conditions for emergence.

Materials

The materials and objects within the installation, together with playful music and dance practices formed a heterogenous set of creative conditions that were artful provocations or invitations to improvise-with. The open-ended nature of the materials, string, fabric, hanging elements within the installation, invited chance and curiosity, questions and experiments. For example, the parachute carries in its material affordances a useful strategy which brought adult parents and educators actively into the improvisational, no-talk space. It gathered adult hands and bodies together creating a kind of concordant, negotiated, communicative happening. Out of silk and human body arose a simple game with simple rules of mutual negotiation and rhythm. Another example is the *sliding duvet burrito game*, that I discuss in Chapter 6, which emerged and was co-constructed between adults materials, space and children. Both the parachute assemblage and the sliding duvet burrito seemed to create a purposeful role for adults in creating a 'game' that children can engage with in multiple ways. Thus, not-talking in this case led to a negotiated sensing

between adults that somehow intensified as it congealed. The sliding duvet burrito game can be conceptualised as many things: an eternal game between adults and child bodies; a return to an ancient rhythm of relation; a non-verbal way of checking in with other bodies; a negotiated grouping and sensing of bodies and a port of relational knowing in a sea of uncertain possibility: points of contact and fluctuating authority playing through a pedagogy of improvisation.

Improvisation is, as I have suggested throughout this thesis, a practice of putting into movement those ways of knowing or becoming-with, that emerge when the binary between self and other becomes disrupted. It is, for adults, a re-learning to navigate the complexity of our surroundings, by experimenting with chance and curiosity. It is a way of breaking out of habituated patterns and forms of thinking including the institution of self. This helps us to sense back into childhood onto-epistemologies and counter the dis-enchantment of our adulthood (Bai 2009) where animism can be reclaimed. Although as Stengers says (2012), the world becomes a disenchanted place through the discourse of (adult) scientific supremacy, I find that most human adults I encounter, long for re-enchantment. Letting go of certainty, positions and habits; shocking ourselves into making the known strange again is never an easy practice. It is a difficult act of re-enchantment that involves a sensing, fluctuating and wavering relationship with knowing: an oscillating familiarity with uncertainty that can never be resolved but that is rather an ongoing commitment. Therefore, this *pedagogy of improvisation* cannot have a template for implementation or generalisation. It is not a set of reproducible conditions - it cannot be scaled up, rolled out and it will never produce the same thing twice.

Arts in early years education

The arts council are currently seeking to make early years one of their priority areas. Strategies for early years arts (Arts Council England 2018, 2019) have focussed predominantly on understanding barriers to engaging with arts and culture in settings and how to equip early years educators to deliver arts activities on top of everything else that they already do. I suggest that this line devalues the practices both of educators and artists. Arts projects in early education have the potential to become ongoing experimental conditions that ask questions without answers. This is not about training hardworking low paid, early educators to pull arts projects out of their hats; it is about valuing the fertile intersection between arts and education and other early childhood practices. It is not about toolkits, rolling out models and justifying abstract notions of creativity. Nor is it about valuing the arts in relation to literacy, good behaviour, development and cognition. It is about recognising what a diverse group of artists and educators, children and parents are capable of doing together and how this will always be unique, situated and unknowable. Arts practices cannot be aligned with the dominating discourses of developmental goals and targets or standardised measurements because it is their difference to these things that matters. It is about understanding arts in education as a carnivalesque phenomenon, a vitalising ethics that disrupts the order of things.

Can multiple camera technologies, including 360˚ film, work in ways that are not perceptible to the adult gaze or traditional video technology?

Trusting in processes of uncertainty and in Deleuze and Guattari's (1983) assertions that the polyphony of the world cannot be contained within meanings or signifiers, that there is more than that which can be described analysed, narrated and reduced, I have

ventured forth with cameras and film data in this research. I have shown how camera and film have a capacity to perceive the concealed faces of the world hidden behind language and territorialising signifiers (Lyotard 1971 cited in Deleuze and Guattari 1977: 204). In other words, sensing with film data in its myriad temporalities can help us become *awake* to how children, who are not yet under the thrall of language or signification, engage with the world, their animistic sensing and relationships with those other faces of the world that have become obscured to adult and the curricular gaze.

I have discussed in Chapters 4 and 5 how Deleuze's *power of the false* (1989) has been critical to my thinking-with film data. Through film, the power of the false shatters traditional notions of objectivity, time and movement and understands that reality is not fixed but is instead constantly in flux and untethered from truth. The power of the false has been instantiated through the way in which my radically different camera eyes have fractured the truth of each other and creatively decomposed and recomposed new images, truths and stories. This opens up new possibilities for understanding the de-territorialising potential of video research in education and resists the positivist and reductionist which seeks to pin bodies and movement down (De Frietas 2019).

Working with film data is handling the stuff of time. Film data plays with time and intensity as is instantiated by Tcam's thin time of watching the bottom of a door, or the 360˚ tiny world image of the lifetime of a parachute assemblage. The frameless qualities of the 360˚ film combined with the other camera sources, each with their own sense of present time, detach temporality from movement and instead loop time, thickening it and fracturing it until it forms crystal-images of time where camera eyes reflect and synthesise each other's temporalities.

While I am fascinated by the scrutiny of time in the research data, my intention is not to close its ephemerality down or capture it by rendering it repeatable, abstracting it or parsing it into types. I have not used systematic approaches to analysis. Instead, I have remained uncertain in my watching-with/writing-with/thinking-with/playing-with/ sensing-with film data. I have not sought to make generalisations, representations or claims but rather, I have told bag lady stories. The camera eyes and I have entered into a creative and speculative relationship to attempt to imagine beyond what can be pinned down. I have sought to glean and glimpse ephemeral murmurations of bodies-in-motion through my relationship with technological capacities of the video data.

I propose the use of 360˚ film, particularly combined with other camera technologies, has generative possibilities for educational research within posthuman, feminist material thinking as it has the ability to de-centre both researcher and child. Working with 360˚ film has been a way of exploring the entangled interconnectedness of the world in a way that has not been possible before this technology has emerged.

While 360˚ film comes with a dangerous panopticon potential as I have discussed in Chapter 2, I have found its spherical eye able to work with patterns of movement and relation through time. The 360˚ film somehow allowed curious threads to unwind in ways that framed video would not have been capable of. This is exemplified in the way that 360˚ was able work with Buzzer's becoming-imperceptible without pinning him down [https://vimeo.com/manage/videos/803459445] (password MTWarculus).

Nevertheless, the haptic grainy Tcam clips and the traditional child-centred iPad clips made critical anchor points for my analysis to jump from and return to. The three sets together made tiny gestures and different treatments of time perceptible. The 360˚ film somehow invokes a more-than-human sensibility (for example [CLIP] and the truth of its

spherical eye is modulated, disrupted and augmented through the relations with Tcam and the iPad). Together these technologies produce a potential to 'recognise how child subjectivities emerge out of the movements and rhythms of bodies, formlessness and chaos' (Caton :1).

Bergson

I tentatively suggest that 360˚ technology may contain a potential to reanimate the indistinct and fuzzy places between subject and object. Over a century ago, Bergson (1911) disrupted the a priori assumption that objects are distinct. He proposed that in order to perceive distinct, individual objects, we need to be able to reflect on them. At the same time, things are indistinct until they grab our attention. Things start from an in-betweenness where reflection and self -produce each other. Murris and Kohan understand that 'Without bodily boundaries and the im/possibility to differentiate between 'self' and 'other', a different conceptualisation of (self)identity e/merges out of patterns of potentialities and flow with a self as always in [temporal] flux' (2020: 593). Bergson proposed that we need memory to notice difference and that we start from a fuzzy place, neither perception of the individual nor conception of the genus but something in-between - a 'confused sense of the striking quality ' and that this sense is equally remote from both clearly perceived individuality and fully conceived generality. Bergson goes on to explore how indistinct things are felt and experienced as *forces* rather than objects. Things and beings take from their surroundings that which attracts and interests them. These things do not have to be abstracted first from the rest of the surroundings because the rest of the surroundings have no hold on them. As Abram puts it - 'Things 'catch our eye' and sometimes refuse to let go; they 'grab our focus' and 'capture our attention'(2010:50). Things pull each other into their own movements and temporalities as I am pulled into different camera eye movements and

266

times. This fuzzy place that is full of possibility relates to the potential of 360˚ film to

reanimate the in-betweenness of perception. For instance, a dance with silk and hand and

hole that is a becoming of bodies and movement, indistinct as separated objects. In

particular, I propose that the digital treatments I have given the film [CLIP] offer an

exploration of the indistinctness of bodies and movement.

Time

Time as experienced has emerged across all three domains of my research

questions. I have discussed the differences between the felt time of childhood and

measured time of the curriculum and how improvised temporal arts practices combined

with not-talking seemed to disrupt the curricular clock and open up to the stretchy,

meandering temporalities of the present. I have also discussed how my camera eyes have

produced and treated time in different ways and how the power of the false further

manipulates and fractures time.

I propose a need to on-goingly reconfigure the relationships between curriculum and

temporality, an *inquiry* of time which would aim to work with complex temporal dynamics

of chronos, kairos and aion in order to open up the potential of present-time and changeful-

time (Murris and Kohan 2020, Honaker 2007). This would widen understandings of

children's temporalities as embodied and creative experiences and resist the regimented

and oppressive use of measured chronological time.

