

Babies as Space Makers: Loitering with Babies in a (Post)pandemic World

Ruth Boycott-Garnett
2024

Babies as Space Makers: Loitering with Babies in a (Post)pandemic World

Ruth Boycott-Garnett

A thesis submitted in partial fulfilment of the requirements of
Manchester Metropolitan University
for the degree of Doctor of Philosophy

Department of Health and Education
Manchester Metropolitan University

In collaboration with
Manchester Art Gallery

2024

Acknowledgements

Christina, Abi and Rachel, meeting the three of you has opened up an adventure that I would never have thought possible. You have shown me a whole new world and I am indebted to your unwavering, attentive and skilful support.

I am honoured to have had the chance to work with Katy and everyone that makes space for families at MAG and feel so lucky to be able to continue working with you in new ways. I would also like to thank Karen and the team at the children centres for inviting me to share their work during the messy surrounds of the pandemic.

Thank you to all the incredible babies and families that kindly shared space with me during the making of this thesis.

With thanks to the White Rose Doctoral Training Partnership for funding this research.

Thanks to the many people that I have met along the way who have changed how I think either in written feedback, over late-night discussions or within the thought-provoking events of the Children and Childhood research group.

Thanks to all the spaces that have let me hide away and write – the kindness café, the side desk in the library and the kitchen table.

Thanks to Rachel, Matthew and Freyja for perfectly timed distractions and making me laugh a lot.

Thanks to Billy and Clementine for always showing me new things. And thanks to the many people who have kept them alive and well whilst I write, particularly;

- Angie, for the hundred and one acts of care that you do when you think no one is looking.
- Loz, for being a part of this intricate web of family that we weave.
- And Esther, for sharing daydreams and making the best ones into plans.

Abstract

In this thesis I experiment with story-making as a fresh approach to paying attention to babies' ways of being. In doing so, I make certain elements of public space visible, queering everyday spatial practices. Drawing on feminist new materialist and other postfoundational theories, this research produces empirical work that draws attention to bodies, matter and space in the here and now allowing an ontological shift that honours babies' non-representational material entanglements with everyday spaces. This orientation resists predetermined paradigms that place the future as 'set in stone' and allows a re-imagining of public space.

The research took place between the Springs of 2020 and 2022 with 16 babies and their caregivers and emerged from interdisciplinary work between an art gallery and family support services. The research was built around my methodological stance of a 'tentative ethnography', which involved spending time with babies during the Covid-19 pandemic through virtual and physical play sessions. Then later, as the pandemic subsided, this ethnographic approach encompassed, evolved, and sat alongside experiences with my own baby as we navigated our changed local area.

Inspired by babies' more-than-verbal and non-representational modes of communication and ways of being, the thesis offers contributions to research in early childhood in two ways. The first contribution is story-making as a way to draw attention to the affective, social, mythical and geographical in babies' everyday material engagements with their worlds. I re-consider methods and methodologies for researching with the very youngest children. The thesis illustrates how researching with babies, raises crucial questions of ethnography, particularly around participation, ethics and the role of the institution in knowledge-production and ownership. Building on existing representations of babies within research, I propose a speculative practice that accepts adult researchers' unknowability of babies' experiences.

The second contribution is a shift in attention placed on babies' everyday lives from private spaces, such as the home, and spaces specifically allocated for babies, such as the nursery,

to public spaces, where babies are often made 'out of place' by material, social and political threads thrown together across public environments. Taking up the idea of the pandemic as a portal to reimagine new futures (Roy, 2020), I reconfigure public space through babies' spatial entanglements. Attending to babies' everyday encounters through story-making practices unsettles notions of speed, productivity and power that play into how space is created within and beyond the neoliberal city. Through a discussion of welcome, wandering and atmosphere I turn to theories of smooth and striated space to elaborate on the tensions and synergies that weave across space creation. This discussion foregrounds how public space is not only constructed through long term urban design and fixed architecture but also created through the everyday material entanglements of families, activists, artists, practitioners and communities. To conclude the thesis, I offer three provocations that consider what conditions are needed for a new type of public space that works with babies' spatial entanglements and allows for movement, loitering and unpredictability.

Contents

<i>Acknowledgements</i>	ii
<i>Abstract</i>	iii
<i>List of illustrations and tables</i>	viii
Introduction: Babies, art and public space	1
Making the case: why should we pay attention to babies' spatial practices?	7
Chapter summaries	15
Chapter 1: Beginnings and endings	18
Conversations in the gallery	19
Collections of things, people and spaces	21
Sharing (un)familiar space with a baby	28
A note on the pandemic and an unfurling world	32
Why am I still talking about the pandemic?	34
A brief encounter with language, politics and history	36
Babies born in a (post)pandemic world	41
Pandemic as a threshold – making a methodology	44
Chapter 2: Framing and defining the research: conceptualisations of space	46
Why space?	47
Space is messy and multiple	51
Space as embodied and subjective	55
Space as social, political and historical	58
Chapter 3: Framing and defining the research: conceptualisations of babies	61
Mythology, media, mammals and more	62
Refusing dominant narratives	65
Babies are not capital	66
Babies are more than developmentalism	69
Chapter 4: Framing and defining the research: reconceptualising babies in space	73
Reconceptualisation 1: Babies are mixed in with the world and make things happen	74
Bodies	78
Skin	82
Air	85
Reconceptualisation 2: Babies are never fully knowable	89
Reconceptualisation 3: Babies live on the edge of human	93
Moving into methodology	97
Chapter 5: Tentative ethnography: babies as methodological agents of change	97
Ethnography, risk and the ask of others	98

Tentative ethnography	102
What babies do to research	104
A relational self	108
Participation and inclusion.....	110
The spider webs of babies	113
Tentative steps in fixed spaces of ethics	115
Chapter 6: Through the portal: stories for a (post)pandemic world	118
Story 1	120
Layers	120
Commentary	122
Sticky baby goes to the library	124
Story 2	127
Layers	127
Commentary	129
Streets	132
Story 3	135
Layers	135
Commentary	136
Ode to an access ramp.....	138
Chapter 7: Zoom, residue and story-making	140
The thing-power of Zoom	142
Attending to affect	145
Data as a residue.....	150
Story writing.....	150
Thinking-with theory and the friction of vitality affects	152
What next?.....	155
Chapter 8: Thresholds, atmospheres and hospitality	155
Thinking-with thresholds	156
Thresholds of atmospheres.....	162
Nomadic babies.....	165
Endings and beginnings: making spaces.....	171
Space, babies and stories.....	171
Babies as (queer) space makers.....	173
Future spaces: three propositions	175
Proposition 1: We need spaces to crawl on our hands and knees.	176
Proposition 2: We need space to lie down and loiter.	177

Proposition 3: We need space where we can be unstable.	177
Miniature epilogue.....	178
<i>References</i>	178

List of illustrations and tables

Image 1: <i>Pincushion, cotton with inscription in pins, 'Welcome little Stranger, MA, CT, 1798'</i>	7
Image 2: <i>Content from the first sensory gift boxes</i>	21
Image 3: <i>Seated Figure</i>	61
Image 4: <i>Ultraviolet Light Treatment, South London Hospital for Women and Children (Edith Tudor-Hart)</i>	76
Image 5: <i>The Joy of the Worlds (Cecil Collins)</i>	80
Image 6: Page 12-13 of <i>Good Dog Carl (Alexandra Day)</i>	87
Image 7: <i>Learning to crawl on the access ramp</i>	133
Table 1: <i>Sensory Gift Play Sessions</i>	23

Introduction: Babies, art and public space

This thesis is about the baby that cries on a bus and wets the eyes of the old man sat on the other side of the aisle.

It is about learning to crawl on the grubby access ramp in the dimly lit corridor.

It is about noticing the tiny buds of spring pushing through concrete while the pram wheels pass by.

It is about the tea party between two strangers in the doctors waiting room.

It is about sleeping in public.

It is about lingering in the library a little longer than is comfortable.

It is about the glee of automatic doors.

It is about being directed to the baby area.

It is about the baby who greets a stranger like old friends and invites them to sit on the grass, to share the space, for an odd, brief, moment.

This thesis documents a series of encounters between babies and the material space around them and what is made possible when considering these moments through story-making. The thinking that this research produced, for me, merged across two distinct phases. The first phase, delivering play sessions for new babies in the depths of the Covid-19 pandemic, then seeped into my personal experience of being with my own baby as the pandemic subsided, which became an unexpected second phase. In the first phase the affective power of babies to build and cut through atmospheres became tangible as babies' sounds, movements and touch lifted or deflated the space. These sessions have led me to believe that babies are clearly active in making the space around them; their movement and intra-actions build into affective intensities that change the space. In this way, babies are space makers. In the second phase these space making qualities did something different when taken out of the children's centres and babies' homes, where the presence of babies is

generally expected and accepted, to public spaces where babies often become 'out of place.'

Space, as put forward by Massey (2005), is never a fixed container but always open, in flux and created through an intricate network of power relations and changing narratives. As the affective space making qualities of babies are often at odds with how public space is negotiated, babies become what Puwar (2004) has described as Space Invaders (2004). Moments where unexpected bodies occupy a space becomes an encounter that 'causes disruption, necessitates negotiation and invites complicity' (Puwar, 2004:1). These 'out of place' negotiations seem to occur, for example, when sheltering in the entrance of a public building, looping a few too many times around the indoor market or spending time investigating a small thread in the library carpet.

At the same time, the presence of a baby makes certain spatial practices possible that would otherwise be judged differently. For example, considering the loop that I would often walk with my baby around my house – following back lanes, rows of terraced houses, a strip of canal towpath and round again – being a white, able bodied coupling of woman and baby, both in the right clothes (weather appropriate and whatever else) and acceptable age ranges, becomes an opportunity to move through space in a way that would not be available to others. Nobody stops us, asks us what we're doing or watches suspiciously from their windows. Would this be the same if I was on my own? Or if this loop was walked by a lone teenager of colour? Ahmed (2014) has shown how all of these aspects play into how a person travels through a space and has drawn attention to the atmospheric walls that work on bodies in different ways depending on the angle from which you enter a space. Babies are not immune to this. They enter a world already imbued with meaning and matter (Ornmalm, 2021) that welcomes some babies more than others, and yet, even just the presence of a baby can change what is possible for a space. I am not suggesting that entering a space as this coupling of woman and baby is instantly positive, effortless and well received. This plays into a larger context of where women walk and where they avoid, where they feel safe, and when and where they negotiate the threat of violence. Babies' experiences of public spaces are also constructed with the ongoing dangers that they might encounter – busy roads, murky canal waters, broken glass, pollution. The presence of a baby, the things that they do or the things that they arouse from others, can add freedom,

vulnerability, tension, joy, sociality, fear or irritation to a space. This is partly how babies become space makers.

Babies are not only active in making the space around them but also bring our attention to aspects of space that we tend to overlook. Taking up the proposition from Holt and Philo (2022) that babies are non-representational and barely-human, they make us notice things by their ongoing connections to the more-than-human matter around them and their ability to live on the boundary of human centred activity. This capacity is produced by our own acceptance that babies are indeed human, yet they act in ways that are often considered outside of the human sphere; they are not 'walking and talking.' When a baby prefers the edge of the room rather than the toys that have been allotted to them on the playmat; when a toddler reaches out to a new face as if they were a long lost friend; when a newborn cranes their neck in the folds of a sling to catch sight of something new; these moments create a stir or a jolt that make certain odd aspects of space visible and allows us to rethink how we all practice space in our day to day lives.

In this way, the babies' actions become a queering of everyday spatial practices. Dyer (2019) suggests that queerness and queering, as well as working as a disruption of gendered norms, can also arise 'from an object's veering away from expectation' (Dyer, 2019:5) and can encompass 'all that is deemed strange and unruly' (2019:5). She applies this to considerations of 'the child's emotional illegibility, queer intimacies, and affective intensities' (2019:2). In this thesis, queering threads through the research, not only through the presence and actions of babies but also in the surrounds of the all-encompassing pandemic that caused people to reassess their habitual interactions such as sneezing into elbows and standing two meters away from each other. I suggest that there was something strange and unruly about the pandemic that made it possible for babies' space making qualities to become more tangible. During weekly play sessions that I facilitated in the first phase of the research there was something about the unusualness of sharing space (both physical and virtual) and having to reconsider your habitual bodily movements with every step; resisting the urge to momentarily pull the face mask away when smiling with a baby, or attempting to catch a sense of conviviality through the distance of a shared Zoom screen; that perhaps made it easier for the actions of babies to become visible, for my own body to become more aware, or heightened, to the affective qualities of the babies. The stuttering in the usual

habits provided a pause where the babies' actions, so transient, tiny and often in between, could slip through into my consciousness.

Queering also finds a place in the data collection and data of this research. Through the time and space that the families and I shared during the first phase of the research, I began to notice these fleeting moments of affective space making but couldn't put my finger on how they were produced. Intrigued by these moments, and wanting to think more with them, I attempted to document their occurrence but found any attempt at capturing or recreating them fell flat. These moments were often too fleeting to capture on camera as they happened and any attempt at pre-empting moments and pre-recording small snippets seemed to create a shyness in the space and cut through whatever connections were building up across the room. A different attempt to film the whole space for the whole session then zone in on specific moments, seemed to suggest that these affective moments didn't exist at all or didn't want to appear on screen.

Ditching the camera, the non-representational elements of babies' lives began to seep into my methodology and produced a queering effect on the idea that their actions could be captured and understood through traditional ideas of representation. Holt and Philo discuss how babies can introduce friction to existing systems (2020:819). This friction rubs up against certain structures of knowledge and representation that determine how research is carried out. For me, this fostered a turn to the written word, not as an accurate record of events, but as a more-than-representational mode of thinking. By attempting to write with a focus on affective spaces, a notion which can be considered 'pre-linguistic' and beyond words, words enter 'into the affective encounter as another part of the event from which a new material experience arises' (Truman, 2016:137). In this way the writing is influenced by Truman's suggestion that words 'mix with, amplify, or dampen the intensity of an affect as part of a larger apparatus of thinking-feeling' (2016:137). From this friction that is produced between babies and research methodologies, my thinking begins to resonate with the key aspects of feminist new materialism. This philosophy tends towards speculative, transdisciplinary, political thinking that de-centres the human and attends to more-than-human agency and the complexities of representation (Truman, 2016). This thinking threads through the thesis guiding methodological, ethical and practical decisions within the

research and has influenced the theories and researchers that I turn to within the discussion.

Though this research is largely ethnographic, the process has been strongly influenced by research-creation, from which this affective writing has grown. Truman and Springgay (2015) describe research-creation as a 'complex intersection of art, theory, and research' (Truman and Springgay, 2015:152). This merging of different types of knowledge is well suited to this study. Partly this is because it fits with the holistic nature of babies' knowledge making that does not distinguish one style of knowledge from another, but also because the foundations of this study come from a long standing relationship between an art gallery and university; places of art and research, which has flourished through an interdisciplinary and inter-professional network of artists, researchers, health visitors, early education providers and family engagement practitioners. In honour of these different perspectives, histories and practices, this thesis draws on art, literature, folklore and lived experience as well as academic texts as a non-hierarchical mixing of embodied, affective and academic knowledge to produce new thinking. These non-academic texts, like queering, weave throughout the whole of this thesis.

Through threads of art, queering and attention to the more-than-human I will focus in on the space making practices of babies in public space. Public space is often included in discussions of placemaking, which is a well-established practice within urban design, generating compelling discussions on the place making activities of communities, artists and families informing the planning of public social spaces (See Courage et al, 2020). Often conscious of grassroots activity and community practices, discussions about placemaking regularly welcome the idea that space can be transformed by paying attention to the ways in which it is actually used. There are resonances here with what you are about to read, and I anticipate that interesting connections could be made between this research and placemaking beyond the thesis. However, throughout the thesis I refer to babies' practice as space making, rather than placemaking, as my perspective is influenced not from urban planning but from early childhood discourse on the spatialities of young children. For example, Hackett (2014) draws attention to the young children's use of space in museums and Orrmalm (2021) studies the flow of things in babies' homes. For me, space making encapsulates the fleeting, affective and small-scale moments in which babies change the

space around them. I propose that taking these space making practices seriously can act as a queering of how we make space and might encourage a rethinking of certain spatial practices in our daily interactions. Paying attention to the spatial practices of babies might lead to spending more time than usual in an open space, noticing the small changing details of a local environment, or bringing care to an overlooked corner. In these small-scale, but potentially radical, interactions I find a kinship with the work of Rose (2019) and the *Loiterers Resistance Movement*. Rose and the *LRM* put forward a simple yet necessary argument that streets are for more than shopping. She suggests 'Loitering, playing, not spending money ... should not be radical acts, but they can become so if we lose the concept of public space and focus only on profit' (2019:115-116). She suggests that spending time in certain spaces can also be a way of 'resisting boredom, heterogeneity and the construction of fear' (2019:116). I suggest that paying attention to babies' spatialities has the potential to refigure space through playful resistances of the things that have become so embedded we have forgotten to notice them. I think this resonates in the *LRM*'s public walks and playful interactions with space, such as CCTV bingo, and feel that sharing spaces with babies becomes the ultimate playful resistance and brings possibilities to make space differently.

I have laid out the story of this research and pulled at the threads that continue through the thesis. What follows is a mix of babies and slings, face coverings and sensory gifts, thresholds and the weight of a museum door. There is discomfort, pleasure, unruliness and the tenderness of sleeping babies. I hope it is of interest to you, the reader, and I hope you find stories that resonate with the spaces that you share with strangers as you go about your daily lives.



Image 1: Pincushion, cotton with inscription in pins, 'Welcome little Stranger, MA, CT, 1798'. Maker unknown. Manchester Art Gallery collection, accession number 1947.1112. Image credit: © Manchester Art Gallery

Making the case: why should we pay attention to babies' spatial practices?

Drawing on existing research practices with babies, this section outlines the need for socio-spatial research that accounts for babies in public spaces. This call for more attention to be given to babies' entanglements with everyday materialities and spatial practices is timely where babies' limited access to public space has altered significantly in the wake of the Covid-19 pandemic and global political shifts. In this section I will pinpoint the contribution to new knowledge that this thesis intends to make and the specific questions that underpin this study.

Anyone who has sat on a bus whilst a newborn fills the air with cries, or when a toddler beams at them from the seat in front, has seen and felt the strong force that an infant can have in changing the space around them. Yet, the majority of studies on, with or for babies are conducted in health or psychology disciplines that often overlook the myriad of flows and connections between babies and the world around them (Impedovo and Tebet, 2021, Holt and Philo, 2023). Studies in health and psychology take up a large proportion of existing research with this age group compared to research with older children and adults where the balance of the social sciences alongside health allows for a variety of perspectives of what a child or adult is. McNamee and Seymour (2012) have shown the importance of paying attention to the methodologies used with different age groups and identify how research within early childhood is dominated by a focus on 10-12 year olds with much less attention given to younger children or babies. When the lion's share of research on babies comes from one domain, this means that the majority of knowledge making around babies is shaped in specific ways that are customary to these particular disciplines or modes of thought, and lack a diversity of perspectives. This is especially important when certain knowledge is presented as universal. Erica Burman (2001) has argued that developmental psychology is not as universal as it is often assumed to be but rather shows 'deeply culturally-embedded records of a particular times and places' (2001:7). For example, Riley identifies how specific ideas of biology and society 'slip uncriticised into child psychology' (1983:22) which not only shapes the discipline but angles the majority of critiques towards the nature/nurture debate rather than allowing other considerations of childhood to emerge. The issue of this within the larger picture is identified by Burman (2001) as she shows how these records of childhood are not only culturally specific but also a record of a dominant culture that has become so commonplace that it is no longer visible.

Health and psychology disciplines rely on a dominance of methods that separate out and measure the intricate working of babies' biologies, such as brain development, rather than methods that regard babies as inseparable from the world around them (Gotlieb, 2000, Holt and Philo, 2023). This results in a large body of research that rarely accounts for babies' experiences within their everyday worlds both through the social and cultural connections that babies are a part of making within their daily interactions and through the myriad of more-than-human intra-actions that proliferate within their on-going entanglements with

the spaces around them. Babies, in most cases, are viewed as the object of study rather than subjective beings with their own influence on the space around them. For example, Woodhead and Faulkner (2008) bring attention to this with children's research in sociology. From their perspective this observation is underlined by the risk that a more participatory practice would bring to a traditional model of research. This emphasises the need to look beyond traditional research when starting with the everyday worlds of babies.

Through a specific model of babies and babyhood, development psychology, and neuropsychology in particular, has made fascinating discoveries on how babies' brains work. This fascination has resulted in a lasting impact on considerations of early childhood in policy making. The *1001 Critical Days Cross Party Manifesto* (Leadsom et al, 2013) is a prime example of this. Developmental psychology has also had a strong influence on perceptions of parents and parenting practices. For example, many of the parenting handbooks find authority in basing suggested techniques on development psychology evidence such as Bowlby's (1958) study of attachment theory (for example Redfern and Cooper, 2015, Perry, 2020). There is a seductive quality to this field of research that brings "concrete" evidence for how babies should be cared for. This has resulted in child psychologists, paediatricians, neuroscientists and education consultants often regarded as 'experts' on babyhood, with knowledge of early development emerging from science and particularly psy-disciplines.

Facts, frameworks and fantasies of a normative child and the child positioned as 'other' have emerged from the accumulation of such privileged knowledge. Influential reports (such as *The 1001 Critical days Cross Party Manifesto* in 2013 and the more recent *Best Start for Life* report from 2021) are often structured around these specific knowledges and in doing so avoids engaging with babies' lived experience. Through this, they reinforce the mother/child dyad so that 'the minutiae of everyday interactions between mothers and their children [are] held up as deeply significant and capable of overcoming structurally ingrained disadvantages' (Gillies et al, 2017:7). Though an empowering notion on the surface, this leads to 'ultimately holding women accountable for the wellbeing of the nation' (ibid, 2017:131) where an investment in teaching universal parenting skills is preferred over redistribution of resources. Erica Burman (2001) delves further into the mother/child dyad unpicking the cultural aspects that place it within specific times and places rather than a timeless global 'natural' occurrence. Burman shows how this mother/child dyad took

prominence in western areas during the post war era which contests the widespread and common assumption that this image of mother and child is a natural, global or ageless phenomena as some child development discourses would suggest. She shows how this ideological shift relocates the 'responsibility for childcare, welfare and development onto mothers, with legal, policy and practice effects we now expend significant amounts of time and money trying to counter' (Burman, 2001:8). Within this focus on mothers as responsible for the welfare of the next generation, there is little acknowledgement of difference, access to spaces, financial restraints, contrasting responsibilities and the array of daily occurrences where babies are not in a bubble of one-to-one interaction with their main caregiver but exploring the physical world around them (for example when journeying, see Boyer and Spinney, 2016).

How research studies are designed and represented has an influence on how results are taken up in public discourse and decision making. Particular studies have become significant as their results have been cited as evidence in policy to bolster governmental approaches. These lab-based methods and advances in data collection such as eye trackers and neuroimaging have their strength in focusing on what is measurable and involves stripping away anything extraneous, different or transient. This is an interesting perspective when considering babies as objects of study. Peterson (2016), in an ethnographic review of the practices in three different baby labs, presents babies as 'difficult research objects' that challenge 'methodological rigour' (2016:1). Jones et al (2014), discuss Robert Stake's (2003) take on comparison as a 'grand and powerful strategy' (Jones et al, 2014:64) that only works by obscuring any knowledge that fails to facilitate comparison. They suggest that comparison can only be constructed by systematically eradicating 'anything that is juicy, contradictory, puzzling, alive – in short, meaningful' (ibid). Sometimes, the constraints of quantifiable comparison provide the ability to zoom in on data which can result in intriguing discoveries. I am not advocating for research that pays no attention to the inner workings of babies' bodies and the captivating science of synapses and bodily responses that are made accessible through test-controlled environments, there is value to this perspective. I am suggesting that when these become the dominant ways of considering and presenting babies, they create a persistent image of the baby as separate, measurable, quantifiable and knowable. We lose the image of a baby in the world interacting and intra-acting with myriad

other bodies, beings, concepts and material spaces. Through this dominance of neuroscience certain ways of thinking about babies are taken as fact and through this acceptance these facts begin to dominate what matters. For example, the CCT image of a shrunken brain next to a 'healthy' brain is well known within the early childhood sector. Often this image is used in sensationalist ways as an example of what happens when a baby is neglected to shock practitioners and parents into certain ways of caring for young children. However, Gillies and colleagues (2017) point out that the origins of these images are murky and difficult to uncover and the actual conditions of life for the child whose brain is in the image are not known (Gillies et al, 2017:8). Yet the uncertainty of its origins has not stopped this particular image being used in policy documents, training materials and popular media.

Throughout the history of development psychology, select researchers interested in the lives of babies have attempted to adapt research methods that take babies everyday lives into consideration (Peterson, 2016). Gessell (1928), for example, started his research by stripping back in order to categorise the actions of babies, then devised a 360-degree viewing dome within which he tried to create a 'natural environment' for babies and parents in an attempt to bring the rest of the world back in (MacRae, 2019). This could be considered as an upside-down version of what I am advocating for; starting from an artificial study space and attempting to insert the 'real' world, rather than starting with the world and allowing a study to form. From this example, it is possible to see that these attempts are still orientated around cartesian models with the human adult as the central knowing and matured subject and follows a humanist logic that exists on binaries such as subject/object, adult/child, researcher/participant. These binaries limit what is thinkable and creates a paradigm that reduces babies to objects of study rather than fluid, subjective and connected beings.

Haraway tells us that 'it matters what thoughts think thoughts, what stories tell stories, what knowledges know knowledges' (2019:570). To create new research with babies we must start with an awareness that other thoughts, stories and knowledges are possible and find a way from there. In paying attention to babies' everyday lives, I suggest babies offer something productive to methodologies. This perspective has begun to appear in literature, particularly in a paper on infantmethodologies (Tesar et al, 2021a) where a collection of twenty researchers, including myself, playfully interpreted what it means to study a child and

the implications that infants have on methods and methodologies. This paper was developed in a series of work on infantologies (Tesar et al, 2020, Peters et al, 2020, Tesar et al, 2021a, Tesar et al, 2021b) that is beginning to build momentum for thinking creatively about infants and infant research.

Burman suggests that to counter the globalisation of certain perspectives of child development, researchers need to attend to 'complexity, diversity and multiplicity' (2001:7). To discover new thinking, we need new orientations that take account of the social, the material and the political in babies' everyday lives. This calls for research in areas outside of psychology and health to pay attention to babies and allow different configurations of babies and babyhood to emerge. Holt and Philo (2023) suggest that the vast research on babyhood in development psychology needs to be balanced by research that considers the 'importance of place, space and socio-cultural, economic and political processes to the very fabric and becomings of babies' and toddlers' interconnected bodies and minds' (2023:827). Gottlieb (2000) and McNamee and Seymour (2013) have noted how the gaze of social researchers have swept over the heads of babies, as if they hold no capacity to change the world around them or are 'not old enough' to participate. Since Gottlieb's initial observation of absent babies, a handful of researchers across geography (Holt and Philo, 2023, Holt, 2012, Orrmalm, 2020a, 2020b and 2021, Boyer, 2012), education (Osgood, 2021, Sumsion et al, 2018, Bradley et al, 2012, Schofield, 2021), social sciences (Orrmalm, 2020b), sociology (Tebet and Abramowicz, 2016), museum studies (MacRae et al, 2017, Hackett et al, 2020) and even mathematics (Acevedo-Rincón and Tebet, 2022) have taken an interest in the everyday lives of babies and small scale studies in nurseries, museums, homes and other every day spaces have started to emerge. Some researchers have even called for the creation of new fields to account for this growing interest. Impedovo and Tebet (2021) and Tebet and Abramowicz (2016) suggest 'baby studies' as a specific field of research that differs in content, methods, intentions and paradigms to the all-encompassing field of childhood studies (Impedovo and Tebet, 2021). In geography, Holt and Philo (2023) propose a subfield of 'infant geographies' that attends to a growing interest in the spatial practices of babies and toddlers. Moreover, in the series of studies on 'infantologies' (Tesar et al, 2020, Peters et al, 2020, Tesar et al, 2021a, Tesar et al, 2021b) mentioned above, Peters, Tesar and colleagues invite an interdisciplinary collection of scholars to participate in a collective

writing project, to pay attention to 'the importance of the world of infants, their evolving minds, and physical and social bodies' (Peters et al, 2020) highlighting the relevance of babies in research across discipline boundaries. Their invitation to consider 'philosophies of the infant' (Peters, 2020:2) takes account of history, philosophy, folklore and accepted assumptions that are entangled with the lives of infants (Tesar et al, 2020, Peters et al, 2020, Tesar et al, 2021a, Tesar et al, 2021b). Through collective writing practices they consider how this philosophy of the infant might provoke us to think further about notions of voice, representation and research methodologies. At this moment in time research with babies in these areas are building momentum and beginning to carve out a space that provides multiple representations of what babies are, do and can be. This pushes back at the dominant image of babyhood from a psy/health perspective and is beginning to change how we talk about babies.

Though an interest in babies is beginning to find a space in a new range of disciplines, these studies are often still located within traditional spaces where children are specifically catered for such as childcare settings (Bradley et al, 2012, Sumsion et al, 2018) and homes (Orrmalm, 2021). Holt and Philo (2023) show how this echoes the culture of most contexts within the global north where babies are excluded, out of place or invisible in certain everyday spaces. They include workspaces, commuter trains and pubs as examples where the presence of babies and toddlers are actively discouraged. This might be explicit through policies and institutional practices or made visibly unwelcome through disapproving glances and inaccessible furniture. Satta (2015) identifies two historical models of children and childhood through purity (and in need of protection) and wickedness (and in need of discipline). She relates these to the increased movement towards specially designated spaces for children and restricted access to public space (Satta, 2015:181). Spaces where babies and toddlers are excluded, or only expected to access demarcated areas, become examples of Soja's (2009) depiction of spatial injustice. He applies geographies of access to the inequitable distribution of space and therefore this becomes a part of the human rights discourse. Gottleib (2000) considers this lack of babies in public areas of life as one of the many reasons why research on babies has been slow to develop in anthropology where interest in the 'domestic sphere', largely inhabited by women and children, have only become a focus of anthropologists towards the end of the 20th century.

This spatial aspect of babies' lives becomes particularly important in the (post)pandemic world. During the Covid-19 pandemic access to public space, both indoors and outdoors, were restricted in various ways impacting more severely on children of colour and children living in areas of poverty (Children's commissioner, 2020). The experiences and implications of these restrictions on children, and children's own navigations of these, have been documented by Barron and Emmett (2020), Russell and Stenning (2020) and Rogers (2022) amongst others, particularly around outdoor play. Less attention has been given to babies and toddlers, perhaps due to their already limited acceptability in occupying public spaces as outlined above. As the pandemic subsided and public spaces opened up, new ways of space-making, through new regulations or changes in social behaviour, were often counter to the needs of babies and toddlers with little account of how they move in and through space. For example, the introduction of booking systems based on timed entrance slots to public spaces such as galleries and museums helped to ensure the capacity of indoor areas was spread evenly throughout the day, a side effect of this limited the flexibility that these spaces previously provided so that days could steer around naps, nappy changes and longer than expected feeds. Once inside public spaces the one-way systems that needed to be followed jarred with the place making movements of toddlers that Hackett and colleagues have so beautifully illustrated with maps of children's embodied journeys in museum spaces (Hackett, 2014) and their attunement with place through tracing lines in the snow on Norwegian nursery visits (Myrstad, Hackett and Bartnæs, 2020).

Our current post-pandemic environment allows for a rethinking of how public space is made and occupied. This research intends to be a part of a growing movement that calls for attention to be given to babies' spatialities. Paying attention to babies as space makers is about not just seeing babies as capacious and holding agency but regarding babies as offering a way to see and encounter the world differently and open up new imaginaries for a different way of living. Fernand Deligny (2016) is known for his work in the 20th century setting up communities or commons with children with autism in the French mountains. In his evocative and rhizomatic writing he draws on the Arachnean and spider's webs unfolding between the living networks of human and more-than-human life that exists outside of naming or words. In his summary of Deligny's work, Oglivie suggests that Deligny asks:

What is a space perceived outside of language? What is the form of a movement without perspective or goal? How do we engage with a world that is not our own, a world turned upside down yet truly common, where acting cohabitates with our actions and the unknown with our forms of knowledge?

(Oglivie, 2016:9)

I propose that the preverbal, non-representational and strangeness of babies' spatialities are an embodiment of Deligny's 'Arachnean' which produces a queering of space in a post pandemic world allowing new practices to emerge that recognise babies and their families in public spaces. The aim and questions for this research are drawn from this perspective of babies' entanglements with space.

Aims

By paying attention to babies' spatial entanglements during the Covid-19 pandemic within the North of England, this research aims to queer common understandings of public space and re-orientate how spaces can attend to babies and their families in a post-pandemic era.

Questions

1. How can researchers use story-making to pay attention to babies' spatial encounters?
2. How are babies involved in the on-going construction of space and how do these actions queer common space making practices?
3. What new imaginaries of public space are made possible by paying attention to babies' space making practices?

[Chapter summaries](#)

After making the case for this research and introducing the aims and key questions this thesis is set out in eight chapters. Chapter one attempts to identify the beginnings of this research, drawing on the existing relationship between the art gallery and the university and the network of practitioners involved in establishing the art gallery as a place for babies and their families. The backdrop of the Covid-19 pandemic is introduced, both in terms of how it

uprooted this research and a brief attempt at documenting effects of the pandemic for young children and their families as well as the changes the pandemic created in public space. The final section of this chapter introduces the content and practical aspects of the research including the people, places and materials that were involved.