Coda: mess

The following conversation is between myself and musician GeminiEye. We had

improvised music with electronic synthesisers for an hour or so, plugging things in to each

other, making chains of electric/sonic connections, getting lost. We finally paused and

stepped away for a break and a cup of tea. When we returned to the synthesisers, things

had become an incomprehensible, wiry mess.

> *GE: when you're in it, doing the playing, you're just intuitively connecting things and*
>
> *you have an understanding of why and how everything connects, it's a big playing*
>
> *machine, and then you step away for a while, it fades from your working memory,*
>
> *and gradually becomes mess…*
>
> *CA: you can sometimes go back in and rediscover little fragments of the machine and*
>
> *pick it back up again*
>
> *GE: like you have made a map of it*
>
> *CA: we make the map as we play*

There is never a representation for the becoming-imperceptible event (Braidotti

2013:137) but we can record it, trace the marks it makes, the residue it leaves behind. These

things map the primacy - and imperceptibility - of movement (Sheets-Johnson 2011;

Massumi 2002). For Gem and I there was a mess of wires (and perhaps an audio recording)

that marked the becoming-imperceptible of our improvisation.

An incomprehensible map of the MTW installation can be seen in the mess that is

made and left behind. The data is both map and mess and can be read, written or tidied up

in a thousand ways. Data is a record - a mark. Phenomena such as Buzzer affect, can be

tracked through the MTW installation and the data.   Movement and affect ran like charges

of electricity through the session, sending their residues and reverberations forwards into

time. 'Loops, knots, speeds, movements, gestures and sonorities' - what Deleuze and

Guattari understood as the lines and paths of a child (1987: 312). Buzzer's imperceptible

movement marked the world in messed up string, tangled time, recorded on film, unfolded by memory and story. Mess maps movement: it is a way to *knot-know* things (Osgood 2020).

I repeat how Adsit-Morris (2015) understands bag lady research practice as 'a mapping praxis, a drawing, re-drawing and undrawing of boundaries and territories within the multiple locations one finds oneself. [...]. We create patterns and leave traces as we wander throughout spacetime, gathering [...] and scribbling' (44). Through this movement we begin to glean how things that seem like chaos are grains of cosmic forces: String-bobble-child-hand-glee configurations, light-silk-movement-slide-whoop, bag-crackle-jump-floor-*'moogie-slot',* bell-space-soundings, *'Got it! got it!'* A cosmic engine. A music machine.

Things : people, communities, practices, materials, feelings (all of which are themselves, synthesising assemblages) plug into each other, vibrate together, dissonance, harmony, swinging, buzzing. Quite impossible to write this mess. What is written is marks, inefficient maps (Knight (2021) and mess.

What I could not write remains in film and sound.

This is a messy thesis. I have packed up these chapters but there are holes and lumps in the bags - things dangle and fall out. I have performed things, collected things, forgotten things, left things behind. I have synthesised particular configurations and not others as I thought with other thought, with film, with what happened inside an installation. I have worked with and through multiple temporalities that have moved in and out of the thesis sphere, I have tried to work artfully so that there is life for the reader. I celebrate mess in all its movements and leakiness. I hope I have packed it well enough for a few useful things to spring out and sing.

Bibliography

Abram D. (2011). *Becoming Animal*. New York: Vintage.

Abram, D. (1996). *Spell of the Sensuous*. New York: Vintage.

Arculus, C. and MacRae, C. (2022). Clowns, Fools and the More-Than-Adult Toddler. *Global Studies of Childhood*, 12(3), pp. 209–223. Doi: 10.1177/20436106221117569.

Arculus, C. (2020). Decolonizing the knowledges of young children through the temporal arts. *International Journal of Music in Early Childhood*, 15:1 pp.61-73

Arts Council England (2020). *Let's Create* [online]. Available at https://www.artscouncil.org.uk/letscreate.

Arts council England (2019). *The Durham Commission on Creativity and Education*. [online]. Available at https://www.artscouncil.org.uk/durham-commission-creativity-and-education.

Arts council England, Sandbrook, B. Churchill, R (2018) *Early Years Arts and Culture: Current Practice and Options for Future Development.* Arts Council England [online]. Available at https://www.artscouncil.org.uk/research-and-data/early-years-arts-and-culture.

Adsit-Morris, C. (2015). *The Nomadic Wanderings of a Bag-lady and her Space Chums : Re-storying Environmental Education with Feral Figurations*. University of British Columbia [online]. Available at https://open.library.ubc.ca/cIRcle/collections/24/items/1.0166649 (accessed 1st April 2018)

Antonioli, M. & Heuzé, B. (2012) The Power of Sound: Resonance and Refrain, *Parallax,* 18:1, 87-95. DOI: 10.1080/13534645.2012.632980

Avineri, N., Johnson, E. J., Brice-Heath, S., McCarty, T., Ochs, E., Kremer-Sadlik, T.,Paris, D. (2015). Invited forum: Bridging the "language gap." *Journal of Linguistic Anthropology*, 25(1), 66–86. Doi:10.1111/jola.2015.25.issue-1

Bai, H. (2009). Reanimating the universe: environmental education and philosophical animism.In M. McKenzie (Ed.), *Green: Restorying Culture, Environment, and Education (pp. 135-151).* Cresskill, NJ: Hampton Press

Bakhtin, M. (1984). *Rabelais and His World*. Bloomington: Indiana University Press

Bakhtin, M. (1981). *The Dialogic Imagination: Four essays*. Trans. C. Emerson & M. Holquist, Austin TX: University of Texas Press.

Barad, K. (2003). Posthumanist performativity: toward an understanding of how matter comes to matter. *Signs*, 28(3), 801-831.

Barad, K.M. (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University Press.

Barad, K. and Gandorfer, D. (2021). Political Desirings: Yearnings for Mattering Differently. *Theory & Event*, 24(1), 14–66. doi: 10.1353/tae.2021.0002.

Bates, A. (2019). Readiness for School, Time and Ethics in Educational Practic. *Studies in Philosophy and Education: An International Journal*, 38(4), 411–426. doi: 10.1007/s11217-018-9643-2.

Baugh, J (2017). Meaning less differences: exposing fallacies and flaws in "The Word Gap" hypothesis that conceal a dangerous "language trap" for low-income American families and their children. *International Multilingual Research Journal*, 11:1, 39-51, DOI: 10.1080/19313152.2016.1258189

BBC (2022). Child speech delays increase following lockdowns [online]. Available at.https://www.bbc.co.uk/news/education-63373804?utm_source=All+Subscribers&utm_campaign=78c764e2da-BBC+News+coverage%3A+November+202204%2F11%2F22+4%3A25+PM&utm_medium=email&utm_term=0_aaf225d5ad-78c764e2da-118586050

Belfiore, E. (2021). Who cares? At what price? The hidden costs of socially engaged arts labour and the moral failure of cultural policy.*European Journal of Cultural Studies*, 1–18.

Belfiore, E. (2012). "Defensive instrumentalism" and the legacy of New Labour's cultural policies. *Cultural Trends*, 21 (2), 103-111. ISSN 0954-8963.

Benbow, L. (2006). A sociological critique of meaningful differences: a functional approach to the parental style of low-income African-American families. In J. L. Kincheloe, K. Hayes, K. Rose & P. M.Anderson (Eds), *The Praeger handbook of urban education* (Vol.1, pp.47-58). Westport, CT: Greenwood Press

Bercow, J. (2008). The Bercow Report: A review of services for children and young people (0-19) with speech, language and communication needs. Department for Education.

Bergson, H. (1911). *Matter and Memory*. Denver : Random Shack
Bertetto, P. (2017). Concept, Sensation, Intensity: Deleuze's Theory of Art and Cinema. *Sociology and Anthropology* 5(9): 792-797, http://www.hrpub.org DOI: 10.13189/sa.2017.050911

Biesta, G. (2018). What if? In C. Naughton and D.I. Cole (Eds). *Art, Artists and Pedagogy: Philosophy and the Arts in Education.* Milton: Routledge.

Blum, S.D. (2017). Unseen WEIRD assumptions: the so-called language gap in discourse and ideologies of language, childhood and learning. *International Multilingual Research Journal*, 11(1), 23-38.

Boyd, C.P. (2017). *Non-Representational Geographies of Therapeutic Art Making : Thinking Through Practice*. Cham: Palgrave Macmillan.

Bozalek, V. & Taylor, C. (2022). 31, Event. In K. Murris (Ed.) *A glossary for doing post qualitative, new materialist and critical post humanist research across disciplines.* Oxon: Routledge.

Braidotti, R. (2013). *The Posthuman*. Cambridge: Polity.

Braidotti, R. (2018). A Theoretical Framework for the Critical Posthumanities. *Theory, Culture & Society* 1–31.

Braidotti R. (2006) The ethics of becoming-imperceptible in C.V.Boundas. *Deleuze and Philosophy*. Edinburgh: Edinburgh University Press.

Braidotti, R. (2019). *Posthuman Knowledge*. Cambridge: Polity.

Braidotti, R. (2022). *Posthuman Feminism*. Cambridge: Polity.

Burman, E. (2017). *Deconstructing Developmental Psychology*. Third edn. London: Routledge.

Bullen, E. (2015). *Manchester Migration: A Profile of Manchester's Migration Patterns*. Manchester: Manchester City Council.