The next trio of chapters establishes existing research that meet at the intersection of babies and spatialities. Chapter two maps out existing theories of space and the ways in which babies' everyday lives are entangled with the spaces they inhabit. This produces the key arguments as to why attention should be given to the spatialities of babies. This chapter introduces particular studies from infant geographies and baby studies that this work is in conversation with. I specify why space is an important element of babies lives and why babies are important to considerations of space.

In Chapter three I lay out common conceptualisations of babies that appear across research, art, folklore and media that create a specific image of babies and babyhood that weave into babies' daily encounters. This chapter provides theoretical perspectives on babies that have informed this research including the implications that particular conceptualisations of babies have on how research is conducted with and for babies and toddlers. Common theories of childhood are repositioned through a re-turning of the implications of development narratives through Massey's writing on space. This highlights what a merging of space and babies might bring to a new way of thinking.

Chapter four takes the existing conceptualisations of space and babies that I lay out in the previous chapters and proposes three reconceptualisations that are beginning to emerge in a small body of literature. These lay out a new thinking about babies that takes in the non-representational nature of babies' lives that contributes to an understanding of babies as unknowable to adult researchers.

Chapter five outlines the methodology for this research and introduces the idea of a tentative ethnography. This is built on recognising the on-going colonial threads of ethnography whilst holding the generative qualities of sharing space. The chapter follows a series of methodological and ethical concerns that emerged during the research. I follow Braidotti's (2014) description of the nomad and nomadic subjectivity to pay attention to the

relational, situated and ever-changing dynamics of the space. This feeds into discussions of participation, representation and ethical frameworks.

Chapter six acts as a portal and provides a break from the narrative of the thesis by introducing a trio of stories that were developed through the research. These stories take Arundhati Roy's (2020) proposal that the pandemic acts as a portal in which we can envision new worlds and new world making practices. These stories are placed in a world not that different to the one that we currently inhabit but one that departed from the pandemic in a different direction and asks how spaces would differ if certain shifts were made possible. These are not an expression of what a perfect world for babies would look like but brings something to think-with in a post-developmental frame that brings babies into political, environmental and global threads.

Chapter seven outlines the process of story-making from which the three stories in the previous chapter have emerged. Laying my own journey of understanding around data, data collection and analysis I outline how story-making becomes a way to think-with the different atmospheres, bodies and actions within different spaces informed by Springgay and Truman's research-creation. Story-making becomes a way to present the thinking of this research to new audiences whilst acknowledging the complexities of (non)representation and knowledge making with babies.

Chapter eight applies existing theories of space to moments of the research and the thinking that was produced for me through the story-making process. This discussion considers elements of atmosphere, thresholds, and the relations between smooth and striated space in an attempt to consider how babies are involved in space making.

With an awareness of how final a conclusion can be, I choose instead to close the thesis with three propositions that draw on the theories, moments, stories and materials that have been laid out within the thesis.

Chapter 1: Beginnings and endings

At the back of the gallery, a crowd of babies, mums, grandmas, dads, aunties and friends would lower themselves to the floor, the older bodies trying to get comfy on mats or throws while the babies were propped on cushions or cuddled in laps. The assembled would be surrounded by scratchy fabrics, silver trays of sand, dangling broccoli, bendy mirrors and pastry brushes. Babies would lift themselves up on the backs of strangers. Speedy crawlers would weave their way through bodies and stuff. Perhaps a toddling girl would roughly pat the head of a tiny baby and shout 'baby!' in delight. Perhaps two babies would wrestle over a silicon spoon. Perhaps a practitioner would cuddle a crying baby as their carer temporarily disappears out of sight. Around the edges, mums would wait on chairs, watching other mums, while a baby slept on their lap, wrestled for freedom, suckled in their arms or grasped at soft sticks of something tasty from tiny Tupperware tubs. At the back of the room, hidden by hanging cloth, were weighing scales and women with answers and reassuring words. One at a time, the babies would have their turn behind the curtain, stripped and weighed and watched.

(Research notes, 2020, cited in Boycott-Garnett, 2023)

Every Wednesday afternoon, for nearly three years, the learning studio at Manchester Art Gallery was filled with movement, bodies, objects and noise. The coronavirus interrupted these gatherings and the room fell empty and quiet, waiting for the babies to come back. At first there was nothing, the rooms were locked and the staff blinked at each other through screens from their bedrooms. Then slowly things began to stir and the gallery tentatively opened its doors. The requirement for one-way systems and the protocols to prevent cross contaminations of objects made it difficult to welcome babies back in the way that everyone recognised, any possibility of babies meeting in the space would be distanced, sanitised and separate. It was almost impossible to imagine that the mingling of bodies and things and noises would ever return. What was once intended to be the heart of this research, a recurring event to observe and become a part of, had disappeared before the research could

begin. The original intention of this research, to see what's happening for these babies, in these spaces, needed a readjustment to fit the current lives that babies were and are still now living, for babies that lived through the pandemic and those that are born now in a different world.

For a while, the Covid-19 pandemic flipped the ways spaces, objects and movements were offered to babies in galleries and children's centres, from a mixing and sharing to an attempt to keep the individual separate from others. Despite the need for physical distance at the time, babies, like all of us, are never completely separate. Their skin mixes with the dust, their breath is part of the air, their brains are built from the milk they drink and their gut is strengthened by ingesting the microbes shared with others. This research turned its attention to the new babies born into and after a pandemic and asks what they need to live well and how public spaces can bring families together yet still, when needed, apart.

In this chapter I will introduce the foundations and longstanding relationships that formed the starting point for this research. I will then describe the things, people and places involved in the practical activity and data collection of the research in terms of what action took place, with who and where. This is framed within the specifics of the Covid-19 pandemic and documents the queering effects on the research that were provoked by the entanglements of babies, pandemics and space.

[Conversations in the gallery](#)

Since 2017, Manchester Metropolitan University and Manchester Art Gallery have built a strong partnership with Sure Start early years provision and the city's health visiting team providing a space to explore what role a public gallery can play in serving health and social need of families within the local community. This flexible and innovative partnership has underpinned the work for families and young children in the gallery space, constructing a multi-team programme of activities with local services, supporting on-going practice and discovering new ways of working. Through this partnership weekly Health Visitor clinics for babies were held in the learning studio, co-hosted by artist Naomi Kendrick who created an immersive, sensory installation that acted as a waiting room for families as they attended

their appointments. The opening vignette of this chapter is an account of this weekly ritual. This work has been documented further in McCall (2020) and McCall and Boycott-Garnett (2020).

I became involved in the work of this multi-professional team in September 2019. Through the MMU Impact Generator Fund, we began a discussion group at the gallery. My role was to facilitate and document the dialogue. The group included practitioners from Manchester galleries, children's centres, local nurseries and MMU researchers involved in delivering work for babies at the gallery. The aim of the group was to introduce elements of existing research to practitioners' everyday experiences with babies and young children in the gallery to open up thinking around a new space for families. This new space, The Lion's Den, eventually opened in 2021, a year later than intended due to the pandemic. These meetings, though not officially part of the doctorate, feel like the closest visible starting point for this research. We developed an insight into theorising the gallery space particularly around making hospitable spaces, spatial politics and object histories. These discussions were my first interactions with a team of practitioners that became key to the development of this research. The team were part of creating the baby art installations and baby clinic which was the intended focus but were also unexpectedly involved as the Covid-19 pandemic created twists and turns and threw us together in unexpected ways.

As researchers across the globe moved to virtual communication, we continued meeting through the light of our laptop screens. Our focus changed from the holistic, theoretical aspirations of the new gallery space to the immediate needs of city centre families in lockdown and what we could do, as a group, whilst the gallery lay bare and silent. Surrounded by the splurge of online material being produced by a range of institutions nationally, that varied greatly in quality, the need for urgency was balanced with the need to build something meaningful, useful and delightful. By sharing resources and ideas we designed boxes of sensory gifts and art making materials for babies and toddlers living within the city centre. Though it was unintended, these boxes became a key element of data collection for the research.

My attention moved out of the gallery and followed the sensory gifts across the city to the children centres and to the homes of newborn babies and newly made parents. This is the moment where I began to collect things – consent forms, email addresses, families,

memorable moments, conversations or photographs. What follows here is an attempt to describe some of the action and spaces that were part of this research and what empirical work took place that forms the base for this thesis.

Collections of things, people and spaces

When the pandemic struck, and all activity came to a standstill, the gallery group's regular meetings over Zoom became a space to grapple with the shock and initial messiness of trying to continue work with families from a distance. In an attempt to do something that was meaningful, urgent and delightful for the babies that could no longer be together in the space, the sensory gift boxes were a taste of the things they would have engaged with had they been able to visit the gallery. They were filled with a mix of textures, colours, scents and sounds. The boxes, later bags, became a little part of the gallery that could be taken into the babies' homes. Since the initial creation of the bags as a temporary way to engage with families whilst the doors of the gallery were closed, the bags became part of the on-going practice of the children's centres and continue to be delivered to new babies long after the pandemic had subsided.



Image 2. Content from the first sensory gift boxes. Authors photograph.

Over the course of the pandemic three thousand bags were filled with sensory things that replicated the materials that the babies would have played with inside the gallery. The bags were scooped up by staff at the children centre and delivered, one by one, to babies in the city. Some of these were dropped off on doorsteps, some were handed out at the children's centre as families were carefully invited back into the building. An envelope of information sheets was added to the bags by the children centres and sometimes, when the envelope was slipped in, there would be other things too; a first toothbrush and toothpaste, a baby book or a sippy cup.

My research moved away from the gallery space, due to its temporary closure, to the collection of sensory bags. I followed these bags into the children centres, into the homes of families and finally to my own home where the things inside the bags became some of the first play objects that my own baby encountered. Working with a dedicated children's centre team, that covered two different city-based children's centres, I began delivering sessions for babies constructed around the sensory gift bags. The bags became a spark for parents to meet other parents and for babies to meet other babies for the first time. The fluctuating pandemic restrictions altered what was possible and the rise and fall in cases shaped what felt safe for families. This meant that each round of sessions was delivered under different sets of restrictions and were planned out differently depending on what was possible. In the first round of sessions, we created separate 'baby nests' for each family that were designed to keep households two metres away from others and used masks and visors when moving about the space. The second round was delivered completely online with weekly Zoom sessions to comply with stricter lockdown guidance. The third round started with baby nests and visors as before but happened over a six-week period that included a change of restrictions halfway through. This provided a change in set up for the last few sessions where babies and their families were allowed to touch and move about a shared space for the first time.

My role changed from a more passive observation and documentation of other practitioners work that I might have originally imagined to a much more enmeshed, busy and versatile role that included planning, preparing and facilitating the sessions with support from two outreach workers, one for each centre. Using the gift bags as a starting point, the sessions became an opportunity to tap into my previous experience of facilitating sensory and arts-

based activities with babies and their families since 2008. This work often draws from theatre, puppetry, object-based storytelling, material installation and guided play. This allowed us to make the most out of the sensory bags in a Covid safe way and to build some temporary capacity for the team as they navigated what engagement was possible within the fluctuating restrictions.

The children centre team were keen to make contact with families that had had babies since the first lockdown was announced as these families had experienced specific challenges and were identified as a priority. This meant that the babies that we worked with were often in the first few months of life ranging from just a few weeks old to 5 months old at the beginning of each round. All together we delivered three different rounds of sessions. These were adapted each time depending on the current Covid-19 restrictions. The first session started in October 2020, this took place just as the second lockdown was introduced and where certain changes had been made that allowed support groups for parents to be held in person (As different lockdowns ensued, this was often referred back to as the ‘soft lockdown’). The second round began in January 2021. These sessions were carried out over Zoom as a more extensive lockdown was introduced that no longer allowed support groups to meet in person. The third round was carried out from March 2021 where there was no national lockdown that needed to be followed but a specific set of guidelines that had to be adhered to in public spaces. These sessions are laid out in the table below.

Table 1: Sensory Gift Play Sessions

	Centre 1	Centre 2	Restrictions
Round 1: October - December 2020 (live sessions)	6 sessions for 4 families	Cancelled – no families	Soft lockdown
Round 2: January – March 2021 (Zoom sessions)	8 sessions for 3 families	4 sessions for 3 families	Full lockdown
Round 3: March – June 2021 (live sessions)	6 sessions for 4 families	6 sessions for 2 families	Under social distancing guidelines

In the stopping and starting of sessions, each new round became a moment to reconsider and to try things differently. Each new beginning became another chance to work out who I was and why I was there. I became a sort of nomad, connected to the children's centre, the gallery and the university but not firmly from either place. This mode of nomadic positioning became central to how I conducted the research, not just in the practical activities but also in the thinking and writing that was produced. Braidotti (2014) suggests that the nomadic subject is a 'non-unitary and multi-layered vision, as a dynamic and changing entity' (2014, 176-177) which I find became particularly significant when working within the turbulent and unsettled environment of the pandemic and as my experience glided across the different roles of practitioner, researcher, friend, parent, facilitator and student. As I move into discussions on methods and methodology in further chapters of the thesis I will return to Braidotti's (2014) nomad and the different ways that it has shaped this research.

Facilitating the different play sessions was a busy role that demanded a certain amount of attention to the different stories, tensions and desires of the space. There was a need for sensitivity that played into each small action from handing out objects to the distanced sensory nests to balancing different social anxieties. The nests were small areas that we attempted to make cosy where each family would stay for the duration of the session. These were placed at least two metres away from each other to comply with social distancing guidelines. Within this I would attempt each week, during the first round of sessions, to catch short film clips of the babies as they interacted with different elements of their nests. These were often hurried and awkward and would somehow cut into the gentle atmosphere of the space.

Slowly I allowed a 'letting go' of the data collection as a central part of the sessions. This transition was in response to the changing needs of the space but also strongly informed by my own understanding of what a baby is. As I will expand in chapter two, babies can be understood as connected to the space and a part of the environment, as outlined by Elwick (2015) and Sumsion and colleagues (2014). This unsettled the idea that the interaction of filming the babies in short, focused clips was somehow without consequence to the babies. I became increasingly aware that filming the babies close-up in small clips was cutting the babies off from the space around them both physically, by sitting in front of them with the camera, and within the films themselves, as the camera isolated the baby and disregarded

the babies' influence on the larger space around them. The commitment to the knowledge that babies are agentic and are connected to the space around them, as put forward by Impedovo and Tebet (2021), Holt and Philo (2023) and Osgood and Robinson (2019:46) amongst others, rubbed up against this filming method and the time spent on filming became less and less with each session. Attending to the space became my main purpose.

As I talk through different aspects of activity in the research, examples of practice, such as the one above, show how each change in activity emerged from a mixture of exigency arising partly from institutional rationale of the children centres, the conditions of social distancing, the dynamics and needs of the space and what responsive action was possible within the parameters of the research. Each change was in response to situational, theoretical, ethical and practical components that fused and cannot be clearly traced to a decision on method, theory or ethics. Each move is simultaneously made through different considerations that are both a question of ethics and a question of method. At the same time, these examples recognise where changes were gradual moves made through the awkwardness of bodies – my body, the babies' bodies, the camera as a body, for example - that needed to adjust to create a space that worked better. Barad (2007) suggests that the idea that epistemology, ontology and ethics can be separated from each other 'depends on specific ways of figuring the nature of being, knowing and valuing' (2007:409). She suggests using 'ethico-onto-epistemology' (2007) as a way to acknowledge the inseparability of these terms. Braidotti's (2014) nomadic subjectivity works with this understanding of ethico-onto-epistemology. It makes it possible to respond to changing surroundings in a way that is situated, open and emergent and that endeavours to identify a 'creative alternative space' (2014:179) and different ways of working. This may result in shifts in the methodological or ethical actions of the research but these are approached from an awareness that these are interwoven.

What follows next is a snippet of detail from each round of sessions to give an idea of the spaces, activities and movement that occurred during each round.

1. The Space and Activity of Children Centre 1

Linoleum, red, dark corridors, echoes, big windows, hard surfaces, chatter at the reception desk, shutters down, shutters up, hard floor, doors, offices, laughter, low light, cash box keys,

filled fluorescent noticeboards, electric doorbell, piles of baby clothes spilling over the tables, leaflets on the coffee table, on the desk, wipe down crash mats, car park, fences, empty nursery tarmac with thermoplastic paint, wicker baskets, hand gel, paper towels.