Campbell, E. (2021). *Guattari, Consistency and the Musical assemblage* in P. Assis, and P. Giudici, (eds). *Machinic assemblages of desire*. Leuven: Leuven University Press

Cannella, G.S. & Viruru, R. (2004). *Childhood and Postcolonization: Power, Education and Contemporary Practice.* New York: Routledge.

Cannella, G. S. (2002). Global perspectives, cultural studies, and the construction of a postmodern childhood studies. In G. S. Cannella, & J. L. Kincheloe (eds). *Kidworld - Childhood Studies, Global Perspective and Education* (pp. 3-18). New York: Peter Lang

Caton, L. (2019). *Becoming Researcher: Navigating a Post-Qualitative Inquiry Involving Child Participants and Wearable Action Cameras*. PhD Thesis. Manchester: Metropolitan University.

Caton, L. & Hackett, A. (2019). Head mounted, chest mounted, tripod or roaming? Ontological possibilities for doing visual research with children and GoPro cameras. In: *The Routledge International Handbook of Playing and Learning with Technology in Early Childhood*. Routledge International Handbooks of Education. London: Routledge. ISBN 9781138308169.

Civinini, C. (2020). School closures will widen 'word gap,' warn teachers. *Times Educational Supplement* [online]. Available at https://www.tes.com/news/coronavirus-school-closures-will-widen-wordgap-say-teachers.

Christian, H. et al. (2016) Influence of the day care, home and neighbourhood environment on young children's physical activity and health: protocol for the PLAYCE observational study. *BMJ Open*, 6(12). doi: 10.1136/bmjopen-2016-014058.

Colebrook, C. (2009). Queer vitalism. *New Formations,* (68), 77 [online]. Available at https://link.gale.com/apps/doc/A236816136/AONE?u=mmucal5&sid=oclc&xid=6cd67be0 [accessed 31 Dec 2022].

Colebrook, C. (2009). On the very possibility of queer theory, in C. Nigianni and M. Storr, M. (eds) (2009). *Deleuze and queer theory*. Edinburgh: Edinburgh University Press

Conquergood, D. (2002). *Performance Studies: Interventions and Radical Research. Cambridge: MIT Press.*

Cox, C. (2009). Sound art and the sonic unconscious. *Organised Sound*, 14(1), 19–26. doi:10.1017/S1355771809000041

Crerar, P. (2018) Children starting school 'cannot communicate in full sentences'. *The Guardian.* Available at https://www.theguardian.com/education/2018/jul/31/damian-hinds-social-mobility-children-school-screen-time.

Cross, I. & Morley, I. (2009). The evolution of music: theories, definitions and the nature of the evidence. In Malloch & Trevarthen (eds) *Communicative Musicality*. New York: Oxford Press, pp 357-376.

Cross, I. (2005) Music and meaning, ambiguity and evolution. In D, Miell., R.Macdonald, & D. Hargreaves (eds). *Musical Communication*. Oxford University Press: Oxford, pp. 27- 43

Crow, S., & O'Leary, A. (2015). Word health: Addressing the word gap as a public health crisis [online]. Available at http://thenextgeneration.org/files/Word_Health_v3.pdf

Cunningham, A., & Stanovich, K. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. Developmental Psychology, 33(6), 934–945. https://doi. org/10.1037/0012-1649.33.6.934

Cushing, I. (2022) Word rich or word poor? Deficit discourses, raciolinguistic ideologies and the resurgence of the 'word gap' in England's education policy, *Critical Inquiry in Language Studies*, DOI: <u>10.1080/15427587.2022.2102014</u>

Cushing, I. and Snell, J. (2022). The (white) ears of Ofsted: a racio-linguistic perspective on the listening practices of the schools inspectorate. *Language in Society*, 1-24, 1–24. doi: 10.1017/S0047404522000094.

Curtis. S. (2011). "Tangible as tissue": Arnold Gesell, infant behaviour, and film analysis. *Science in Context,* 24(3), 417–442

Dahlberg, G. (2016). An ethico-aesthetic paradigm as an alternative discourse to the quality assurance discourse. *Contemporary Issues in Early Childhood*, 17(1), 124-133.

Dahlberg, G. & Moss, P. (2005). *Ethics and Politics in Early Childhood Education*. New York: Routledge

Darwin, C. (1859). *On The Origin of Species*. London: John Murray.

Davies, B. (2014). Listening to children: being and becoming. London; New York: Routledge

De Freitas, E. (2016). The moving image in education research: Reassembling the body in classroom video data. International Journal of Qualitative Studies in Education, 29(4), pp. 553-572.

Deleuze, G. & Guattari, F. (1987). A Thousand Plateaus: Capitalism and Schizophrenia. Translated by Brian Massumi. London: Bloomsbury.

Deleuze, G. & Guattari, F. (1983). *Anti-oedipus: Capitalism and Schizophrenia*. Minneapolis: Minnesota press.

Deleuze G and Guattari F (1986). *Kafka: Toward a Minor Literature*. Minneapolis, MN; London: University of Minnesota Press.

Deleuze, G. (1968). *Difference and Repetition*. London: Athlone Press.

Deleuze, G. (1989). *Cinema 2: the time-image*. London: Athlone Press.

Deleuze, G. (1990). *The Logic of Sense* (trans. M Lester). New York: Columbia University Press.

DfE & Hinds, D. (2018). *Multi-million fund to boost children's early language skills. UK Government.* Available at: https://www.gov.uk/government/news/multi-million-fund-toboost-childrens-early-language-skills.

Department for Education (2017) *Unlocking Talent, Fulfilling Potential: a Plan for Improving Social Mobility through Education*. Cm 9541: HMSO [online]. Available at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/667690/Social_Mobility_Action_Plan_-_for_printing.pdf (Accessed on 20th July 2018).

Department for Education. (2017) *Statutory Framework for the Early Years Foundation Stage* [online]. Available at https://www.gov.uk/government/publications/early-years-foundation-stage-framework--2].

Department for Education. (2021) *Statutory Framework for the Early Years Foundation Stage* [online]. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/974907/EYFS_framework_-_March_2021.pdf

Department for Education (2021). Development Matters: Non-statutory Curriculum Guidance for the Early Years Foundation Stage [online]. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1007446/6.7534_DfE_Development_Matters_Report_and_illustrations_web__2_.pdf

Department for Education (2013). 92,000 2-year-olds already receiving free childcare [online]. Available at 92000-2-year-olds-already-receiving-free-childcare.

Department for Education (2022). *The Power of Music to Change Lives: A National Plan for Music Education.* UK Government. Available at: The_Power_of_Music_to_Change_Lives.pdf https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1086619/The_Power_of_Music_to_Change_Lives.pdf.

Department for Education (2016) Music Education in England: A Review by Darren Henley for the Department for Education and the Department for Culture Media and Sport [online]. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/175432/DFE-00011-2011.pdf

Delpech-Ramey , J. (2010). Deleuze, Guattari, and the "Politics of Sorcery"', *SubStance*, 39, 1, (121), 8-23.

Delpech-Ramey , J. (2010). Sublime Comedy: On the Inhuman Rights of Clowns, SubStance, 39, 2, (122) 131-141.

Despret, V. (2012). What Would Animals Say if we Asked the Right Questions? London: Minnesota Press.

Dillon, B. (2005). *In the Dark Room*. London: Fitzcarraldo.

Dissanayake, E. (2015). *Art and Intimacy*. Washington: University of Washington Press.

Drury, R. (2014). Ocean. Unpublished composition

Dudley-Marling, C. (2007). Return of the deficit. *Journal of Educational Controversy*, 2(1), Article 5. [online]. Available at http://cedar.wwu.edu/jec/vol2/iss1/5

Dudley-Marling, C., & Lucas, K. (2009). Pathologizing the language and culture poor children. Language Arts, 86(5), 362–370.

Duhn, I. (2015). Making agency matter: rethinking infant and toddler agency in educational discourse. *Discourse: Studies in the Cultural Politics of Education*, 36:6, 920-931, DOI: 10.1080/01596306.2014.918535.

Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), (2001) [online]. Available at https://nces.ed.gov/ecls/birth.asp.

Education Endowment Fund: Law, J. Charlton, J. Dockrell, J. Gascoigne, M.McKean,C. and Theakston, A. (2017). Early Language Development: Needs, provision and intervention for preschool children from socio-economically disadvantage backgrounds. *A Report for the Education Endowment Foundation* [online.] Available at https://educationendowmentfoundation.org.uk/public/files/Law_et_al_Early_Language_Development_final.pdf (Accessed 28th June 2021).

Elwick, S. (2015). 'Baby-cam' and researching with infants: viewer, image and (not) knowing. *Contemporary Issues in Early Childhood*, 16(4), 322-338.

Ewell, P. (2019). Music theory and the white racial frame *Music Theory Online*, 26, 2, Available at https://mtosmt.org/issues/mto.20.26.2/mto.20.26.2.ewell.html.

Fielding, M. and Moss, P. (2011). *Radical Education and the Common School: a Democratic Alternative*. London: Routledge (Foundations and futures of education).

Fendler, L. (2001). Educating flexible souls: the construction of subjectivity through developmentality and interaction, in K. Hultqvist and G. Dahlberg (eds). *Governing the Child in the New Millennium*. London: Routledge.

Fernald, A., Marchman, V. A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, 16(2), 234–248. doi:10.1111/desc.12019

Fernald, A., & Weisleder, A. (2015). Twenty years after "Meaningful Differences," it's time to reframe the "deficit"debate about the importance of children's early language experience. *Human Development*, 58, 1–4. doi:10.1159/000375515.

Fisher, E. (1979). *Women's Creation: Sexual Evolution and the Shaping of Society*. United States: Anchor Press.

Flores, N. (2021). Racio-linguistic genealogy as method in the sociology of language. *International Journal of the Sociology of Language*, (267–268), 111–115. https://doi.org/10.1515/ijsl-2020-0102.

Flores, Nelson & Jonathan Rosa (2015). Undoing appropriateness: Raciolinguistic ideologies and language diversity in education. *Harvard Educational Review*, 85:149–71.

Foucault, M. and Sheridan, A. (1991). Discipline and punish: the birth of the prison. Harmondsworth, Middlesex: Penguin Books (Penguin social sciences).

Gallacher, L. (2015). 'The terrible twos': Gaining control in the nursery? Children's Geographies, 3(2), 243-26.

Gallagher, M., Hackett, A., Procter, L., & Scott, F. (2018). Vibrations in Place: Sound and Language in Early Childhood Literacy Practices. *Educational Studies: Journal of the American Educational Studies Association*, 54(4), 465–482.

Gallope, M. (2018). *Deep refrains: Music, Philosophy, and the Ineffable*. Chicago: University of Chicago Press.

Gesell, A L. & Gesell, B.C. (1912). *The Normal Child and Primary Education*. Boston : Ginn.

Gesell, A. (1934). *An Atlas of Infant Behaviour.* New Haven: Yale University Press

Gesell, A. (1952). "Arnold Gesell." In E.G. Boring, H.E. Werner, H.S. Langfeld & R.M. Yerkes (eds). *A History of Psychology in Autobiography*, vol. 4. Clark University Press, pp.123–142.

Gilkerson, J., Richards, J., Warren, S., Montgomery, J., Greenwood, C., Kimbrough Oller, D., Hansen, J., & Paul, T. (2017). Mapping the early language environment using all-day recordings and automated analysis. *American Journal of Speech-Language Pathology*, 26 (2), 248–265. https://doi.org/10.1044/2016_AJSLP-15-0169.

Gilkerson, J., Richards, J., Warren, S., Kimbrough Oller, D., Russo, R., & Vohr, B. (2018). Language experience in the second year of life and language outcomes in late childhood. *Paediatrics*, 142(4), 1–11. https://doi.org/10.1542/peds.2017-4276.

Gluschankof, C. (2019). Self-initiated musicking in kindergarten as instances of emancipation: the case of Arabic speaking young children in Israel. In B.Ilari and S.Young (eds.). *Music in Early Childhood*. New York: Springer.

Godin, N. (2004) Alone in Kyoto [recorded by Air] on *Talkie Walkie*. Paris: Virgin

Gross, J. (2017 Grosz, E. (2020). *Chaos, Territory, Art : Deleuze and the Framing of the Earth*. Paperback edn. New York: Columbia University Press (Wellek Library Lectures in Critical Theory).

Guattari, F. (1995). *Chaosmosis: an Ethico-aesthetic Paradigm*. Sydney: Power Publications.

Hackett (2021). Wild literacies . Blog Post [online] available at https://abigailhackett.wordpress.com/2021/07/01/wild-literacies/

). *The Language Epidemic: Early Intervention Foundation* [online]. Available at https://www.eif.org.uk/blog/the-language-epidemic (accessed 29th June 2023).

Hackett, A . MacLure, M & McMahon, S. (2020). Reconceptualising early language development: matter, sensation and the more-than-human, *Discourse: Studies in the Cultural Politics of Education*, DOI: 10.1080/01596306.2020.1767350.

Hackett, A. (2021). *More-than-human literacies in early childhood*. London: Bloomsbury Academic (feminist thought in childhood research). Available at: https://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781350144743 (Accessed: January 16, 2023).

Hackett, A., & Somerville, M. (2017). Posthuman literacies: young children moving in time, place and more-than-human worlds. *Journal of Early Childhood Literacy*, 17(3), 374–391.

Hackett, A. (2014). Zigging and zooming all over the place: Young children's meaning making and movement in the museum. *Journal of Early Childhood Literacy*, 14(1), 5-27.

Halberstam, J. (2020). *Wild Things: the Disorder of Desire*. Durham and London: Duke University Press.

Hammer, C., Morgan, P., Farkas, G., Hillemeier, M., Bitetti, D. & Maczuga, S. (2017). Late talkers: a population-based study of risk factors and school readiness consequences. *Journal of Speech, Language and Hearing Research*, 60(3), 607-626.

Haraway, D.J. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke.

Haraway, D. (1988). Situated knowledges: the science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14(3), 575–599. https://doi.org/10.2307/3178066

Haraway, D. (2013). *Simians, Cyborgs, and Women: the Reinvention of Nature*. London: Routledge.

Harley, J. (2018). Foreword. In *Why Closing the Word Gap Matters: Oxford language report*. Oxford: Oxford University Press, p. 2.

Hart, B. and Risley, T.R. (1999). The Social World of Children Learning to talk. Baltimore, Md: P.H. Brookes Pub

Hart, B., & Risley, T. R. (1995). *Meaningful Differences in the Everyday Experience of Young American Children*. Baltimore, MD: Brookes Publishing.

Hart, B., & Risley, T. R. (2003). The early catastrophe: The 30-million-word gap by age 3. *American Educator*, Spring, 4–9.

Hartshorn, M. (2018). Mind the word gap: The Difference in Poor Children's Language Skills. Open access government [online]. Available at https://www.openaccessgovernment.org/mind-the-word-gap-the-difference-in-poor-childrens-language-skills/55066/ (accessed 28th June 2021).

Hayward, E. V. A. (2010). Fingeryeyes: Impressions of Cup Corals. *Cultural Anthropology*, 25(4), 577–599.

Hempsall, J. (2019). Speech and Language : the 30-million-word gap. Children and young people now [online]. Available at https://www-cypnow-co-uk.mmu.idm.oclc.org/features/article/speech-and-language-the-30-million-word-gap.

Hickey-Moody A.C. (2013). Deleuze's children. *Educational Philosophy and Theory* 45(3): 272–286.

Hirsh-Pasek, K., Adamson, L. B., Bakeman, R., Tresch Owen, M., Michnick Golinkoff, R., Pace, A. Suma, K. (2015). The contribution of early communication quality to low-income children's language success. *Psychological Science*, 26(7), 1071–1083. doi:10.1177/0956797615581493

HM Government & National Literacy Trust. (2018). Improving the home learning environment : A behaviour change approach. DfE.

Hoff, E. (2013). Interpreting the early language trajectories of children from low-SES and language minority homes: Implications for closing achievement gaps. *Developmental Psychology*, 49(1), 4–14. doi:10.1037/a0027238.

Hoff, E. (2006). How social contexts support and shape language development. *Developmental Review*, 26, 55–88.doi:10.1016/j.dr.2005.11.002.

Honkanen, K. (2007). Aion, Kronos and Kairos: On Judith Butler's temporality. *Journal of Queer Studies in Finland*. [online] Available on: https://journal.fi/sqs/article/view/53674/16796

Hope, S. (2017). From community arts to the socially engaged art. In: A. Jeffers and G. Moriarty (eds). *Culture, Democracy and the Right to Make Art*. London: Bloomsbury, pp.203–221.

Holmes, T. (2020). Electronic and Experimental Music: Technology, Music and Culture, 6th edition. New York: Routledge

Honkanen, K. (2007). Aion, kronos and kairos: on Judith Butler's temporality. *Journal of Queer Studies in Finland*. Available on: https://journal.fi/sqs/article/view/53674/16796.

Hungry Little Minds (Nd) UK Gov [online]. Available at https://hungrylittleminds.campaign.gov.uk/#2

Huhtinen-Hilden, L. and Pitt, J. (2018). *Taking a Learner-centred Approach to Music Education.* London: Routledge.

Ingold, T. (2013). *Making: Anthropology, Archaeology, Art and Architecture*. London: Routledge.

Jeffers A. & Moriarty G (2017) *Culture, Democracy and the Right to Make Art: the British Community Arts Movement*. Methuen: London.

Jankélévitch Vladimir and Abbate, C. (2003). *Music and the Ineffable*. Princeton, N.J.: Princeton University Press.

Johnson, E. Avineri, N. & Johnson, D.C. (2017). Exposing gaps in/between discourses of linguistic deficits. *International Multilingual Research Journal*, 11:1, 5-22.

Johnson, E. J. (2015). Debunking the "language gap." *Journal for Multicultural Education*, 9(1), 42–50. doi:10.1108/ JME-12-2014-0044.

Johnstone. K. (1981). *Impro*. London: Methuen

Kennedy, D. (1989). Fools, young children, animism, and the scientific world-picture. *Philosophy Today*, 33(4): 374-381.

Kleinherenbrink, A. (2015). Territory and ritornello: Deleuze and Guattari on thinking living beings. *Deleuze Studies*, *9*(2), 208–230. https://doi.org/10.2307/45331572

Knight, L. (2021) *Inefficient mapping: a protocol for attuning to phenomena*. Punctum Books.