2. A First Session with Baby Nests (Centre 1, Round 1)

Piles of toys and play equipment are pushed to the side or packed away into already bulging shelves to make a large bare space. We spread five gym mats out in a circle around the room and try to make them look cosy with cushions, fabrics and soft play-things, the gallery gift bags are ready and waiting on each patch. At the entrance to the room is a table with disinfectant wipes, a box of disposable masks and a small bottle of hand sanitizer. Rain clouds have eventually dispersed and the hall is filled with a natural light. The projection of sunlight from the windows creates perfectly square patches of warm sun on the vinyl floor and straight lines of clearcut light climb over the mats and objects separating them into half-light and half shade. We start slowly. Taking time for prams and bottles and bags to be sorted and each baby has their moment of being lifted out of their cocoon, high up into the air and eventually down on to their mat where they are expected to stay for the duration. Mums and babies watch each other and lean in. Starting with a song there is always a moment of stillness, all babies focused on the same spot and the same sound. Then there's music from the playlist and chatter and action as I move from one mat to the next bringing a mix of things; a sensory waitress with stuff discovered in the cupboards – chromatic cubes, crunchy cornflakes, bowls of billowing foam. There's nothing ground-breaking here, nothing that hasn't been seen before in a sensory session for babies but somehow this is what is needed. Something that is ordinary when everything around us is unknown.

3. The Space and Activity of Centre 2

Carpet, calm, airy, quiet, where is everybody? Long soft corridor, shush, cosy feeding chair, books, height from the windows, cushions on the chairs, tall cupboards, stairway, pale blue, bright spacious notice board – no notices, leaflets in a carousel, empty shelf, neatly packed boxes of baby bubble bath in a line, empty office, empty kitchen, one tea stained mug, trees

against the window, the roof of a gazebo, blackout blinds, darkness, fading, twinkling, chromatic colour changing, deep fur rugs.

4. A First Session with Baby Nests (Centre 2, Round 3)

Two tiny babies, unfurling from their mother's laps while their mothers share the recognition of getting out of the house for the first time. We sit in the dark of the sensory room, surrounded by glowing, fading, twinkling things and chat. When the babies stir we watch and whisper.

5. The Content of Online sessions (Round 2)

Phone screens. One laptop screen. Bare walls and ceilings at funny angles, centred faces, light from a nearby window. The sounds of babies snuffling, sucking, mewling. Bags sprawling contents over the bed – bells, black and white cloth, spiky ball. Sometimes a video of lights and colours and music. Sometimes a squishy limb, a close up of a baby's yawn, a snuggled baby draped over a shoulder. Passing movement of spaces as a mum walks from one room to another. Igbo nursery rhymes. Cameras off. Cameras on. Pyjamas. Fears. Directions to the next nearest chemist. An all-encompassing smile from a waking babe. Plans to meet in the park. Blank screens. Gone.

6. New Rituals Emerging Online (Round 2)

We seem to have created our own tradition so that each week, when the screen flickers on and someone arrives into the virtual zoom space they turn the phone round to the baby and we see a squashed close up of a squishy face – cheeks, eyes, nose, neck, mouth and we chime 'Hello Baby!' and for a moment they seem to see each one of us and stare right back through the screen.

These fragments give a hint of the spaces and activities that went on during my time with the children centres. Once these sessions had come to an end a second phase of research

began to form. The next section details the second half of this study and how the two parts are intrinsically meshed together.

Sharing (un)familiar space with a baby

The starting point for orientation is the point from which the world unfolds: the 'here' of the body and the 'where' of its dwelling. Orientations, then are about the intimacy of bodies and their dwelling places.

(Ahmed, 2006, cited in Osgood and Robinson, 2019:9)

This research could be divided in many different ways. For example, it could be led by the different levels of restrictions during lockdowns or divided by the different forms of data that were collected. In attempting to make sense of what happened in the research, to retell it in a way that is true to the messiness and complexities, yet fluent enough for you, the reader, to find narrative and significance, I find value in Ahmed's concept of orientation. This helps to illustrate the changes in bodies, spaces and movements that provide a clear distinction between two corresponding phases. The first phase was between 2020 and 2021 spending time with families and practitioners during the height of the Covid-19 pandemic. The second phase took place from 2022 to 2023 and involved spending time with my own baby as the pandemic subsided. There are significant differences between these two phases, not just because they involved different spaces and activity but also a completely different way of working. The first phase began with a distinct research plan which was then caught up in the exigencies of the Childrens Centres' work and supporting parents with babies in the height of the pandemic whereas the second phase was led by my own wanderings with my baby in our local environment. This second half materialised as my new baby and I began to dwell in and traverse through spaces in ways that were different to what I had known before. This difference was in the spaces we encountered and the ways in which we encountered them. The spaces were altered from how I had known them before. Emerging out of the pandemic, the spaces, and the way in which we moved through them, felt new. Sharing space with a baby provided much more need and opportunities to loiter rather than hurry past. It was not only the movement through space that caught my attention but how

my new baby's bodily knowledge of space was shaped by the way she moved, or the way she was moved by me or other people. For example, I wondered what it meant to feel the ordinariness of sleeping and waking in a different location, often in a mix of familiar and unfamiliar environments.

Methodologically the research became something akin to Deligny's wander lines. In a paper on the methodological implications of research with infants, Boldt (in Tesar et al, 2021) suggests that Deligny's process of mapping children's lines of wandering was 'resolutely indirect' (Tesar et al, 2021a:8). She suggests that rather than attempting to build a volume of knowledge, Deligny intended more on entering 'a resonance of gestures' (Ogilvie, 2016:13) through focusing on immanence, wandering and tracing (2021:8). In this way both stages of the research refuse to stick with traditional ideas of ethnography and join with Boldt's suggestion that 'participating in the immediacy of the lives of infants may offer the daily experience of a-signification, what Deligny (2015) called 'the unthought-out project,' which challenges our devotion to will and intention' (Tesar, 2021a:8).

Walking through my local area took unusual routes, looping back over themselves in knots according to how long it took for my baby's eyelids to close, or were scattered with intermittent stops and starts, pausing for little feeds or some such comfort in places that were no longer common places for stopping – a deserted bench on a busy road, a dry stone wall, an empty market stall. How we would dwell in these places would depend on the affordances of the place and how our bodies blended or grated with the space. In this sense we became a part of what Massey (2005) refers to as the 'throwntogetherness' of space. She describes this as 'the unavoidable challenge of negotiating a here-and-now' (2005:283). Each movement became a negotiation between the human and nonhuman that draws on the histories and geographies of each moment and place. The affordances were one part of the material and social landscape that participated in making a space comfortable, intimidating, exposing, cosy, delightful, threatening - the height of a wall or foothold for feeding on comfortably, or, the surface of the floor for crawling over, or, particularly with indoor spaces, the length of time that felt comfortable to loiter there while the baby slept or explored some intricate detail of the environment – radiator covers, access ramps, wood chip shavings. This new way of existence changed where my attention went in the spaces around me. I was drawn to how she moved through the world with me and other family members every day

and how this changed my own considerations of the spaces that we shared. For example, I recognised small details of the slow change of seasons on the daily paths that were less than 500 yards from our doorstep. I had walked these paths countless times before while these tiny cyclical changes happened around me unnoticed. These wanderings (dis/re)orientated the research in unexpected ways. Ahmed's (2006) writing on orientations seems to be at work here. She describes the responsiveness of bodies to the world around them and how they shape and are shaped by the spaces that they dwell in, not so much as external spaces that surround them but by the practice of dwelling itself (Ahmed, 2006).

Wandering with a baby produced a queering effect that I suspect could and has occurred for many couplings of adults and babies across different spaces and time periods. I suspect, however, that this queering effect was somehow magnified by what had come before and the still unsettled world that we were a part of. These encounters of venturing out into a post-pandemic landscape with a new baby produced an awareness of the queering that had occurred around us through lockdowns and social distancing measures. As Ahmed (2006) outlines in her account of orientation, the queerness of the world outside disrupted and reordered my relations with other bodies - stone walls, dry benches, leaves – by navigating them in a way that was now different to how I had experienced them before. As Ahmed (2006) suggests:

To re-encounter objects as strange things is hence not to lose sight of their history but to refuse to make them history by losing sight. Such wonder directed at the objects that we face, as well as those that are behind us, does not involve bracketing out the familiar but rather allows the familiar to dance again with life.

(Ahmed, 2006:164)

Ahmed's (2006) discussion on queer phenomenology and the connections that she makes between bodies, atmospheres and histories continues across the thesis influencing the methodology and thinking that emerges throughout.

During those first few months something started to happen that interlaced our everyday moments with the time shared with families at the children's centres. Sometimes my daughter's movements would bring jolts of memories from the sessions or vivid fragments from the written notes. For example, when moving around the different spaces in the house

particular things would catch her attention – the lampshade, the open doorway, the tiles on the bathroom wall. She would twist her body to keep these things in eyesight and watch them from unusual angles from the floor or from high up over somebody's shoulder. These moments were reminiscent of the awkward angles of bedrooms and baby paraphernalia that appeared on the laptop screen during the zoom sessions. Through her movements she evoked the swaying of the camera phones as bodies softly collided – mum, baby, phone, hands, faces, feet. Her actions echoed with the many uncaptured things that had caught the babies' attentions off screen when I was holding the baby sessions earlier during the pandemic. There was something about going through these movements with my daughter that brought a new liveness to some of the memories and notes from the different sessions. It was as if each phase could now be magnified through each other.

It is worth noting that this was not my first time sharing long hours with a baby. I had shared time with my older son during his babyhood and I had spent long days caring for babies in baby rooms of nurseries or during childminding days. But the timing of this experience, with the pandemic still dribbling into the way our world functioned around us, memories of the play sessions and the specifics of sharing time with those babies in the depths of the pandemic, seemed to have a strong influence on the first months of time spent with my baby.

I started writing notes again, sometimes these were lists of things we saw on a patten up the towpath or the various places that she had woken up that day. Sometimes our journeys became little experiments together. These lists and little experiments will be included in the section on data later on where I will dive into these things in more detail. During my time working with the children centres and spending time with my baby daughter, extracting, creating or seeking out data was never the most important thing that was going on. There were moments where data made itself known, moments where I attempted to pin data down, moments where I created reams and reams of data of varying degrees of usefulness, yet it feels like the most generative and persistent forms of data were somehow within the flurry of interactions, intra-actions, small moments, whisps of conversations, small movements, stuck memories and little scribbles. Through this multitude of moments, data was formed, like a residue.

As I have described, the activity of the research was always playing out to the constant backdrop of the Covid-19 pandemic that writhed and raged across all the action that took place. Because of the prominence of the pandemic within the research I will commit the second half of this chapter to bringing the effects of the pandemic into focus.

A note on the pandemic and an unfurling world

we can walk through lightly, with little luggage,

ready to imagine another world.

And ready to fight for it.

(Roy, 2020:214)

The café, the heart of the building, is closed and the first thing you see on entering the building is the shutters to the serving hatch and stacked chairs and tables. Next to the tables is a big stack of crates filled with cellophane wrapped bottles of hand soap. In the book room (also closed) the shelves have been shoved together to make space for piles and piles of these crates. The crates arrived early on in the pandemic. They try to give packs out to anybody who enters the building in a futile attempt to get rid of them and reclaim some space.

(Research notes, 2021)

The Covid-19 pandemic is fully meshed into this research. Throughout the thesis I refer to the Covid-19 pandemic as a threshold for a new world and a different way of living. Before I do this, it is important to note the fatal effects of the pandemic. Nearly 7 million people have died world-wide from the virus to date (World Health Organisation data, June 2023) and nearly 2 million people in the UK have reported Long Covid symptoms (Office for National Statistics, 2023) though actual cases of both are likely to be much higher than the collected data (Farhana Sultana, 2021). This is on top of acknowledging the impacts of restrictions and

the inadequate handling of the pandemic across the UK. The Covid-19 pandemic has created a new world where touch, breath and sharing physical space with others are possible risks to the health of the world population. It has had an impact on large scale policy making to minute interactions such as how we greet others or sneeze into our elbows. In such a global event permeated with unknowns and precarity, families with young children and pregnant people were particularly left with little information, guidance or advice about how the virus could effect them, their children or their unborn babies. The pandemic saw parents give birth without birth partners, babies meeting extended family via online screens and families isolated with no contact with health visitors, other parents or social networks. To suggest that the pandemic was a great chance to rethink our research methods or strengthen the authenticity of my thesis, or even as an opportunity to create a brighter world, does not erase these experiences nor are these positives merely a silver lining.

It is also important to acknowledge that, though there are some shared narratives of the pandemic, people experienced the pandemic in very different ways. As some people experienced being furloughed or working from home, others continued to travel to their place of work each day. As some areas were able to loosen restrictions, others continued to be in lock down. As some families made the most of their back gardens or local fields for walking other families were cooped in high storey flats or needed to navigate overcrowded parks.

When the pandemic entered into the public consciousness there was a moment of hope that this could bring about a way of living differently, particularly around communal caring practices for the human and more-than-human world. For example, from within the very middle of it all, Osgood, Andersen and Otterstad (2022), inspired by Arundhati Roy's proposal that the pandemic is a portal, suggested that it was possible to learn from the 'felt dimensions of the virus' (2022:7) and how paying attention to this might lead us to what Tsing et al (2017) refer to as the arts of living on a damaged planet. Judith Butler (2022) suggested that the beginning of the pandemic provided a momentary view of what environmental renewal could look like if production was reduced (2022:45). As lockdowns rolled out around the world, Rachel Adams (2020) noted how stories of environmental recovery became a testament to ecological interdependency where 'human attempts to care for one another were having a palpable impact on the climate' (Adams, 2020:695). Adams,

however, shows how quickly this model of interdependency turned into something far more dystopian:

As the pandemic continued to rage, in cash-strapped New York City the parks filled with trash and cast-off PPE, vines and weeds burst through cracked pathways, and populations of rats, raccoons, squirrels, and mice feasted on unwholesome human garbage. The West Coast burned.

(Adams, 2020:695)

In the UK, by the summer of 2023, we could see how the hopefulness quickly deflated as the speedy rhetoric of 'get back to normal' was painted over any possible consideration of changing the way we go about our daily lives. As the dust settles, there are tiny trickles of caring that have continued across communities in the north of England, but these feel precarious in the on-going tumultuous context of daily lives such as the ongoing repercussions of leaving the EU, the war in Ukraine, the ongoing violence in Gaza and the cost of living crisis to name just a few. Yet, there are things, little things that have stuck, for better or worse, and the world is now a different place from the pre-Covid era that we once knew. As Osgood and colleagues (2022) suggested, we did enter a portal, and are now crossing the threshold, with tentative steps or blinkered strides, into a different world.

To situate this research, I will include a brief outline of the Covid-19 pandemic, how it played out in the UK and where the research sits within it. These broad depictions of the pandemic are illustrated with moments from the strange liminal space between when the virus first entered the UK and the first restrictions were announced.

Why am I still talking about the pandemic?

February 2020: Stepping off the train we merge into the crowds of the station, jostling through the ticket gates and spreading out across the city. Halfway across the city our conversation turns to the coronavirus. One says 'I wonder when they'll start doing something about it here.' And we shrug which turns to a nervous laughter.

Within the UK the last compulsory restrictions were removed in February 2022 though the virus continued to impact daily life. It is understandable that the ending of restrictions released a common urge within the UK to move on, to welcome an end to the pandemic. To keep going back to the pandemic only reopens wounds and interrupts our supposed return to normal. For this research, where the main activities took place directly over the timeframe of the pandemic, Covid-19 became fused with the work. Dyer (2020) identifies how queering arises from 'an objects veering away from expectation' (2020:5). I would argue that the pandemic acted as a queering of everyday practices and research practices by causing a glitch in how we moved in public space. Face masks, hand gel, social distancing signs and floor markings all created a space that moved away from what we knew as normal. This played out in a number of messy and rhizomatic ways and therefore avoiding a deliberate and sustained acknowledgement would create a false and misleading account of the work that happened.

The main implications of the pandemic on this research can be identified in three different ways. Firstly, the fluctuating pandemic changed the research design, process and orientations as the virus became increasingly present during the fieldwork and shaped what was possible for the babies and families in their new lives shifting the research from week to week. As the pandemic seeped into every element of the research the original aims and questions seemed to be disconnected from what was happening around us. This resulted in a change of focus so that the pandemic is written into the key aims but also altered my own thinking on participation which had significant implications for the ethics and methodology. The pandemic also unintentionally melded with the methodology of the research as it created a stuttering in our usual habits that brought attention to new ways of thinking and being. The small pauses and overriding of intuition, such as ensuring myself and parents were two meters apart even whilst holding sensitive and personal conversations or remembering to reach out for hand gel dispensers when entering the building, seemed to cause a pause in habits that made other aspects of babies' interactions more noticeable and therefore the virus was part of influencing the direction of the research as a whole.

This moves into a second important influence of the pandemic on the research concerning the small-scale changes that the pandemic produced. Covid-19 had a significant effect on babies and their families across the UK as is evidenced in *Babies in Lockdown: listening to*

parents to build back better report from Best Beginnings, Home-Start UK, and the Parent-Infant Foundation UK (2020). The pandemic seeped into their daily lives and became a part of the spatial and material intra- and interactions that this research intended to focus on altering the very subject matter that I intended to engage with.