Kromidas M. (2014). The 'savage' child and the nature of race: Posthuman interventions from New York City. *Anthropological Theory*, 14(4): 422-441.

Kromidas, M. (2019). Towards the human, after the child of Man: Seeing the child differently in teacher education. *Curriculum Inquiry*, 49(1): 65-89

Kuppers, P. (2016). Mad methodologies and community performance: the asylum project at Bedlam. *Theatre Topics*, 26(2), 221-237.

Law, J., Rush, R., Schoon, I., & Parsons, S. (2009). Modelling developmental language difficulties from school entry into adulthood: Literacy, mental health, and employment outcomes. *Journal of Speech, Language, and Hearing Research*, 52(6), 1401–1416.
Leal. B, (2005) Childhood between literature and philosophy, readings of childhood in Manoel de Barros' poetry. *Childhood & Philosophy,* v.1, n.1, jan./jun. 2005 issn 1984-5987.
Lecoq, J. (2000). *The Moving Body*. London: Bloomsbury

Lee, M. (2003). 'Memories of a sorcerer': notes on Gilles Deleuze-Felix Guattari, Austin Osman Spare and Anomalous Sorceries'. *Journal for the Academic Study of Magic*, 1: 102 – 130.

Leffel, K., & Suskind, D. (2013). Parent-directed approaches to enrich the early language environments of children living in poverty. *Seminars in Speech and Language*, 34(4), 267–278. doi:10.1055/s-00000076.

Le Guin, U.K. (1989). The carrier bag theory of fiction. In Dancing at the Edge of the World: Thoughts on Words, Women, Places. New York: Harper & Row, pp. 165- 170.

LENA (2018). Who We Are [online]. Available at https://www.lena.org.

Lines, D. (2017). Jazz departures: sustaining a pedagogy of improvisation. In C. Naughton & D.R. Cole (eds) *Art, Artists and Pedagogy: Philosophy and the Arts in Education*. 1st edn. Milton: Routledge.

Løkken, G. (2009). The construction of 'toddler' in early childhood pedagogy. *Contemporary Issues in Early Childhood* 10 (1).

Løkken, G. (2000). Tracing the social style of toddler peers. *Scandinavian Journal of Educational Research*, 44:2, 163-176, DOI: 10.1080/713696668.

Lorimer, J. (2014). *On Auks and Awkwardness, Environmental Humanities*, vol. 4, pp. 195-205.

Loveless, N. (2019). How to make art at the end of the world: A manifesto for research-creation. Duke University Press.

Lyotard, J (1971) *Discourse, figure.* Paris: Klincksieck, University of Minnesota Press

MacLure, M. (2016). The Refrain of the A-Grammatical Child. *Cultural Studies, Critical Methodologies*, 16, 2, 173.

MacLure, M. (2013a). Researching without representation? Language and materiality in post-qualitative methodology. *International Journal of Qualitative Studies in Education*, 26(6), 658-667.

MacLure, M. (2013b). The Wonder of Data. Cultural Studies ⟷ *Critical Methodologies*, 13(4), 228-232.

MacLure. M (2010). The offence of theory, *Journal of Education Policy*, 25:2, 277-286 [online] https://doi.org/10.1080/02680930903462316 (Accessed 20th July 2018).

MacRae, C. Arculus, C. (2020). Complicité: resisting the tyranny of talk. *Global Education Review*, 7:2, 43-57.

MacRae, C. (2019). 'Grace Taking Form'. Video Journal of Education and Pedagogy 4, 1, 151-166, Available From: Brill https://doi.org/10.1163/23644583-00401003 (Accessed 09 February 2023).

MacRae, C & MacLure, M (2021). Watching two-year-olds jump: video method becomes 'haptic'. *Ethnography and Education*, DOI: 10.1080/17457823.2021.1917439

Malloch, S. and Trevarthen, C. (2018). The Human Nature of Music. *Frontiers in Psychology*, 9:1680. (1-21) doi: 10.3389/fpsyg.2018.01680.

Merleau-Ponty, M. (1962). *Phenomenology of Perception*. London: Routledge & Kegan Paul.

Manning, E. (2016). *The Minor Gesture*. Durham: Duke University Press,

Manning, E. (2012). *Relationscapes: Movement, Art, Philosophy*. US: Mit Press.

Manning, E. (2009). What if it Didn't All Begin and End with Containment? Toward a Leaky Sense of Self. *Body & Society,* 15(3): 33–45 [online]. Available at http://www.sagepub.co.uk/journalsPermissions.nav. DOI: 10.1177/1357034X09337785

Manning, E. and Massumi, B. (2014). *Thought in the Act: Passages in the Ecology of Experience*. Minneapolis: University of Minnesota Press.

Marchman, V., & Fernald, A. (2008). Speed of word recognition and vocabulary knowledge infancy predict cognitive and language outcomes in later childhood. *Developmental Science*, 11(3), 9–16. https://doi.org/10.1111/j.1467-7687.2008.00671.x

Marguch, F. (2018). Queer Anomalies: Reading Contemporary Argentinian Literature'. *Deleuze and Guattari Studies,* 12,4: 541–552 DOI: 10.3366/dlgs.2018.0330

Marks. L. (2000). *The Skin of the Film: Intercultural Cinema, Embodiment and the Sen*ses. Durham: Duke.

Martín-Bylund, A. (2018). Minor (il)literate artworks: Inventive processes of biliteracy and the role of expertise in early childhood bilingual education. *Global Studies of Childhood*, 8(1) 23–37

Massumi, B. (2002). Parables for the Virtual: Movement, Affect, Sensation. Durham, NC: Duke University Press.

McCabe. B. (2019). Creature. Unpublished composition.

Miller, P. J., & Sperry, D. E. (2012). Deja vu: The continuing misrecognition of low-income children's verbal abilities. In S. T. Fiske & H. R. Markus (eds.). *Facing Social Class: How Societal Rank Influences Interaction.* New York, NY: Russell Sage Foundation, 109–130.

Michaels, S. (2013). Dj vu all over again: What's wrong with Hart and Risley and a "linguistic deficit" framework on early childhood education? *Learning Landsca*pes, 7(1), 23–41.

Molk, D (2021). Confronting our White Complicity: Music theory and white supremacy. New Music Jan 6ᵗʰ [online] https://newmusicusa.org/nmbx/confronting-our-complicity-music-theory-and-white-supremacy/

Moriarty, G. 'Where have we come from?' Community Arts to Contemporary Practice. Available at https://communityartsunwrapped.com/2014/03/24/where-have-we-come-from-community-arts-to-contemporary-practice/.

Moss, P. and Roberts-Holmes, G. (2021). Now is the time! Confronting neo-liberalism in early childhood. *Contemporary Issues in Early Child*hood 1–4,

Moss, P. and Roberts-Holmes, G. (2021b). Neoliberalism and early childhood education. *Markets, Imaginaries and Governance*. London: Routledge.

Morsy, L. & Rothstein, R. (2015). *Five social disadvantages that depress student performance: Why schools alone can't close achievement gaps*. Available at http://www.epi.org/publication/five-social-disadvantages-that-depress-student-performance-why-schools-alone-cant-close-achievement-gaps/.

Murris, K. & Kuby, C. (2022). Adult/Child. In K. Murris (ed). *A glossary for doing post qualitative, new materialist and critical post humanist research across disciplines.* Routledge: Oxon.

Murris, K. (2016). *The Posthuman Child*. Oxon: Routledge

Murris, K. & Haynes, J. (2020). Troubling Authority and Material Bodies: Creating Sympoietic Pedagogies for Working with Children and Practitioners. *Global Education Review*, 7 (2). 24-42.

Murris, K and Peers, J (2022). GoPro(blem)s and possibilities: keeping the child human of colour in play in an interview *Contemporary Issues in Early Childhood*, 23(3) 332–355.

Murris, K. and Kohan, W. (2021). Troubling Troubled School Time: Posthuman Multiple Temporalities. *International Journal of Qualitative Studies in Education*, 34(7), 581–597. doi: 10.1080/09518398.2020.1771461.

Murris, K. (2017). Learning as 'worlding': decentring Gert Biesta's 'non-egological' *Education. Childhood & Philosophy*, Rio de Janeiro, 13, 28, 453-469.

Murris, K. and Osgood, J. (2022). Editorial: Risking Erasure? Posthumanist Research Practices and Figurations of the Child, *Contemporary Issues in Early Childhood. Issue?*

National Literacy Trust (2018). *Early Words Together* [online]. Available at https://cdn.literacytrust.org.uk/media/documents/EWTat2_eval_report_June18_for_dissemination.pdf. Accessed 1 July 2021.

Niland, A. (2012). Exploring the lives of songs, the context of young children's musical cultures, Min-ad: Israel studies in Musicology online. 10, 27 - 46
Nursery World (2013) Catherine Gaunt, Nursery Places for Two-Year-Olds: a timeline. Nursery World [online]. Available at nursery-places-for-two-year-olds-a-timeline.

Ofsted (2019b). *Education Inspection Framework: Overview of research*. Ofsted

Ofsted (2019a). *School Inspection Update*. Ofsted.

Oliveros, P. (2005). *Deep Listening: a Composer's Sound Practice*. Bloomington: iUniverse.

Olsson, L.M. (2013). Taking Children's Questions Seriously: The Need for Creative Thought. *Global Studies of Childhood*, 3(3), 230-253.