Thirdly, taking the pandemic as a threshold we are presented with a post-pandemic state that has altered what is now taken as normal. As family researchers we must consider the implications that the post-pandemic ways of living have on families and research futures. As we move into a world more prone to pandemics and natural emergencies (Daszak et al, 2020, Nelson, 2020, Subedi, 2020) work must be done to ensure the effects of the pandemic are kept visible. Writing the pandemic into the thesis ensures that the research is situated within the historical, political and geographical present that has characterised this study. By holding onto these three points in this thesis, it is intended that writing the pandemic into the ongoing present allows a way to imagine the future with care and response-ability and consider ways of living that learn from the last four years.

This section has identified that the notion of a return to normal is illusory and why the pandemic is an important lens when considering what global futures are possible and particularly why the pandemic needs to be kept in focus when considering what futures are possible for babies in public spaces. The next section details a quick glance at how the pandemic has played out so far in the UK and how this also leaks into any future possibilities.

A brief encounter with language, politics and history

February 2020: At a workshop we all go into the bathrooms to wash our hands before we start an activity with physical contact. Someone hums 'Happy Birthday to you' which breaks some sort of tension and stirs the oddness of lining up by the sinks.

It is not possible to document all aspects of the pandemic within this short section, but to delve a little further, I have drawn out aspects of language, politics and history that bring different dimensions of the pandemic to the fore. Many of these perspectives were featured and debated by various experts and enthusiasts as the pandemic played out. This section is

intended to remind you, the reader, of the heady and complex threads of action and information that splurged across different media platforms as the virus continued.

Though the blockbuster film is yet to be made, the Covid-19 pandemic was not a curse of bad luck that fell across the globe. This is not a superhero movie. The simplistic narrative of good versus evil was portrayed repeatedly throughout the pandemic across the UK where the microscopic image of the garish red spiky virus represented a common alien-like enemy that all humanity had to conquer. This narrative was a useful one as it placed humanity at war with something unknown, unexpected and unprecedented. Any deaths or damage caused were not failures but unfortunate yet unavoidable tragedies as nobody could be expected to be prepared for such a surprising attack. This narrative conveniently ignores a cyclical pattern of economic and public health crises that Vieira (2020) identifies throughout history. She suggests that this predictability is routinely ignored so that 'far from trying to avoid these crises, authorities act surprised and respond with reactive rather than preventative measures when they inevitably surface' (Vieira, 2020:144). The superhero narrative of humanity united against a common enemy also ignores that 'different groups [of humans] stand in starkly different relation to the virus given varying access to power, decision-making, and protection' (Lunstrum et al, 2021:1505).

The 'good versus evil' narrative plays into a constructed language of war. Musu (2020) shows how the use of war rhetoric is both appealing and a useful metaphor that 'hides several pitfalls that, in the case of the COVID-19 pandemic, are particularly dangerous' (Musu, 2020:online). For example, many people continued to work in public spaces during the heights of Covid restrictions providing work that was seen as too essential to stop, such as early years childcare (Ailwood, 2020:309). In the UK, these roles were bestowed the title of 'key workers' and provided with bizarre symbolic gestures (like the weekly Clap for Carers/Heroes where each Thursday at 8pm people were encouraged to stand on their doorsteps and clap their hands) alongside inadequate PPE, poor working spaces and contradictory guidelines. To continue these acts through Musu's (2020) war analogy, these key workers, particularly nurses, were presented as 'frontline' workers and given the role of infantry soldiers; the first to head 'over the top.' Honoured as brave heroes and applauded in symbolic celebrations whilst real life material conditions made them entirely disposable (Butler, 2022:48). Musu shows how this use of war rhetoric calls for 'obedience rather than

awareness and appeal[s] to our patriotism, not to our solidarity' (Musu, 2020:online). She shows how this use of the 'war spirit' makes space for authoritarian shifts. For example, increasing powers of detainment and isolation and prohibiting public gatherings and protests through the Coronavirus Bill.

The example of key workers as 'frontline' workers links to Lunstrum and colleagues' (2021) proposal that the pandemic reveals 'a politics of difference in which certain human lives are protected and helped to flourish while others...are forgotten if not sacrificed' (Lunstrum et al, 2021:1503) and that these sacrifices are classed, racialised and created through capital structures and environmental destruction. Ailwood (2020) uses this example to highlight the politics of care, where the pandemic brings to light underlying questions of 'who is worthy of care, who cares, for whom, and under what conditions' (Ailwood, 2020:309). Stirling (2020) shows how this disparity in valuing of different human lives is a factor, not just in the pandemic, but in on-going environmental injustices where the often-silenced voices of women and children are also those who 'disproportionately bear the weight of environmental harms' (2020:222).

March 2020: We begin to cancel plans. The university halts any requests to travel abroad to conferences. There are still no announcements.

Presenting the pandemic as a fight between good and evil is perhaps a comforting narrative. It avoids the need for questioning, criticising or making changes to our ways of living. The repeated refrain of 'get back to normal' also fits into this idea that everything was fine beforehand. Once this isolated incident is dealt with, we can return to our previous lives. Vieira (2022) shows how this idea of normal is problematised when considering that 'normal' includes an overlapping of crises since the Industrial Revolution that limits how we think about future and what futures are possible. Considering the immense impact the Industrial Revolution has had on the North and particularly Manchester; shaping the landscape, housing, wealth and resources that are part of the present city, we are still living within the repercussions, both benefits and atrocities, that this era entailed. As Vieira (2022) asks 'how can we think about the future when we are submerged in overlapping crises?'

(Vieira, 2022:144). Pandemics, natural disasters and man-made crises are not new and most of the discoveries that are made through the light of a tragedy are already plainly in view for all to see. It is often the case that those with power and status choose not to look. In 2018, before Covid-19 was in existence, Achille Mbembe (2018), told us 'Ours is a time of planetary entanglement. We are, more than ever before, at any other time in history, exposed to each other' (Mbembe, 2018:online).

This idea of on-going unacknowledged catastrophes is also evident in film and literature. Kara Keeling (2019) writes about *Space is the Place (1972)*, an Afrofuturist science fiction film, written by the experimental composer, Sun Ra, about Black flight to outer space to escape the catastrophe that has already happened on earth. The main song has the refrain 'it's after the end of the world, don't you know that yet' suggesting that the worst thing already happened, long before Covid. In literature, the short story *Bears with Lawyers* which appears in Sean Tann's *Tales from the Inner City (2018)* depicts a court case between bears and humans where a case against humankind included over ten thousand years of theft, deportation and murder amongst other things. Though the humans protest ignorance the bear's lawyers reveal that the evidence was everywhere for all to see: 'And so the bears showed us. Sure enough, there it was as plain as day, in all the places we never bothered to look' (2018:176).

These different accounts from different perspectives produce different futures in terms of what matters and what stories get told. Placed together these particular narratives all expose the theory that the Covid-19 pandemic is an isolated incident that came from nowhere. On a more direct level, epidemiologists, economists and environmental scientists have all shown a clear relationship between the climate emergency, capitalism and the increasing impact and frequency of pandemics (Sultana, 2021). This triangle of climate crisis, capitalism and pandemic play out in myriad ways that reveals the Covid-19 pandemic as embedded within the structures of global economies. The first of these links is in the specifics of Zoonotic viruses, such as Covid-19, which are transmitted from animal to human. Rohr and colleagues (2019) show that 3/4s of all new recognised diseases are now Zoonotic due to the increase in mass meat production. They claim that 'more than 50 % of zoonotic infectious diseases that have emerged since 1940 have been associated with measures to intensify agriculture' (Rohr et al., 2019). Deforestation is also linked to the increase of

infections due to the decreasing biodiversity of the planet in which these viruses would usually be contained. These examples are just a small slice of the on-going debate around how the pandemic and climate change are directly or indirectly related. Butler (2020) suggests that, whether connected or not, the global pandemic condition is situated within climate change as it is grounded in an interdependency between human and more-than-human bodies (Butler, 2020:46). Sultana (2021) shows that the interplay between both things ‘expose underbellies of structural inequities and systemic marginalizations across scales and sites’ (Sultana, 447:2021). Butler (2020) says:

we are living in a pandemic in the midst of environmental racism and within its terms, exemplified by unsafe water in poor regions and increasing numbers of evictions for many with uncertain income. The relation to air, water, shelter, and food—already compromised under the conditions of climate change and unbridled capitalism—are even more acutely registered under pandemic conditions. These are two different conditions, but they become linked together and intensified in the present. Those structures did not disappear; they intensified.

(Butler, 2020:46)

March 2020: At a café the owner gives a flamboyant welcome, he squeezes my son’s shoulder and I find myself flinching at this friendly gesture.

From the above-mentioned entanglements we see that Covid-19 did not happen in isolation and it entered a capitalist world that was already gendered, classed, racialised and under a growing influence of neoliberal movements (Sultana 2021). The increased inequality that is produced within capitalist logics creates a society lacking in resources to deal with public health crises once they occur. The pandemic has exposed and widened an increasing level of inequality globally and within the UK (Vieira, 2022:144). As Stevano and colleagues (2021) suggests ‘these have been reproduced through the intensification of inequalities and reinforced through policy responses that have failed to protect the most vulnerable from the health and socio-economic impacts of COVID-19’ (Stevano et al, 2021:1). The pandemic has

also become a convenient way of hiding further cuts to public services as Covid-19 becomes a blanket reason for any closures, delays or cancellations over the last few years.

Covid-19 is often presented as a pandemic that caused everything to pause, to stop the world in its tracks, but lives continued as the pandemic unfurled. Babies were born, funerals were carried out (even if they could only be attended virtually), many people continued going to work every day (even though the streets were emptier than usual and some of the shops were closed). This disparity in the experiences of the pandemic is indicative of classed, racialised and gendered structures and highlights a disproportionate impact in the north of England compared with the south (Bambra, 2021).

Not just daily lives but global events also played out through the pandemic, namely the murders of George Floyd and Sarah Everard, and the national and international reverberations of these events, including the Black Lives Matter movement and Reclaim the Streets vigils, were navigated and represented through the restrictions and governance of bodies as accountable carriers of the virus.

March 2020: Parting at the train station I dive in for a hug and immediately feel her shoulders tense. I pull away clumsily but it all feels too late.

Babies born in a (post)pandemic world

The experiences of families and young children during the pandemic has been the focus of a range of research studies and policy reports (including the Children's Commissioner's *Lockdown Babies*, Best Beginnings, Home-Start UK, and the Parent-Infant Foundation's *Babies in Lockdown*, Mothership Writers' *Born in Lockdown* and the *Covid Realities* research project). These studies, patchworked together, paint a bleak picture of increased anxiety, poor mental health, poor literacy and language skills, isolation for new families and harrowing experiences for pregnant and labouring parents. Though these studies have gone a long way to document the lived experiences of families during the pandemic there has been little progress in policy and practice to provide effective support for families going forward (See *Impact of Covid-19 on new parents: one year on Report*, 2021). This is perhaps

most documented in early years and education settings where the catch-up programme is 'failing the most disadvantaged' (Education committee report, 2022). As the babies that were born during the first year of the pandemic enter formal education this has developed into a fixation with 'closing the attainment gap' and a catching-up agenda where lost learning has taken precedence over lost play opportunities or nurturing emotional health (Rogers, 2022:494). This state of anxiety is connected to money through leveraging resources that play off narratives of catch-up and catastrophic delay including a multimillion pound tutoring contract between the government and private company Randstad (Education committee report, 2022). As Osgood, Andersen and Otterstad (2022) have outlined -

Research undertaken in early childhood contexts during the pandemic has been preoccupied with a search for answers to the multiple challenges children pose and encounter during a global pandemic. Such dominant modes of research seek to establish certainty, to provide the basis for taking control by managing, mitigating and fixing.

(Osgood, Andersen and Otterstad, 2022:212)

Kuhfeld and colleagues (2020) have shown how the ways in which catch-up and loss are framed on learning as a linear process of acquisition, which they describe as an assumption which is often faulty and 'tenuous at best' (2020:24). Harmey and Moss (2021) suggest that existing evidence shows that 'learning is best characterised by overlapping waves of progressions and regressions over time' (2021: 3). They utilise this research to recommend that education focuses on responsive, local knowledge that prioritises children's mental health (2021).

The alterations of services in response to the pandemic, as well as the catch-up agenda has played out in how nursery education is delivered but also in what is now available for babies in terms of what spaces you find them in and what services they can access. *The Impact of Covid-19 on new parents Report* (2021) shows the limited services available for new parents, particularly around perinatal mental health and support during the first 1001 days. Existing services, such as health visitor support and children centre programmes, in many areas in the north, are still much less visible than they were pre-Covid. Many children centre services have continued to be accessed through booking systems rather than drop in and open

access spaces. Though it could be argued that this gives an ability for services to tailor resources to families that are most in need, it becomes less visible. This changes how families access services and limits available spaces that make it possible for a new parent and baby to know that they can leave the house and go somewhere accessible.

Opportunities to dip into a pop-up space for a quick chat with a breastfeeding specialist, access peer support or spend time with other families are less frequent. This has resulted in limited spaces where babies and their carers can spend time for however long they need to be there. This limits the spaces they enter and limits their visibility in many spaces.

During the pandemic access to public space, both indoors and outdoors, was restricted in various ways. These restrictions led to an unequal distribution of space particularly around access to public green spaces within cities with judgements, anxieties and tensions building around who had more right to use certain spaces over other neighbours and strangers. This brings to mind Puwar's description of space invaders and the making of space that is repeated and contested over time so that 'some bodies are deemed to have the right to belong, while others are marked out as trespassers' (2004:8). The crowding of green spaces also played into individual judgements on what felt safe. During the online Zoom sessions of the research, families shared worries of taking their newborn babies to the crowded park nearby. Research has now shown that these spatial injustices impacted more severely on children of colour and children living in areas of poverty (Children's commissioner, 2021). Save the Children, Just for Kids Law and The Children's Rights Alliance, as part of the UK Covid-19 commission inquiry (2024), have brought attention to how children as a whole group were overlooked during Covid-19 policy making. The experiences and implications of Covid-19 restrictions on children, and children's own navigations of these, have been documented by Barron and Emmett (2020), Russell and Stenning (2020) and Rogers (2022) amongst others, particularly around outdoor play. Less attention has been given to babies and toddlers, perhaps due to their already limited acceptability in occupying public spaces. In response to the scarcity of activities and spaces for families, grassroots activity from parents and activists began to emerge, particularly around outdoor walking groups for parents with babies and toddlers. For example, Platt (2023) documents how walking with her baby and other parents through the Covid-19 restrictions played into expectations of 'good mothering' (Platt, 2023). The development of these kinds of shared uses of outdoor

spaces between families, such as walking groups, organised picnics and outdoor play groups, is a starting point for considering the intricate changes in cultural and material uses of space for families with young children and the relational interstices between the pandemic, babies and space.

Pandemic as a threshold – making a methodology

The pandemic can be taken up almost as a curtain that is pulled back and reveals the workings of power structures across the world. Focusing on the effects of policy decisions in the early years work force, Sims (2022) illustrates how Covid-19 revealed neoliberal tendencies that were already at work. They suggest that ‘the choices that governments made at the outset of the pandemic has allowed their priorities and underlying ideology to be more transparent’ (Sims, 2022:1174). For others, the pandemic was not just a revelation of existing structures that changed what we know about something but something that could change how we think and go about knowledge making. Fullagar and Pavlidis (2020), for example, thinking through a feminist new materialist perspective, prefer to focus on what the Covid-19 virus ‘does’ as a gendered phenomenon (2020:152). In her poetic article, *The Pandemic is a Portal*, Arundhati Roy poses the pandemic as a portal which is taken up by Osgood, Andersen and Otterstad (2022) as a way to think differently about young children and the world we inhabit. They present Roy’s portal as an ‘in-between space...replete with thresholds of anticipation’ (2022:209). It is this anticipation that feels productive and worth hanging on to as the pandemic shifts out of focus. We can perhaps hold onto that anticipation and uncertainty by considering what worlds were made both possible and impossible by the pandemic. Through Osgood and colleagues’ suggestion that the pandemic is a ‘gateway that is both of the world and creative of worlds’ I will take this up as a provocation to consider the pandemic as a point of departure where multiple worlds are possible. What if the world split at the point of the pandemic and created multiple thresholds, what if we walked through the pandemic into a world where more-than-human care, for example, was written into every action and what would these different worlds look like?