Olsson, L.M (2009). *Movement and experimentation in Young Children's Le*arning. Oxon: Routledge

Osgood J and Murris K (2022) Editorial: Risking erasure? Posthumanist research practices and figurations of the Child. Call for Papers. *Contemporary Issues in Early Childhood*. Special Issue, 23(3): 1–7.
Osgood, J., & de Rijke, V. (2022). 'that's enough!' (but it wasn't): the generative possibilities of attuning to what else a tantrum can do. *Global Studies of Childhood*, *12*(3), 235–248.

Osgood, J. (2020). Queering understandings of how matter comes to matter in the baby room in L. Moran, K. Reilly, and B. Brady (Eds) *Narrating Childhoods across Contexts: Knowledge, Environment, and Relationships*. London: Palgrave Macmillan.

Ossmer, C (2020). Normal Development: The Photographic Dome and the Children of the Yale Psycho-Clinic Isis 111:3, 515-541

Oxford University Press (2021). *Become a Word Gap Partner School*. Available at https://oupform.edcowe sites.co.uk/secondary/register-as-a-word-gap-partner-school-and-access-your-freesecondarytoolkit/?step=form&region=uk.

Oxford University Press (2018). *Why Closing the Word Gap Matters: Oxford Language Report* [online]. Available at http://fdslive.oup.com/www.oup.com/oxed/Oxford-Language-Report.PDF?region=uk. (Accessed 28th June 2021).

Pacini-Ketchabaw, V. (2012). Acting with the Clock: Clocking Practices in Early Childhood. *Contemporary Issues in Early Childhood*, 13(2), 154–160.

Pasquinelli, E. (2012). Neuromyths: Why Do They Exist and Persist? *Mind, Brain, and Education*, 6(2), 89-96.

Pan, B.A., Rowe, M.L., Singer, J.D., & Snow, C.E. (2005). Maternal correlates of growth in toddler vocabulary production in low-income families. *Child Development*, 76, 763–782.

Peacock, L. (2009). *Serious Play: Modern Clown Performance*. Bristol: Intellect.

Patel, L. (2014). Countering Coloniality in Educational Research: From Ownership to Answerability. *Educational Studies*, 50(4): 357-377.

Pitt, J & Arculus, C. (2018). *SALTMusic Research Report* [online]. https://issuu.com/gyct/docs/saltmusic-research-report

Providence Talks (2015). About providence talks [online] http://www.providencetalks.org (20th July 2018).

Quigley, A. (2018). *Closing the Vocabulary Gap*. London: Routledge.

Rauscher, F. H. (2002). Mozart and the mind: Factual and fictional effects of musical enrichment. In *Improving academic achievement*. Academic Press, pp. 267-278. doi: 10.1016/B978-012064455-1/50016-6.

Regelski, T. (2002). On 'methodolatry' and music teaching as critical and reflective praxis," *Philosophy of Music Education Review*, 10(2), 102–123.

Rhee, J., Curley, S. & Subreenduth, S. (2018). Un/learning habituation of body-mind binary through the teaching/learning body/mind. *The Journal of the Assembly for Expanded Perspectives on Learning*, 23 (1), 118-137.

Rich R, (1989). Mbira on *Rainforest.* San Francisco: Hearts of Space.

Roberts-Holmes, G. (2015). The 'datafication' of early years pedagogy: 'If the teaching is good, the data should be good and if there's bad teaching, there is bad data'. *Journal of Education Policy*, 30(3), 302-315.

Rodgers. T. (2010). *Pink Noises*. London: Duke University Press

Rogoff, B. (2003). *Cultural Nature of Human Development*. Cary: Oxford University Press.

Rosa, J., & Flores, N. (2020). Reimagining race and language: From raciolinguistic ideologies to a raciolinguistic perspective. In H. S. Alim, A. Reyes, & P. Kroskrity (Eds.), *The Oxford handbook of language and race* (pp. 90–107). Oxford University Press.

Rosa, J., & Flores, N. (2017). Unsettling race and language: Toward a raciolinguistic perspective. *Language in Society*, 46(5), 621–647

Rovner, L.& Anderson, L. (2022). Sisters with transistors. Aspect Ratio Films. Available at https://aspectratiofilms.com/videos/sisters-with-transistors/ (accessed January 25, 2023).

Royal Society for Public Health (RSPH). (n.d.). Early years communication and language pathway in Manchester. https://www.rsph.org.uk/static/uploaded/c66c80e5-b305-46c7-9c7d1225aea29b89.pdf (accessed 7 July 2021).

Saldanha. A (2010). Skin, affect, aggregation: Guattarian variations on Fanon. *Environment and Planning A*, 42, 2410 -2427.

Schellenberg, E. G. (2004). Music Lessons Enhance IQ, *Psychological Science*, 15(8), 511–514. Schulte, C.M. (2013). Being there and becoming-unfaithful. *International Journal of Education & the Arts*, 14,1-16

Serres, M. (2008). *The five senses: A philosophy of mingled bodies*. London: Continuum.

Shannon, D. B. (2021). A/autisms: a "queer labor of the incommensurate": holding onto the friction between different orientations towards autism in an early childhood research-creation project, *International Journal of Qualitative Studies in Education*, 1-19.

Shannon, D. B., & Truman, S. E. (2020). Problematizing Sound Methods Through Music Research-Creation: Oblique Curiosities. *International Journal of Qualitative Methods*, 19 Sheets-Johnstone, M. (2011). *The Primacy of Movement*. Philadelphia: John Benjamin Publishing.

Sheldrake, M. & Macfarlane, R. (2020) Fungi's Lessons for Adapting to Life on a Damaged Planet: Merlin Sheldrake in Conversation with Robert Macfarlane. Literary Hub [available at https://lithub.com/fungis-lessons-for-adapting-to-life-on-a-damaged-planet/

Sheldrake, M. (2020). *Entangled lives: How Fungi make our Worlds, Change our Minds and Shape our Futures*. London: Bodley Head.

Sherman, L.W. (1975). An ecological study of glee in small groups of preschool children. *Child Development*, 46, 53–61.

Sibieta, L., Kotecha, M., & Skipp, A. (2016). Nuffield early language intervention: Evaluation report and executive summary. *Education Endowment Foundation*.

Sendak, M. (1967). *Where The Wild Things Are*. London: Bodley Head.

Small, C. (1996). *Music, Society, Education*. Hanover, NH: University Press of New England.

Smith, D.W. (2019). The pure form of time and the power of the false: Deleuze on temporality and truth. Tijdschrift door Filosofie, 81/2019 29 - 51. [online] Available at https://philarchive.org/archive/SMITPF-4. Doi:10.2143/TVF.81.1.3286543

Snell, J. and Cushing, I. (2022). 'A lot of them write how they speak': Policy, pedagogy and the policing of 'nonstandard' English. *Literacy*, 56(3), 199. doi: 10.1111/lit.12298.

Springgay, S. (2021). Feltness: On how to practice intimacy. *Qualitative Inquiry*, 27(2), 210–214. https://doi.org/10.1177/1077800420932610

Springgay, S. & Truman, S. (2018). On the Need for Methods Beyond Proceduralism: Speculative Middles, (In)Tensions, and Response-Ability in Research. *Qualitative Inquiry*, 24(3), 203-214.

Sperry, D. E., Sperry, L. L., & Miller, P. J. (2018a). Reexamining the verbal environments of children from different socioeconomic backgrounds. *Child Development*, 90(4), 1303-1318. https://doi.org/10.1111/cdev.13072.

Sperry, D. E., Miller, P. J., & Sperry, L. L. (2015). *Is there really a word gap?* Paper presented at the annual meeting of the American Anthropological Association, Denver, CO.

Sperry, D.E., Sperry, L.L., Miller, P.J. (2018b). Language does matter: but there is more to language than vocabulary and directed speech. *Child Development*, 90(3), 993-997.

Stengers, I. (2012). Reclaiming animism. *E-flux Journal*, 1-10 [online]. Available at http://worker01.e-flux.com/pdf/article_8955850.pdf (accessed 25 August 2020).

Stern, D.N. (2004). *The Present Moment in Psychotherapy and Everyday Life*. New York: W.W. Norton.

Stern, D.N. (1985). *The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology*. New edn. U.S: Basic Books.

Stige, B. (2010) *Where music helps: community music therapy in action and reflection*. Farnham, England: Ashgate

Stover, C. (2017). Time, Territorialization, and Improvisational Spaces. *Music theory Online*: Chicago Vol. 23, Iss.1.

Sullivan, A., Moulton, V., & Fitzsimons, E. (2021). The intergenerational transmission of language skill. *The British Journal of Sociology*, 72(2), 207–232. https://doi.org/10.1111/1468-4446.12780.

Suskind, D. (2015). *Thirty Million Words: Building a Child's Brain*. New York, NY: Dutton.

Suskind, D., Leffel, K. R., Hernandez, M. W., Sapolich, S. G., Suskind, E., Kirkham, E., & Meehan, P. (2013). An exploratory study of "Quantitative Linguistic Feedback" effect of LENA feedback on adult language production. *Communication Disorders Quarterly*, *34*(4), 199-209.

Sutton-Smith, B. (1997). *The Ambiguity of Play*. London: Harvard University Press

Taylor, A, Blaise, M. & Giugni, M. (2013). Haraway's 'bag lady story-telling': relocating childhood and learning within a 'post-human landscape'. *Discourse: Studies in the Cultural Politics of Education*, 34(1), 48-62.