The threshold creates a way of knowing and not knowing, a precarity that makes us more attentive to what is felt and ‘wanders outside the frames of normality’ (2022:211). Writing from within the middle of the pandemic Osgood and colleagues consider ‘portal time’ as mundane yet extraordinary where there is a need for researchers to produce knowledge that is different and takes note of the different world that dwells within the portal yet is ‘comfortingly familiar’ (2022:211) during a time where a gentleness is required yet not without allowing the potential of this unique moment ‘to disrupt and reformulate ways to undertake research and ways to conceptualise the child’ (2022:208). Osgood and Odegard (2022) suggest that:

The current geopolitical epoch in which we find ourselves – that is at once generative of, and implicated in, complex social, political, and cultural systems, demands that childhood researchers reappraise how and why we undertake research in the ways that we do and what potentialities exist from embracing more speculative and tentacular approaches.

(Osgood and Odegard, 2022:227)

My intention in focusing on the pandemic is not to add to the documentation of families’ and babies’ experiences. This is partly because this has already been done and to repeat what is already evident seems futile. It is also partly because I am unconvinced, inspired particularly by the writing of Eve Tuck (2009) on theories of change, that to document families’ difficult experiences, regardless of my ability to do so or the ethics of attempting to represent these (which will be discussed in further sections), will have any further positive impact on those families and babies that I met during Covid or build anything particularly useful for families and babies more general in a (post)pandemic world. Instead, I am drawn to something more speculative that works with Manning’s idea of ‘a knowing that must always remain out of bounds’ (2022:211) that Osgood and colleagues acknowledge. This experimentation and speculative thinking taps into Osgood and colleagues (2022) use of ‘virusing-with experiments’ as a way to ‘pursue a different logic to that which currently frames the child of the pandemic i.e. child as vector; child as innocent and in need of protection; and child suffering ‘learning loss’ (2022:212). In the next chapter these ideas of virusing with, unknowability and rethinking common frameworks of childhood feed into a discussion on the concepts of babyhood and what a baby is. This rejection of certain models

of childhood and affirmation of others makes it possible to acknowledge different ways of talking about babies' entanglements with a social and material world.

Starting with the pandemic as a threshold or portal for speculative thinking moves into considering the data of this research and different ways that feminist new materialist methods situate the researcher as entangled with the process of 'generating different knowledges about childhood' (Osgood and Robinson, 2019:6). This will be explored further in Chapter three. The pandemic as a threshold or stories as thresholds are built on the idea of threshold as a concept, or a portal to different ways of thinking. Thresholds are physical things, as doors, gateways, arches. They are tangible things that are felt, solid. In Chapter seven I consider real thresholds that play on our bodies and babies' bodies as we traverse through spaces in our daily lives.

In this chapter I have outlined a practical sense of what happened during this stage of the research, and described the world in which this research took place. In the next chapter I intend to lift this out of the day-to-day actions and interactions that formed the empirical and physical data of this research and relate these everyday moments to a more theoretical grounding of the key aspects of the research, namely the concepts and theories that have informed my understanding of space and babies and how these concepts correspond to each other. These considerations have been gathered into a trio of corresponding chapters that bring existing concepts of space and early childhood to propose three reconceptualisations that form the backbone of this thesis. Once these key concepts have been positioned, this lays the groundwork for a consideration of methods and methodology in later chapters.

Chapter 2: Framing and defining the research: conceptualisations of space

This thesis is based on the notion that babies make the space around them and are in turn made by the spaces that they encounter. Before wading into a methodology that works with babies and brings space into focus, these next three chapters draw out the main areas of interest that are held within this work; namely, babies and space, and offers a considered

attempt at illustrating what different definitions play into how I talk about these two things. Though the former may seem easily identifiable and the latter seems infinite, there are multiple ways of considering each of these aspects. The different ways that we consider each of these things has implications on the other and has implications on how each can be researched. In this way, the concepts that I have brought to this research, both from considerations of early childhood and different spatial theories, seem to resonate with each other and push thinking further in each area. For example, Massey's illustration of space being an infinite plain of stories-so-far (2005) brings something new to the idea of set trajectories for babies in early childhood development. These three chapters act as a mini trilogy that make space for connections between spatial and childhood theories to emerge whilst putting forward the reasons why I have chosen to pay attention to the spatialities of babies and why this is a generative area for more research.

In Chapter one I described the particulars of this research, I zoomed in on the detail of the spaces, things and people that were involved and the on-going backdrop of the pandemic. By drawing my attention to the different philosophical concepts of babies and space, and finding those that resonate between, I intend to lay the groundwork which makes it possible to consider how these two things fit within a research context. Once this is established it is possible to define the methodology that has emerged through this research which will take place in Chapter five.

This chapter will focus on the different considerations of space that resonate with this research. Chapter three turns to the different considerations of babies that are evident within research and everyday life which makes space for Chapter four to illustrate three key reconceptualisations that are beginning to emerge in contemporary literature in baby studies and which create a sturdy base for this piece of research. To begin, I will set out in more detail, why considering babies through their spatial encounters is a generative and under researched area to think with.

Why space?

A consideration of space is the missing key in the current understanding of babies in early childhood research. This section elaborates on the proposal that more attention should be given to spatial aspects of babies' lives within early childhood research. Whilst

acknowledging existing arguments from an emerging body of literature I will emphasise an awareness of the social, imaginative and political that, though given some attention within young children's spatial practices, tends to become lost in current observations of babies' use of space in current research and early years practices. This often occurs where observations of babies separate the baby's body and the material environment from the more abstract aspects of the social world. Though babies may experience the abstract rather differently to adults or older children, the political, historical, mythological and the imaginative all have an influence on babies lived experiences and should be kept visible in spatial research with babies. I will illustrate this, and other existing arguments, by demonstrating how certain theories of space correspond, contradict and queer common conceptualisations of babies and babyhood.

Since the beginning of the century there has been a spatial turn within childhood studies with a growing interest in children's entanglements with space. Drawing largely from human geography, early childhood researchers have identified the integral bind that links space and social practices within children's lives. Christensen and O'Brien (2003) focus their attention on cities as cultural, social and material spaces of home and community for children and emphasise the importance of considering children's lived experiences of city spaces. Valentine (2004) in *Public Space and the Culture of Childhood*, relates children's experiences of space with rising fears around young people's alleged mis-use of space alongside parenting, stranger danger and children's vulnerabilities. One study that particularly resonates with this research is Rasmussen's (2004) differentiation between spaces for children and children's spaces which highlights how children's spatial cultures often go unnoticed by adults, particularly within informal spaces that are not specifically designed for children. This interest in what Hackett, Procter and Seymour (2015) have described as children's spatialities, a term that focuses on the social and cultural aspects of space in children's lives where the spatial and the social are 'inextricably realized in one another' (Pile, 1993, cited in Hackett et al, 2015:3), has highlighted the ways in which attending to space can bring attention to different ways of thinking about children, particularly around embodiment, agency and emotion. The interest in children's relationships with space has also been at the heart of the international journal *Children's Geographies* (under the editorship of John Horton and Peter Kraftl) which has established a growing community of

interdisciplinary researchers that are linked through an interest in children and space. Though there has been an increase in space orientated research within early childhood, the majority of these studies tend to focus on toddlers and young children with less focus on pre-walking babies. One study from Cortés-Morales (2020) on virtual and material experiences of space, and another from Cortés-Morales and Christensen (2014) on the everyday technologies of mobility, are some of the few examples of spatial research with children that include experiences of babies. Babies are often categorised as ‘non-walkers’ or ‘pre-walkers’ which depicts them as more stationary beings than toddlers with less opportunities for interactions with the wider space around them. There is an argument that research on children’s spatialities has an enduring interest with children’s independent mobility such as Mikkelsen and Christensen’s engagement with the interdependent mobilities of older children (2009) and Murray and Cortés-Morales’ (2019) study that considers the imagined, interdependent and relational mobilities of children. In relation to this shared interest there has been less attention given to children whose mobilities are entirely constructed as dependent on others. This lack of studies on babies’ entanglements with space may be related to the general consensus that babies need to be moved by others to cover any substantial amount of distance. This plays on the assumption that you cannot affect space without being able to move independently through it and feeds into a discussion that will be expanded later in this chapter that equates walking with being fully human and therefore pre-walking babies as not quite human.

If space is connected to movement and movement so often connected to walking then considering how babies make, take up and move through space requires a different way of thinking about how space is researched. This is an example of why many studies focusing on babies have advocated for different research practices to those within childhood studies and the creation of a new field that differs in methods, goals and concepts (Tebet and Abramowicz, 2016, Impedovo and Tebet, 2021). Though the emergence of baby studies is built on the premise that babies are different to children (Tebet and Abramowicz, 2016), some of the key arguments for attending to space within children’s lives have been transferred over to the lives of babies, such as the consideration that babies are protagonists of their own lives and are active in space making practices (Impedovo and Tebet, 2016, Orrmalm, 2021). One element that is still to be fully realised within baby studies is the need

to pay attention to the abstract within babies' entanglements with space. The case for paying attention to space put forward in the following sections is constructed from existing literature on babies alongside a rationale for focusing on space within the wider context of childhood that is currently less visible within the new field of baby studies.

The outset of this thesis offers key arguments for why researchers should pay attention to babies' spatial entanglements. Though these reasons are interlinked it is possible to draw out four specific threads that build this argument. The first thread is that accounting for space in babies' lived experiences brings a much-needed new perspective to counter act the dominance of development psychology in early childhood research (Gabriel, 2020). As the frame of development psychology is located in the tensions between the biological and social models of childhood, an aspect which is well illustrated in Riley's (1982) publication on *War in the Nursery* which I will explore further in this chapter, this prevents a recognition of the production of space. By building a purposeful focus on space this moves away from the on-going nature verses nurture deliberation and draws attention to a more relational focus on babies' actions in the here and now within a social and material world. The second thread is an acknowledgement that babies are imbricated in the fabric of space and therefore the relationship between babies and space should be recognised within early childhood research (Sumsion et al, 2018). The third thread is that paying attention to space draws an awareness to the expectations and exclusions of babies in certain spaces and social practices (Holt and Philo, 2023). The final thread links this question of expectations and exclusions to the current era in which we find ourselves where babies' limited access to public space has altered significantly in the wake of the Covid-19 pandemic and global political shifts.

Horton and Kraftl (2006) suggest that space is commonly used in children's research sometimes with little contemplation on what space is. Following their three characteristics of space as complex, subjective and dynamic (2006:86) the next sections will illustrate how the research threads correspond to the existing literature on babies' spatialities and connect to specific theories of space and movement. Through this, I will demonstrate the way that space is understood and contextualised within this study and the key theories that have influenced this sense of space.

Space is messy and multiple

Horton and Kraftl (2006) suggest that space is more complex and multiple than it is often presented in research (2006:84). This is a central condition of space put forward by Massey amongst others. She suggests that space is made up of an infinite web of stories-so-far and created through a thrown-togetherness (2005). Massey's descriptions of space have had a strong influence on the development of this thesis. Her focus on space as the key component for considering difference and complexity seems particularly relevant to babies lived experience as they navigate the material and social world that they are a part of and develop their own embodied participation in space and time. Massey argues that space is the 'sphere of possibility' for both multiplicity and therefore difference (1999:310). She shows how this quietly unassuming statement of space contrasts with popular constructions of time and space, by demonstrating how a model of time and space put forward by Bergson dominates many common narratives of how time and space work together. She argues that Bergson's construction of difference is created through change and that change is a process of one thing turning into another over time. This makes space the fixed and inactive constant, the background, with time as the only vehicle for creativity. Her own impression of space is one that considers difference through 'the simultaneous existence of a multiplicity of things' (1999:310) where lots of different stories are happening in any given moment in overlapping spaces. This allows for an understanding of space that is 'open, unfinished and always becoming' (1999:309). Massey's depiction of time and space is one that is more 'intimately connected' where space becomes 'a cut through the myriad stories in which we are all living at any one moment' (2013:3).

This is the first example where a specific theory of space has played with my current understanding of childhood. Considering space in this way, taking it as a disruption of my habitual thinking that assigns greater importance to time over space, begins to create a different way of thinking about babyhood. This conceptualisation of space disrupts the dominance of chronological time within early childhood discourses. Gallacher (2017) shows how childhood is often presented as a journey 'which unfolds in time, rather than space' where birth, or even conception, is recognised as the starting point with adulthood located as the final destination (2017:1). Applying a focus to the complexity of the spatial,

recognised by Massey, in any given moment with a baby, shifts focus away from time, maturation and development and provides potential for an opening up of development narratives that are tied to common understandings of what a baby is and can do. A baby is often understood as following the set milestones on a development trajectory over time, acquiring set skills and knowledges until they reach the ultimate development goal of a walking and talking child, which in turn is replaced by the race to become full adult. This focus on milestones and development trajectories is such a common understanding of childhood within western society that we need reminding that there are other ways that childhood can be thought. It is also worth reminding ourselves that this development model of childhood can still be problematic even if, and sometimes due to, its widely accepted status. Ramaekers and Suissa (2012) show how this model creates an 'expert blindness' where parents and professionals no longer see the child 'because of the distortions within the developmental lens they are encouraged to look through' (Gallacher, 2017:2). Gallacher (2017) demonstrates how different geographical metaphors, such as wayfaring rather than milestones, can begin to influence how childhood is constructed.

In the common little interactions between babies and strangers in the north of England, such as sitting next to a baby on a bench or standing behind them in a queue, a familiar pleasantry to pass between the adults is often 'aw, how old are they?' making the most regular defining criteria of a baby based within time and not space. If space was considered an important element of babies lives perhaps strangers would ask 'where have they been?' or something that situates them in a transient, moving yet concrete world. In this way, attending to space allows researchers to shift away from common narratives of childhood that are often habitual yet problematic. Massey's focus on space rather than time becomes a strong advocate for the first thread in this research that suggests attending to babies through a spatial lens counteracts dominant childhood narratives. This aligns with Hackett, Procter and Seymour's (2015) proposal that attending to space places the researcher in the 'here and now' which works to disrupt the image of children as developing and on a path to becoming full adult (2015:1). They suggest that a spatial lens 'recognises the non-linearity of children's lives' (2015:1) opening up other possibilities for acknowledging children's different ways of being that escapes the dominant developmental and individualised lenses. In this

way, considering babies through space rather than the usual development trajectories becomes quietly radical.

Considering this idea of space on a more global scale, Massey (2005) identifies how global narratives often place certain countries as 'behind' others or 'developing.' She shows how this narrative suggests there is only one way to proceed in creating a successful functioning state, namely through capitalism and a very specific model of progress, and that this is built on an image of time as the defining factor. This ignores the possibility that these countries might be on a different path and creating different ways to function. This adheres with work of other writers and scholars on colonising structures such as Fanon's (1961) *Wretched of the Earth* which calls on the reader to not imitate the Western colonial model but to chart a new course (1961:311). Considering countries through a more spatial reference where all places exist alongside each other on different trajectories produces an understanding of different possibilities where capitalism is not the only option. This suggests an interesting perspective to bring to ideas of childhood and universal development models. Gupta (2019) identifies how the western model for when and how babies learn to walk is a much narrower and specified version than what happens for babies around the world.

Development frameworks that are still widely used today, though occasionally adapted, are based on studies in the UK and USA in the 1950s and 60s. As evidence emerged that babies learn to walk in much varied ways around the world, and in some cases, such as in Uganda, generally earlier than the western model, the initial reactions were to suggest that walking 'early' could cause intellectual issues (Gupta, 2019). Moving from global to a local scale, Holloway and Pimlott-Wilson (2014) show how generalised ideals of parenting and parent classes are destabilised by geographic factors that play into class, culture and shared practice. Thinking about babies in a more spatial context, from global (Gupta, 2019) where babies are moving around their spaces in different ways, to local (Holloway et al, 2014) where neoliberal parenting models are taken up in different geographical contexts, assists in considering the movement of babies in myriad different possibilities and makes visible the racialised, gendered or classed assumptions that underlie universal notions of babyhood.

Massey's depiction of space has been productive within existing discussions on babies' spatial entanglements (Acevedo-Rincón and Tebet, 2022, Orrmalm, 2021, Sumsion et al, 2018). These range from considerations of how space is conceptualised to the implications

this has on methods and methodology and specifically what this might mean for research with babies. For Acevedo-Rincón and Tebet (2022) and Sumsion and colleagues (2018) there is a generative quality to Massey's idea of space as 'a simultaneity of stories-so-far' (2005:32). This is Massey's image of space as many things all happening at the same time, in different speeds and temperaments, and with a future that is unpredictable. In this way space is never still, everything is always moving. Consider a slice of time where a baby stretches their body towards the wheels of their pram, their tongue leading the way towards a lovely lick of the muddy pram wheels. We are in the midst of a story where, having been on a rainy ride in the pram to the park, the baby is unfastened from their seat and lifted down to the floor where the juicy mud has caught her eye. We are also in the middle of a story of a pram that has been used for another baby before this one and is likely to be used for another baby in the future. There is also the story of the mud that has been aerated by worms for centuries and is host to many forms of bacteria that are just beginning to erode the rubber of the tyres at such a minute level it is out of perception for any human eyes. These are just some of the stories that are gathered in this particular space. These stories become a starting point to imagine an alternative to development narratives. They become post-developmental stories that take account of the myriad of relational complexities that make up babies' material encounters.