Tembo, S.& Bateson, S. (2021). Liminal relationalities: on collaborative writing with/in and against race in the study of early childhood. *International Journal of Qualitative Studies in Education*, 1-15. DOI: 10.1080/09518398.2022.2061738

Trafi-Prats, L & Caton, L. (2020). Towards an ethico-aesthetic of parenting: Sensing ritornellos of play with GoPro data. *Genealogy*, 4(2):34. https://doi.org/10.3390/genealogy4020034.

Trevarthen, C. & Malloch, S. (2009). *Communicative Musicality*. Oxford: Oxford Press.

Truman, S. (2022). *Feminist Speculations and the Practice of Research-Creation*. Routledge: Oxon.

Truman, S. E. (2021). *Feminist Speculations and the Practice of Research-creation: Writing Pedagogies and Intertextual Affects*. London: Routledge.

Truman, S. E. (2016). Becoming more than it never (actually) was: expressive writing as research creation. *Journal of Curriculum and Pedagogy*, 13(2), 136–143.

Tsing, A.L. (2019). On nonscalability: The living world is not amenable to precision-nested scales. *Common Knowledge*, 25(1), 143-162. https://www.muse.jhu.edu/article/727131.

Tsing, A.L. (2015). *The Mushroom at the End of the World: on the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press.

Turner, V. (1982). *From Ritual to Theatre: the Human Seriousness of Play*. New York: Performing Arts Journal Publications. UKmusic [online]. Available at https://www.ukmusic.org/about/.

University of York (Nd). *LENA device*. Department of Linguistic Science [online]. Available at https://www.york.ac.uk/language/research/projects/babylab/lena-device/.

Valente, J. M., & Boldt, G. L. (2015). The rhizome of the deaf child. *Qualitative Inquiry,* 21(6), 562-574.

Viruru, R. (2001). Colonised through language: The case of early childhood education. *Contemporary Issues in Early Childhood*, 2(1) 31-47.

Von Uexküll, J. (2001a). An introduction to umwelt, *Semiotica*, 134 (1), 107–10.

Von Uexküll, J. (2001b). The new concept of umwelt: A link between science and the humanities. *Semiotica*, 134:1, 111–23.

Waldfogel, J. & Washbrook, E. (2011). Early Years Policy. *Child Development Research*, 1-12. [online] Available at https://www.hindawi.com/journals/cdr/2011/343016/ (Accessed July 20 2018).

Wallin, J. J. 2014. "Education Needs to Get a Grip on Life." In M. Carlin and J. Wallin (eds). *Deleuze and Guattari, Politics and Education: For A-People-Yet-To-Come*, 117–40. London: Bloomsbury.

Wasik, B., & Hindman, A. H. (2015). Talk alone won't close the 30-million word gap. *Phi Delta Kappan*, 96(6), 50–54. doi:10.1177/0031721715575300.

White, E. J. (2022). Utterance chains: A dialogic route to speculative thinking-with toddlers in the Chthulucene. *Global Studies of Childhood*, 204361062211175, 204361062211175–204361062211175. doi: 10.1177/20436106221117573.

White, E. J. (2016). More than meets the 'i': A polyphonic approach to video ss dialogic meaning-making video. *Journal of Education and Pedagogy*, 1(1), 1–14. doi: 10.1186/s40990-016-0002-3.

White, E. J. (Ed.) (2020). *Seeing the world through children's eyes: visual methodologies and approaches to research in the early years*. Leiden: Brill Sense (Visual pedagogies, methodologies & educational research, vol. 1).

Whitmarsh.J. (2011). Out of the mouth of babes: first-time disadvantaged mothers and their perceptions of infant communication. *International Journal of Early Years Education*, 19:3-4, 283-296

Words For Life [online]. Available at https://wordsforlife.org.uk/activities/filter/?age=1-2&activity=(Accessed July 1 2021).

Worth, Dan (2022). Does Ofsted have a problem with language policing? TES [online]. Available at https://www.tes.com/magazine/analysis/general/does-ofsted-have-problem-language-policing?fbclid=IwAR2qZrXXFtW4Q8vuZdY8aUc8r1zQGKJpl18rfrq7zbkTI_tkrKEF-acv_Gc.

Wright, J. (2006). *Why is that so Funny?: A Practical Exploration of Physical Comedy*. London: Nick Hern.

Wynter, S. (2003). Unsettling the coloniality of being/power/truth/freedom: Towards the human, after man, its overrepresentation--an argument. *The New Centennial Review*, 3, (3), 257-337.

Young, S. (2018). *Critical Perspectives in Early Childhood Music*. Oxon: Routledge.

Young, S. (2017). Diverse parenting goals and community music in early childhood. *International Journal of Community Music*, 10 (3), 261–71,doi: 10.1386/ijcm.10.3.261_1.

Young-Bruehl, E. (2012). *Childism: Confronting Prejudice against Children*. New Haven: Yale University Press.

Youth Music & Ipsos MORI (2020) *The Sound of the Next Generation* [online]. Available at https://youthmusic.org.uk/sites/default/files/2020-06/The%20Sound%20of%20the%20Next%20Generation.pdf (accessed ?

Appendices

Film and audio clip links

Audio Clips	
Buzzer's wow entrance	https://on.soundcloud.com/xpn59
Moogie Slot	https://on.soundcloud.com/FPxv1
Got it Got it	https://on.soundcloud.com/LEnaM
Contagions of Bells	https://on.soundcloud.com/cpqXh

Video Clips	
Contagions of bells	https://vimeo.com/manage/videos/813567176/privacy
Moogie slot	https://vimeo.com/manage/videos/813565944/privacy
Got it got it	https://vimeo.com/manage/videos/803462367
Beginnings Buzzing	https://vimeo.com/manage/videos/803459445

Table of video data produced.

Video data produced by camera eye		
360˚ footage	60 minutes	60 minutes
Tcam	7 clips: 4 clips 7- 8 minutes long, 1clip just over 4 minutes long, 1 clip 2 minutes long and one clip 16 sec	8 clips: 5 clips between 7 and 10 minutes, 2 clips just under 3 minutes.
Nursery iPads	11 clips between 2 and 14 seconds, 1 clip 26 seconds long	27 clips between 25 - 40 seconds long, 1 clip 1.40 secs long

Nursery school data

School context and Pupil data:

6 September to 2 December 2021

Total number on roll – **131**

Room	Numbers on Roll December 2021
Childc████████████	25
Childcare- C████████████	10
████████	36
	60

Free School Meals	18.46%	24 pupils
English as Additional Language	50.77%	66 pupils
Pupil Premium	18.46%	24 pupils
SEN Needs	20.00%	26 pupils

Afghan	1
Any other Black Background	3
Any other Mixed Background	10
Arab	20
Bangladeshi	3
Black – Nigerian	2
Black – Somali	11
Black – Caribbean	4
Chinese	1
Indian	3
Other Black African	23
Other Ethnic Group	11
Other Pakistani	2
British	18
White Irish	1
White and Asian	4
White and Black African	1
White and Caribbean	3
White European	4
White Other	5

First Language	Number of Pupils
Amharic	1
Arabic	22
Believed other than English	2
Chinese	1
Classification Pending	2
Edo/Bini	1
English	61
German	2
Hausa	1
Igbo	1
Kurdish	4
Malayalam	1
Lingala	3
Other Language	2

Persian/Farsi	3
Polish	3
Portuguese	2
Somali	11
Spanish	1
Tigre	1
Tigryna	4
Urdu	1

Participant Information and consent forms

CONSENT FORM

Title of Project: **More-than-words**   Study Number: **3289**

Name of Researcher: **Charlotte Arculus**

Please initial all boxes

1. I confirm that I have read and understand the information sheet dated 10.07.2019 (version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

☐

2. I understand that my participation and my child's participation is voluntary and that I am free to withdraw at any time without giving any reason

☐

3. I agree for my child to take part in the research project

☐

4. I give permission for video recordings to be taken of my child - and myself if I choose to participate - as part of the research process.

☐

5. I give permission for written notes to be taken of my child - and myself if I choose to participate - as part of the research process

☐

6. I give permission for photographs to be taken of my child - and myself if I choose to participate - as part of the research process

☐

7. I give permission video clips to be used for creating the research thesis, a final event, conference presentations and research related seminars

☐

8. I give permission for quotes to be used for creating the research thesis, a final event, conference presentations and research related seminars

☐

9. I give permission for images, to be used for creating the research thesis, a final event, conference presentations and research related seminars

☐

☐

10. I understand that my participation will be anonymous but that faces may be recognisable on some video and images

11. I agree to take part in the above study.

12. I agree for my child to take part in the study

_____   _____   _____
Name of Participant   Date   Signature

_____   _____   _____
Name of Person   Date   Signature
taking consent.

Participant Information Sheet
Parents and Carers

More-than-words: an arts research project with two-year-old children

1. Invitation to research

My name is Charlotte Arculus. I am an early-years artist and PhD student at Manchester Metropolitan University and I would like to invite you and your child to take part in my doctoral research study. I am interested in how two-year-old children use movement, musical and expressive behaviours to communicate with others and make sense of their world. The study is in collaboration with Curious Minds and dance-artist Anna Daley.