For Sumsion and colleagues, these 'stories-so-far' become a methodological tool for focusing in on video footage of babies within daycare settings whilst still holding an awareness that each baby is part of 'a heterogeneous, entangled and fluid assemblage of people and things' (2018:120). They emphasise how Massey's image of lots of things all happening simultaneously with unknown outcomes, what she refers to as a 'throwntogetherness' (2005), works to highlight the unexpected. In her discussion of babies as space makers through the 'flow of things,' Orrmalm (2021) also includes Massey's emphasis on surprise and the unexpected as a way to highlight the unpredictability of babies' space making practices. This attention to the unexpected lifts babies' actions out of the predictability of early childhood frameworks and brings attention back to the many small scale practices that babies carry out across different spaces. Attending to the movement of objects exemplifies how this attention to space is not a theoretical notion but concerned with tangible material things.

Space as embodied and subjective

Bodies may become orientated in [a] responsiveness to the world around them, given [...] capacity to be affected. In turn, given the histories of such responses, which accumulate as impressions of the skin, bodies do not dwell in spaces that are exterior but rather are shaped by their dwellings and take shape by dwelling.

(Ahmed, 2006:9)

Horton and Kraftl (2006) emphasise that space is always experienced through the body and therefore 'inherently personal, partial, individual, subjective and contingent' (2006:84) made through a history of memories and imaginings (2006:85). One of the most noted references to body and space comes from Lefebvre (2002) in his observation that space is produced through, perceived through and lived through the body. He suggests that 'each living body *is* space and *has* its space: it produces itself in space and it also produces that space' (Lefebvre, 2002:170). This proposition alongside Ahmed's words that open this section, brings into view the very physical and personal experiences of space on individual bodies. Different bodies make space in different ways. This has led to Puwar's conceptualisation of space invaders. She notes that 'social spaces are not blank and open for any body to occupy. There is a connection between bodies and space, which is built, repeated and contested over time' (2004:8). Through this way of space making over time she shows how 'some bodies are deemed as having the right to belong, while others are marked out as trespassers' (ibid). This works to make certain bodies in certain spaces become 'matter out of place' (2004:10). These out of place bodies are often those that don't fit the somatic norm which she describes as 'the corporeal imagination of power as naturalised in the body of white, male, upper/middle-class bodies' (2001:652). She describes the queer dynamic of being 'of and in a space, while at the same time not quite belonging to it' (2004:8).

Massey relates her stories-so-far to material practices that are always in motion (Massey, 2005:32). Through this she shows that her understanding of space is not abstract but a web of on-going entanglements of matter; Orrmalm (2021) describes Massey's depiction of space as both 'open and concrete' (2021:679). In this is the awareness that space always holds a physical quality whether this is the solid surface of bodies or permeable like air or water. Ingold builds a strong picture of this in his argument against space, preferring place as a

more useful notion. He suggests the term 'environments' from biologists might be more generative as it evokes an awareness of matter and material. He lists examples of specificities where space becomes a notion of nothingness such as walking through the countryside, rather than space, being indoors rather than being in space, going out into the open, rather than going out into space, feeling the wind rather than feeling space and looking up at the sky rather than looking at space (2011:145). Through these examples he suggests that the term space implies an empty container that is 'detached from the realities of life and experience' (Ibid). The notion of space in this sense is always contained rather than porous and full of fixed things rather than fluid. Ingold shows that considering space as an empty container with set boundaries rather than an entanglement of moving materials creates a world of separate entities where the liveliness of things coming into being by weaving and tangling with the stories of others, such as Massey's 'stories-so-far', is halted by the rigidity of everything being fixed and separate.

Despite Ingold's protest I find space is still the most useful term for considering the different environments that babies find themselves in throughout their daily adventures. Place in my own understanding is much more enmeshed with ideas of location and identifiable places such as 'St. George's Square', 'Brougham Road' or 'Liverpool.' As I have outlined in the beginning of this thesis, there is also a well established practice of 'place-making' within urban design which has its own set of roots and epistemologies that differ from the ones I have included in this thesis. I prefer to refer to space and space-making as I feel this encapsulates the tiny, transient and abstract moments of space making that might happen in the corner of a library, beneath a picnic bench or behind a fire escape. I have included Ingold's discussion of space and place however as it emphasises the fullness of space that we are always in correspondence with. Space is never empty.

To counteract the impression of space as nothingness Ingold considers Gibson's (1979) notion of medium, substances and interfaces. In this conception medium is matter that can be moved through, such as air, and facilitates a perception of the environment. Substances generally can't be moved through and considered as 'solid stuff' such as rock. Surfaces are the interface which stands between the two and, according to Gibson, 'where most of the action is' (Gibson, 1979, cited in Ingold, 2011:22). By considering a world made up of these three categories we can begin to picture space as thick with material and matter. What's

more, these properties are not fixed but interchangeable and relational; Ingold suggests that 'To describe these properties means telling their stories' (2007:5) which brings us back to considering space as a multiplicity of on-going material entanglements. Thinking back to the baby, the mud and the pram it is possible to identify the medium of air and rain, the substances of the pram wheel, the mud and the babies' body and the surfaces such as the papillae bumps on the babies' tongue and the thin outer layers of mud that connect with the air above and the rubber of the wheel below. It is also possible to envision the transient nature of these boundaries as the mud erodes the rubber of the wheels or the transformation of mud and baby if the baby is successful in getting a big lick of mud on her tongue. At some point the mud becomes part of the baby's body.

From this example we can see how babies, like all beings, are not separate from the world around them. They are bodies made from matter (such as bones, synapses, skin) in a world of matter (such as air, floorboards, sand). This aligns with Hackett, Procter and Seymour's evocation of Pink's (2009) work on sensory ethnography to express how 'people experience the world through their bodies and these bodies are inseparable from the place in which they are located' (Hackett et al, 2015:6). If we recognise that children, and babies, are constantly within a space of some kind and that these spaces have an influence on their bodies, then, space must be understood as material and an integral element of everyday life.

Orrmalm's (2021) study on 'the flow of things' takes babies' interactions with matter along a different trajectory that moves away from the body and focuses more specifically on the role of materials within babies' space making practices. Through focusing on the journeys of objects within the home she brings the space and layout of the setting into the forefront of the discussion positioning babies as active in making and remaking the space around them. Attending to the more-than-human, as with Orrmalm's study, or an emphasis on the body as part of an on-going merging of material entanglements, as indicated above, aligns with the philosophies of feminist new materialism which contemplates the liveliness of matter and de-centres the human, particularly the patriarchal image of 'man' (Braidotti, 2013), as a separate being that sits at the top of a self-made hierarchy. Osgood and Robinson (2019) suggest that a feminist new materialist approach requires researchers to engage with 'children's entanglements with space, place and materiality' (2019:8). This perspective has

been taken up within childhood studies establishing a turn towards the material in everyday encounters particularly within early childhood and is beginning to have an influence within baby studies. Impedovo and Tebet (2019) suggest new materialisms can be generative in considering babies wider entanglements with space. Some of the central theorists that have had a strong influence on the foundations of feminist new materialism are beginning to be applied to examples of babies' space making practices. For example, Sumsion and colleagues (2018) apply Deleuze and Guattari's definitions of smooth and striated space to an interaction between babies during mealtimes in a home day care setting. By putting these theories to work, they show how babies navigate structure and spontaneity in ways that bring about possibilities for lines of flight. A critical aspect of this is the acknowledgement by the researchers that the space is made not just through the movements and material engagements of babies, but also the regulations of childcare settings and notions of healthy eating practices that inform the actions of the researchers and practitioners. This shows how babies' lives are influenced not just by their immediate surroundings but by social, political and structural decisions. Having established that babies' engagements with space are grounded in material practices, the next section will emphasise the more abstract influences on babies' spatial entanglements and the importance of keeping the abstract in view when working from a feminist new materialist perspective with babies in research.

Space as social, political and historical

Horton and Kraftl's (2006) third and final suggestion on how space is researched within studies of childhood is to consider space as spacings rather than through the noun of space to emphasise the active, open and constant motion that is the nature of all spaces. Even spaces that feel rigid, defined and closed will always be in some form of transition if perhaps a slower pace or against a rigid resistance. Consider the isostatic recovery of land masses as the weight of the ice after the ice age relieved the shoulders of the land as it melted away and allowed the mountains to rise a little higher above the sea. Space is always in motion. This continuous redefining of space is also unpredictable. Massey warns against the use of grand narratives in considering the future of spaces and new possibilities as these often suggest a future that is already knowable and therefore unable to be changed or undone.

This is not a move against history or an attempt to ignore the histories that play out in the present of any given space. Ahmed brings attention to the history that is embedded in all objects and how a queering of these objects keeps these histories in motion. She suggests:

to re-encounter objects as strange things is hence not to lose sight of their history but to refuse to make them history by losing sight. Such wonder directed at the objects that we face, as well as those that are behind us, does not involve bracketing out the familiar but rather allows the familiar to dance again with life.

(Ahmed, 2006:164)

The history of a space is embedded in the transient matter that it is made from and with a multiplicity of stories. If we take Manchester as an example, it is easy to trace the history of colonialism and the industrial revolution in the fingerprints and stone of the city. Though the colonial and industrial threads are undoubtedly a part of the present and future stories of the city these do not necessarily predetermine what futures are available. This rejection of predictable narratives translates across to definitions of early childhood and provides a space to cast off preconceived notions of child development trajectories and allows an openness to the future to emerge.

Massey's attention to the multiplicity and simultaneity of space breaks up the distinction between the global and the local, producing different stories to those embedded in the dominant discourses that shape our collective consciousness. For example, she shows how a consideration of the multiplicity of space can bring forth stories of globalisation and colonisation other than the familiar white European narrative that is constantly retold. It may even bring about stories of modernity where the intimately local carries its own force, rather than being shaped by global forces. She says that we must recognise space as the product of interrelations 'from the immensity of the global to the intimately tiny' (2005:31). This manages to bring global political shifts into the small-scale material practices rather than the common image of 'the global' as somehow always 'up there', 'out there', certainly somewhere else' (2005:132). Applying this to what could be considered the tiny interactions of babies suggests that babies' spatial practices are partly made by the political around them but also can have political force.

Massey's caution about predetermined narratives is with an awareness that emphasises the 'utterly political' nature of space (2013:7). This is no different for babies even if their experience of the political differs in some way to that of adults and older children. In this sense Massey's description of space seems to find an alignment with feminist new materialism. Critics of feminist new materialist theory have suggested that by focusing in on the material, there is a possibility that the social, political and historical aspects of daily life become hidden. Truman (2020) suggests that this is why the 'feminist' in feminist new materialism is essential and warns that 'new materialisms without feminism - a feminism that attends to race, gender, sexuality, and ability - can recentre both humanism and Whiteness' (Truman, 2020:2). Feminist new materialism builds on a well-established body of work from feminist post-structuralism. Feminist post-structuralists, such as Judith Butler, tend to the ways in which the world is made through language, discourse and culture with attention to race, class, sexuality and gender. Though Ahmed (2008) has evidenced that an interest in the body has always been present within feminist theories, feminist new materialism brings lively matter to the centre of their enquiries. Mohandas and Osgood (2023) point out that, rather than a rejection of the feminist post-structuralism that precedes it, feminist new materialists build on the discursive by turning towards the role of materials and bodies as lively matter within 'materialdiscursive' assemblages (2023). The key then, is to find a methodology that attends to both the material and the political in babies' spatial encounters.

Massey shows how re-imagining the spatial can 'open up the very sphere of the political' (2005:32). This aligns with Haraway's proposal that 'it matters what stories we tell to tell other stories with' (2016:12). Taking Haraway's proposal seriously and applying it to Massey's perspective on space is key to the intentions of this thesis. Combining these two theoretical approaches allows me to build a space to tell stories that matter starting with babies. It also allows me to tell stories about space that opens it up to different potentials. One way of finding these new stories is through allowing ourselves to experience space in ways that queer our own everyday practices. Rose and the *Loiterers Resistance Movement* (see the [LRM website](#)) suggest walking, loitering and playing in different ways with space can make certain processes visible that shape the city (Casini and Rose, 2022). The LRM use playful interventions that 'decode the palimpsest of the streets, uncover hidden histories

and discover the extraordinary in the mundane.’ In these actions they ‘aim to nurture an awareness of everyday space, (re)engaging with, (re)mapping and (re)enchancing the city’ (LRM, online). I suggest dwelling in this playful space alongside the, often unassuming, queering practices of babies becomes a way to tell new stories about space and to ensure that these stories are ones that matter.

In this chapter I have outlined specific considerations that present space as messy, multiple, embodied, subjective, social, political and historical. Holding all of these strands together places space as something that is always open, in motion and unpredictable. These threads of space play out in the fabric of the environment as bodies merge, glaciers move and mud mingles with microbes. The next chapter moves attention across to babies and the different ways that they are presented in political, theoretical and popular narratives that all become part of the spaces that babies inhabit.

Chapter 3: Framing and defining the research: conceptualisations of babies

there is no such thing as a baby ... if you set out to describe a baby. You will find you are describing a baby and someone else.

(Winnicott, 1964:88)

This chapter focuses on existing conceptualisations of babies and how the different ways we think about babies directly inhibits, restricts, challenges or affirms how we conduct research with babies. Only once we have established how we see babies in the world, and what configurations of babies we want to refuse or affirm, can we move on to considering a methodology that works with their different ways of being. My attempt in this chapter is to discuss different ways that babies are considered from different perspectives rather than attempt to define what a baby is. Bradley and colleagues have already identified how Winnicott, referenced at the beginning of this section, suggested that any attempt to define what a baby is results in describing what a baby is not (141:2012). I am interested particularly in what new definitions of babies are created when they are considered through a spatial rather than temporal lens. Defining babies through a temporal lens often becomes

a question of when babyhood begins and ends. Holt and Philo (2023) have called attention to the religious, ethical and political consequences that this definition of babyhood can have. Considering how we think about babies in this chapter provides a path towards identifying the key aspects of babies and babyhood that thread through this research that will be identified in Chapter four. Identifying these key elements then makes space for the methodology which will be detailed in Chapter five.

Mythology, media, mammals and more



Image 3: *Seated Figure* from the 12-9th Century, BC. Held at the Metropolitan Museum of Art, York. Image in the Public Domain.

Babies are fascinating. What is perhaps equally fascinating is the queer fascination with babies that seems to appear in all areas of life across time and space. Though there has been

some attention given to the experiences and attitudes towards babies throughout history (Tebet and Abramowicz, 2016, Mintz, 2016), this fascination is often concerned with the symbolic nature of babies and what they represent rather than an interest in the real interactions of babies in their everyday spaces. Representations of babies appear in some of the earliest records of civilisations. For example, the Olmec babies, created between 1200 and 800 BC by artists in the first major civilisation of Mexico, are small clay figurines that, though little is known about them, are thought to link the life cycle of infants and agriculture (Doyle, 2015). Babies are also found within the popular imagination through mythology and folklore over thousands of years. From the Greek God, Kronus, who ate his babies in fear that he would be overthrown, to the North European Changeling, frequently found in Irish and Scottish folklore. The Changeling is the beautiful and quiet baby who is swapped by the fairies for an often ugly and unruly supernatural being or a piece of wood imbued with fairy magic to resemble the child. Perhaps the most common motif of babies across the ages is that of the lost babes in the wood. An early example of this is the story of Romulus and Remus from ancient Rome, abandoned by humanity and raised by gods or animals (Windling, 2013). Many of these representations of babies bring to the fore the inhuman edge that babies dwell in as more-than-human beings; the Olmec babies, for example, include statues of babies with 'feline features' and maize sprouts. Truman describes how 'inhuman' is a concept developed through queer, trans and critical race theorists 'in a response to overrepresented versions of Man' (2019:113). She notes Cohen's (2015) use of the term to accentuate 'difference and intimacy' (2019:113). She describes how the grammatical use of the prefix 'in' works in two distinct ways. In one way it places an opposition between one thing and another such as 'incapable' vs 'capable' and in another way it positions something as inclusion or enveloped. This produces what Truman and Cohen have described as an intimacy (Truman, 2019:113) or an 'estranged interiority' (Cohen, 2015:10). Truman suggests that thinking the inhuman 'does not mean flattening the boundaries between human and nonhuman, nor is it a practice that demands the inhuman's entry into the category of the human' (2019:114). For me, I envision this as positioning babies on the edge of human; accepted into the fold of human in parts but reaching to the more-than-human in physical, symbolic and political ways that pull at the boundary of what it is to be human.