Please take time to read the following information carefully and ask questions if anything is not clear or you would like more information. Take time to decide whether or not to take part.

What will happen?

My research will have 3 parts

Part 1 Will involve me spending time in the nursery observing and taking part in what children do. During this time, I will introduce a range of video cameras including one that children can use. Using video technology with children of this age as a way explore their world is an under researched area. I hope to develop a practice of making and watching films with children so that

296

they become used to doing this. I will document how and what children do. You will be very welcome to take part in watching the films and your views will be very useful to the research.

Part 2 Anna Daley and I will be offering creative movement and music sessions for two-year-old children. How children of this age communicate in ways other than talking is an under-researched area and these workshops will be an opportunity to gather information about how children respond during the activities. The workshops will involve playful music, dance and film-making activities where adults speak as little as possible. I would like to gather views from you about what the children do in the workshops, you are welcome to attend the sessions and your contributions will be very valuable.

Part 3 Will be two arts workshops for adults (artists, nursery practitioners and parents/carers) These will take place after the children's workshops. You are invited to attend these workshops but it is entirely voluntary. The purpose of these adult workshops is to reflect on, discuss and gather views on what the children have been doing. You can consent for your child to be part of the project but you don't have to attend the workshops.

2. Why have I been invited?

You have been invited because you are a parent of a two-year-old child. The purpose of the study is to advance understanding of how two-year-old children's communication and language develops. I would like the research to contribute to local and national debates about 'school readiness' and consider the contributions arts-based approaches (music and dance) can make to these debates. All those involved in the project are invited to take part in the sessions and to reflect on what we are learning as the project develops. I want to use this information to investigate further ways in which we think about, understand and develop creative practices for two-year-olds in early childhood education.

Everything that children do as part of the research workshops and my time with them in the nursery will be valued. I will deeply value your experiences and knowledge of your child that you will bring to the project. You are invited to be part of some, or all of these workshops and research process.

3. Do I have to take part?

It is up to you to decide. We will describe the study and go through the information sheet, which we will give to you. We will then ask you to sign a consent form to show you agreed to take part. You are free to withdraw at any time, without giving a reason.

4. What will I be asked to do?

You are welcome to attend and participate in the research activities and discuss what the children did. It is up to you whether you want to take part in the research.

What will my child be asked to do?

Your child may be involved in all or some arts sessions and during my time in the nursery when the research is taking place. There will be video recordings going on and playback of those recordings. Your child will only participate in these workshops if they want to, they will not be made to participate in anything they don't want to do.

All video and information gathered during these sessions will be stored in a safe place. When this information is used in reports, publications or presentations, all participants will remain anonymous so your own identity and your child's identity will be kept confidential at all times. **However, faces may be recognisable.**

Video will be used to form a research presentation as part of my thesis and be shown at conferences relating to this research. **Your informed consent will cover this potential use of data.**

Aspects of this research will go on beyond the lifetime of the workshops, for example the dissemination of information about the project at conferences or journal articles. **Your informed consent will cover this potential use of data.**

I may wish to use video for teaching resources, promotion and funding proposals that involve the use of websites and social media. If I wish to use video or photographs on websites or social media where the faces of you or your child are recognisable, **I will seek further consent from you.**

5. Are there any risks if I participate?

I do not foresee any risks to you or your child. You may be unsure about participating in the research. However, even if you do give initial consent to your child taking part, you can decide to withdraw at any stage.

6. Are there any advantages if I participate?

By taking part your child will have the opportunity to experience the fascinating workshops provided by a well-established early years arts practitioner. You will also be able to discuss the ways you think these experiences engaged your child and help inform future and developing practices for professionals working with this age group.

8. What will happen with the data I provide?

Your confidentiality will be safeguarded during and after the study. All video and information gathered during these research sessions will be stored in a safe place. Film will be collected on video cameras, and written notes made in the researcher's and arts practitioners' notebooks.

Film data will be transferred and stored on encrypted, password protected devices after each session. Devices and notebooks will be kept in locked cabinets at MMU, or locked cabinets in the researchers and artists offices.

Data will be examined by myself and others who take part (artist, parents, nursery staff and children) to explore what we found interesting and for further analysis. This will include writing and film making for my thesis, for publication and conference presentations. If data is to be referred to in the public domain, pseudonyms and anonymised faces will be used in written and visual texts **unless otherwise agreed and additional informed consent has been sought and secured from the participants involved**.

Video will be used to form a research presentation as part of my thesis and be shown at conferences relating to this research. **Your informed consent will cover this potential use of data.** When this information is used in presentations, all participants will remain anonymous so your own identity and your child's identity will be kept confidential at all times. **However, faces may be recognisable.**

Aspects of this research will go on beyond the lifetime of the workshops, for example the dissemination of information about the project at conferences or journal articles. **Your informed consent will cover this potential use of data.**

I may wish to use video for teaching resources, promotion and funding proposals that involve the use of websites and social media. If I wish to use video or photographs on websites or social media where the faces of you or your child are recognisable, **I will seek further consent from you.**

Exemplary pieces of the data will be archived and conform a consultable digital data set. For this I will follow the requirements of Manchester Metropolitan University's institutional Data Repository, see https://e-space.mmu.ac.uk/ The data will be kept for up to 4 years in total and then disposed safely following the designated institutional procedures described in https://www2.mmu.ac.uk/isds/information-security/policies/data-destruction/

When you agree to participate in this research, we will collect from you personally-identifiable information.

The Manchester Metropolitan University ('the University') is the Data Controller in respect of this research and any personal data that you provide as a research participant.

The University is registered with the Information Commissioner's Office (ICO), and manages personal data in accordance with the General Data Protection Regulation (GDPR) and the University's Data Protection Policy.

We collect personal data as part of this research (such as name, telephone numbers or age). As a public authority acting in the public interest we rely upon the 'public task' lawful basis. When we collect special category data (such as medical information or ethnicity) we rely upon the research and archiving purposes in the public interest lawful basis.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained.

I will not share your personal data collected in this form with any third parties. This is a small closed study.

If your data is shared this will be under the terms of a Research Collaboration Agreement which defines use, and agrees confidentiality and information security provisions. It is the University's policy to only publish anonymised data unless you have given your explicit written consent to be identified in the research. **The University never sells personal data to third parties.**

We will only retain your personal data for as long as is necessary to achieve the research purpose.

For further information about use of your personal data and your data protection rights please see the University's Data Protection Pages.

9. What will happen to the results of the research study?

The research will form the basis of my doctoral thesis and feed into the ongoing practices of the nurseries, and arts organisations taking part. I hope that the research will be used to support creative arts practice in nursery settings and develop understandings of how artists can work with young children to develop and understand their communication and language learning. I will create a final research event to which all participants will be invited.

The study aims to provoke thinking and discussions about two-year-old children, 'school readiness', literacy & communication and creative learning experiences.

10. Who do I contact if I have concerns about this study or I wish to complain?

Charlotte Arculus, Lead Researcher, charlotte.arculus@stu.mmu.ac.uk

Dr Christina MacRae, Supervisor, C.Macrae@mmu.ac.uk tel: 0161 247 2261

Faculty Ethics FOE-Ethics@mmu.ac.uk, 0161 247 3700

If you have any concerns regarding the personal data collected from you, our Data Protection Officer can be contacted using the legal@mmu.ac.uk e-mail address, by calling 0161 247 3331 or in writing to: Data Protection Officer, Legal Services, All Saints Building, Manchester Metropolitan University, Manchester, M15 6BH. You also have a right to lodge a complaint in respect of the processing of your personal data with the Information Commissioner's Office as the supervisory authority. Please see: https://ico.org.uk/global/contact-us/

THANK YOU FOR CONSIDERING PARTICIPATING IN THIS PROJECT

Case studies by Nursery Practitioners
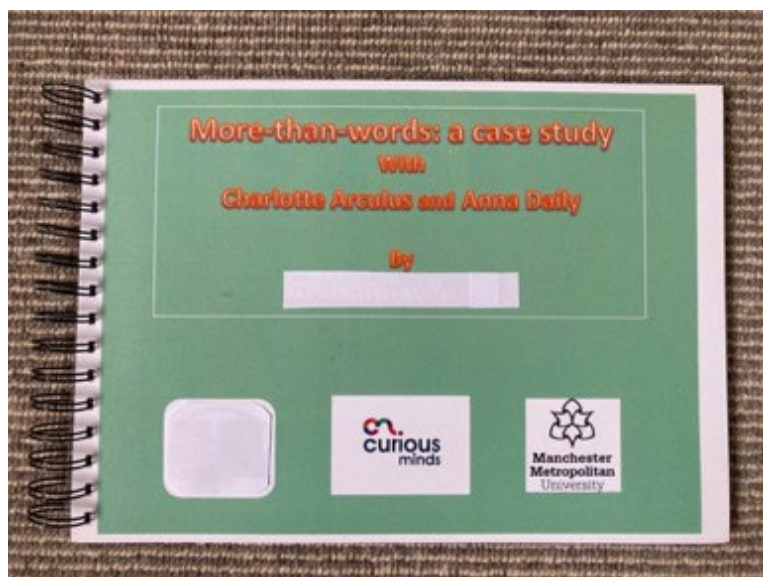

Figure 37: case study cover 1

Figure 38: case study cover 2

Figure 39: case study cover 3