In more recent history, this fascination with babies as living on the edge of human has been put to use to develop medical methods to sustain the life of babies. Blakemore (online) Shows how the first incubators for babies, developed by Couney, had been given little interest from the medical community. Looking for a new way to fund the research Couney took the incubators to Coney Island where he created a circus side show for holiday makers. There are photos of visitors posing and smiling with the alien-like premature babies as they fought for their life in the world's first incubators.

This fascination with babies continues to this day. Babies are often utilised to represent certain values or mined as a source for emotive responses. Consider the age-old trope of politicians kissing babies to build their image or the use of babies in films to elicit emotion from the audience. There are countless examples of this but to pick one from popular film history, in the emotional climax of the 2003 Christmas film, *Elf*, where Santa's broken sleigh manages to lift off the ground and narrowly escape their assailants, the camera switches to focus on the face of an unnamed baby in the crowd as the music swells.

Babies have also become strewn across Youtube and social media platforms with hundreds of compilations of 'funny', 'cute' or 'odd' things that babies do with newly released videos totting up nearly 3000 views in just the first week (for example, 'Little Ones' youtube channel with 85, 6000 subscribers). Social media has also provided a platform for babies to become celebrities with babies such as the toddler 'RUDA' who is the focus of a parenting vlog whose daily life has been filmed since birth and with videos reaching up to 3 million views (see 'Real Couple' youtube channel). These uses of babies within film and media are fraught with ethical implications on consent, agency and subjectivity where babies are held as queer objects to elicit relief, domesticity, order, laughter, warmth or money from their audience.

Moving away from film and media to a different perspective, this fascination with babies is not only present in humans and perhaps taps into more animalistic qualities that humans possess. Anecdotally certain animals, such as dogs and cats that have had a baby introduced to their home, have been shown to recognise babies in other species as young and responded to them in more caring or playful ways. Recently, the clip of a chimpanzee recognising a baby in a woman's arms through the glass of a Zoo compound and sharing a moment of motherhood is a viral example of a recognition of babies across species. This is,

of course, not the case for all animals and there are still many examples of animals eating the young of others such as the Heron's partiality to ducklings and so on. It is also worth noting that humans are no different here as they dine on Veal and other such delicacies.

This brings me to a final point on the queer fascination with babies that perhaps highlights the absurdity of what this means for babies lived experiences. It is important to note that the obsession with video clips of babies or the way that they create links with the animal world does not translate to high status or respect for babies and the more-than-human world in general. These reams of babies on Youtube, the manipulation of babies for emotive effect and the innocence attributed to babies and animals should be considered in a fuller picture where the lives of some babies are without value. This includes the 13,000 Palestinian children, including babies and toddlers, that have been killed in the last six months in Gaza (Save the Children, online).

These portrayals of babies leak into the daily lives of babies. These media constructions of babies are tied to the expectations on what babies should do, look like, how they should behave in their everyday experiences and flavour the interactions that they have with adults. In this way these constructions of babies have effects on babies' daily lives alongside their interactions with the more immediate material things around them.

[Refusing dominant narratives](#)

Some of the new emerging body of literature on babies has taken into account the different perspectives on babies and babyhood. Tebet and Abramowicz (2016) include perspectives on babies from history, philosophy, space and anthropology. Mintz (2016) particularly highlights how considering babies through an historical lens influences public perceptions and distorts linear theories of development. Existing literature differs in responses to existing theories and perceptions of childhood. One response is a move towards focusing only on the baby in the moment as a way to fend off preconceived ideas of babies (such as Impedovo and Tebet, 2021) whereas a smaller few attempt to use methods that keep babies actions in tension with the many different perceptions that surround them (such as Holt and Philo, 2023). In my research I will suggest that this is made possible by moving away from

the individual actions of babies to considering the babies in constant cooperation with their surrounding environment. This environment is made up of material, social and cultural elements from microbes and fibres to mumsnet and older people in the street insisting that the baby needs a coat on. These are all parts of the babies' worlds and a baby cannot be isolated from these things. Within this there are certain theories of babyhood that seep into the collective (un)consciousness that dominate how babies are understood and therefore interacted with or provided for. Considering babies through space makes different attitudes to babies evident in practical and tangible ways in a heterogeneous jumble that the babies experience every day – the way they are fed, dressed, put to bed or played with are all linked to different, sometimes unconscious, perceptions. Bradley and colleagues (2012) suggest that researchers must engage with methods that avoid pre-existing knowledge or concepts of babies. I would argue that this is perhaps impossible and we need to consider ways in which we can make ourselves open to concepts of babyhood that are so engrained we have forgotten that they are a part of our thinking and make an explicit choice on which concepts to refuse and which ones to allow in. These theories need to be made visible and an intentional cut made between which theories are held on to at the start of each piece of research and which ones are rejected. This section highlights some of the most common narratives that are applied to babies in research. In attempting to establish a new way of considering babies in a research context it seems sensible to consider what ways are currently evident, how these models are used and what impact this has on the ways in which research is constructed. This section outlines two of the most common models of babyhood and establishes why both of these models should be taken with caution. Continuing the idea of different constructions of babies across time and space I have illustrated both of these models with babies in art and folklore. These act as examples of different ways that babies are represented in various threads of life and provide a contrast to the models that seem to suggest they are the only plausible ways of considering the lives of babies.

Babies are not capital

*When Eva was born, her mother wasn't prepared for what was coming next. Eva is no ordinary baby. Eva is a giant threat to society. The army is called; the world's media descend on the UK; there are protests and placards, opinions and destruction. And there is Zara, her mother. A mother who will defend the child she loves with all her might. A mother against the world. With a soaring musical score, a cast of over 100, cherry pickers, tanks, 3D projections and a mechanical, moving 'baby' that's bigger than a double decker bus, **ZARA** is a one-off, unique experience. A giant outdoor theatre event for the whole family, which tells the epic story of one learning disabled mother and her fight to protect her baby.*

(Mind the Gap's description of an onsite performance (2019:online), *Zara*, from Mind the Gap, Walk the Plank and Emergency Exit Arts)

Babies being made into gigantic proportions seems to appear often in different forms of art and protest. From Ron Mueck's giant lifelike baby sculpture [A Girl](#), to the giant [Trump Baby blimp](#) that appeared near the houses of commons during the then president's visit to the UK. Sparrman notes how Mueck's sculpture inspired her own 'unlearning' of agency in early childhood and notes how a 'fictive, imaginary child' (Sparrman, 2024:4) made lasting impressions on how she and her colleagues understood the agency of a newborn baby within an ethnographic study. Inspired by the baby blimp, Osgood, Kroeger and Persky (2022) incited a special issue of the *Global Studies of Childhood* Journal entitled 'On the Spectacle of 'Tantruming Toddler'' in which they suggest that relating selfish and ignorant behaviour to that of a 'big baby' intended as an insult portrays a grotesque and reductionist image of 'child' and in doing so limits 'ideas about child/hood within the public imagination and so actively silences other accounts of contemporary child/hood' (Osgood, Kroeger and Persky, 2022:199). Robson, from the same special issue, suggests that this use of the inflated baby image as ridicule legitimatises 'hostile acts against children' (2022:288). There is something about the size of these beings that adds to their intrigue for artists. The theatre piece that is referred to above uses large scale puppetry and 3D projection mapping to portray the absurdity and panic of constant intervention and a lack of understanding of the daily experiences of a mother with learning disabilities and her baby.

Since the 1980s a capital model of the child has increasingly influenced how children and babies are valued. This narrative is common within policy making and funding budgets and

may even seem appropriate in some of these areas though the capital value model has also had an influence on families, support centres and early years settings. Heckman (for example, Francesconi and Heckman, 2016) is a key influential figure that pushes this line. His research lies between epidemiology, developmental psychology and economics with a focus on attributing certain characteristics of the family environment as the determining factors for adult outcomes later in life (2016) and the balance of early capital investment that reduces costs over a lifetime through early intervention. As public funding continues to decrease there is certainly an attraction to this argument as it advocates for more investment in early years services. However, this model lacks an understanding of subtleties and finds its answers in projected numbers and generalised models rather than the daily and varied experiences of families. Arculus (2024) has shown how capitalist values of progress, expansion and cheap labour have produced hegemonic regimes in early education. She shows how this results in not only sourcing 'cost-benefit' solutions to concerns which supports a move to generic, trial tested programmes of intervention but also defines what becomes a concern. For example, she shows how notions of the 'word gap' in toddlers, with individual toddlers deemed 'word rich' or 'word poor', is based on what Tsing refers to as 'capitalist expansion' (Arculus, 2024:86). Vandebroek (2020) highlights the danger of the influence the capitalist model has on the early years sector. He suggests that when the early years sector begins to use these languages and ideas about education it suggests that this is the only available model of childhood. It presents education through 'the language of brain development, individual achievements and economic returns' (Vandebroek, 2020:419).

Gillies and colleagues (2017) show how a model that places children as human capital positions their early years as a time of investment that will secure financial gain in the future. This leads to a variety of troubling images of babies and families. Firstly, any poverty or inequality through a lack in capital or resources is more likely to be associated with poor parenting (Gillies et al, 2017:31) bringing the home environment and roles of parents under a scrutiny that amplifies a classed, racialised and gendered ideal of parenting and the optimal family home. This is something that Penn has found evident in a number of large-scale longitudinal studies (Penn, 2010:53) and shows how this perspective during the turn of the century led to targeting disadvantaged mothers. This positioned parenting as the

essential risk to a secure future for children and therefore society in general. This links to Polokow's image of children in the US as vulnerable yet dangerous. Polokow describes:

Poor children, described as innocent and in need of better parenting, yet viewed as future predators and potential criminals, have been commodified by an instrumentalist cost-benefit discourse that dominates policy decision-making about poverty and child care in the United States. Hence assistance and intervention for children have never been premised on rights or on children's daily existential needs, but rather on a crass and heartless instrumentalism – 'invest now or pay later' is the dominant mantra for early intervention.

(Polakow, 2010:71)

Seeing babies as capital obscures the minutia of babies' everyday lives and this influences the values that a study is built from. Penn shows how many studies focusing on human capital either ignore inequality or take it for granted; 'poverty is a problem only when it generates additional costs that could be avoided' (Penn, 2010:53). This human capital model has had direct influence on the methodology of this research as it supports a continued impression that babies are only seen as valued when considered what they might become (Vandenbroeck, 2020:420). This links to the second model that I have chosen to refuse within this research which is the impact of developmentalism on how babies are seen, valued and cared for.

Babies are more than developmentalism

The belief in changelings is historically widespread in Northern Europe: where a previously 'normal' child was believed to be stolen by fairies and a mute, deformed or sickly and bawling fairy baby left as a substitute. Belief in changelings has been used to justify everything from forced baptism of children and adults to infanticide, abuse and maltreatment of children whose development of physical form didn't meet their parents' or community's expectation.

(Crucible, 2003)

*Hush awhile, hush awhile, sleep now for me.
Lay yourself softly if my babe you be,
Or did some fay creeping from your crib steal you sleeping
And leave me a creature that's nothing of me?*

(Changeling's Lullaby, *Crucible*, 2003)

There have always been children that don't comply with the image of the well behaved and quiet baby. In folklore, these are evident in the stories of changelings that were in some cases used to explain oddities and unusual behaviours from young children. In the last half a century development psychology has become the dominant narrative on babyhood and, in its own way, solidifies and gives authority to instituting the order of the normal.

As developmental psychology has grown in popularity it has had a strong influence on early childhood studies. Lenz Taguchi suggests that development psychology has 'become normalised as the singular and natural way to shape discussions' in early childhood (Lenz Taguchi, 2019:xviii). Gabriel (2020) explains how this ages and stages model creates developmental norms, encoded in milestones and developmental delay. He states, 'within this framework, childhood is viewed as an apprenticeship for adulthood that can be charted through stages related to age, physical development and cognitive ability' (Gabriel, 2020:49). A common theme that seeps through this developmental model is the child as lesser than the adult. Murriss (2016) uses Deleuze's theory of negative difference to highlight the deficit model that is entwined with developmentalism and the child as lacking. She suggests:

This negative difference relies on something always out of reach, and here *deficit* models of child and childhood emerge: child is still developing, is not complete and is unfinished and immature. Child is compared to adult, with the latter as the 'transcendental signifier' (Hultman and Lenz Taguchi, 2010, p. 529): mature, developed and complete.

(Murriss, 2016:89)

Blaise and Pacini-Ketchabaw (2019) show how development trajectories are only built on what is already known and so provide less space for the surprising, emergent and lesser recognisable moments that happen for babies in their daily lives: 'This view zooms in on an individual child and assumes that we already know what a body can do' (Blaise and Pacini-Ketchabaw, 2019:111-112). Developmentalism is built therefore on the idea that we can 'know' the child and when a child is 'lacking against normative expectations' it becomes our duty to 'fix' them (Osgood and Robinson, 2019:37).

The critique of developmentalism has expanded over the last decade to include a variety of voices and perspectives, particularly within post theories, but writing from Riley (1983) in the 1980s shows how this direction of developmental thinking grew from popular narratives and concerns of the time and illustrates a critical perspective that has been given less attention over the last few decades. Emerging from the biological versus social debate of the time, amidst the backdrop of Marxism and Feminism that flavoured this era, she addresses how notions of what biology, an individual or society is 'slip uncriticised into child psychology' (Riley, 1983:5). She questions to what level is this inescapable through the psychological model. She shows how both the notions of babies as biological or social beings include problematic interpretations. She identifies how a purely social model of the child ignores physiological differences and neurodiversities that shape how individuals navigate the world. She also shows how the popular image of babies as entirely social paved the way for further accountability to be placed on the mother-child dyad and a strengthening of Bowlby's attachment theory. Despite a body of concerned critique, attachment theory is now so engrained in early years development theory that it is taken as definitive. Rather than searching for new ways to consider the family model, Garrett (2022) suggests there is more interest in attempting to 'retrofit' Bowlby's theories to the modern day. For example, as an acknowledgement of the changes in work and gender roles since its creation, the theory has been occasionally adapted to include other family members or key workers in childcare to move away from the mother-child dyad. Handily, these adaptations came at a time when mothers of young children we're being encouraged back into the work force. The historical and political context of attachment theory is significant. Thomson (2013) outlines how the creation of Bowlby's attachment theory shaped the distribution of the welfare state post-war and relied on the caring role of mothers. Schofield identifies how Bowlbyism

continues in the modern day as a politically conservative force that pathologises mothers and polices the caregiving acts of families (Schofield, 2021:15). This abstraction of Bowlbyism to the modern day dims the political and historical context that this theory originated. Summoning a striking image, Riley suggests that this move ‘speaks of the activities of a timeless, ahistorical, desert island mother-child couple, watched at its communicating and interacting as in a bell-jar...’ (Riley, 1983:20). I suggest moving attention to babies through a spatial lens lifts discussions out of this biological and social divide, out of the mother-child dyad, out of the predictability of certain childhood theories and makes space for different narratives.

The resistance of developmental frames has impacted on research designs. Some early years researchers have looked for new ways of thinking that disrupts the developmental narrative. Gabriel (2020), for example, suggests an understanding of development that is ‘a non-linear, temporal and embodied process’ as a way of moving beyond binaries of nature and biology (Gabriel, 2020:48). Orrmalm (2020b), for another example, suggests using Jackson’s (2014) idea of ‘erosion, breakdown and decay’ as a starting point for thinking ‘rather than novelty, growth and progress’ (Orrmalm, 2020b:4). Resisting the certainty and predictability of childhood makes space for uncertainty, unpredictability and that which is unknowable. This will feed in to one of the main three conceptualisations of babies that I will put forward which depends on leaning into the unknowability of babyhood and rethinking what knowledge we can build from this position. This move away from developmentalism has also influenced the first conceptualisation of babies that I propose as it moves away from development trajectories and brings attention to the body as a starting point. Many researchers have found a potential for new thinking by turning to the body and its entanglements with matter. MacRae (2019) shows how the developmental narrative creates a hierarchy of knowledge where sensory-motor play for babies is ‘cast as essential and necessary, but only as a more primitive and unthinking mode that is superseded by reason and the symbolic’ (MacRae, 2019:3). She suggests that by paying attention to the body in its encounters with the world it is possible to ‘trouble the idea of play as normatively mapping a pre-determined trajectory’ (MacRae, 2019:350) and therefore disrupts the developmental narrative.

Though I have outlined developmentalism and capital as two different perspectives these are completely interlinked and influence each other. In Hackett's discussion on toddlers in the Capitalocene, she highlights the 'faltering of capitalist logics of progress' (2022:263) that shows how capitalism is linked to developmentalist logic and human exceptionalism that denies 'human inter-dependency with nature' (2022:263). She shows how progress is tightly embedded in the idea of time. Whereas MacRae suggests focusing in on the body, Hackett suggests paying attention to the everyday in toddlers lived experience. I suggest that both of these are possible when taking a broad view of babies and toddlers through their spatial entanglements. Moving to a notion of space, rather than time, and Massey's (2005) idea of space as a multiplicity of stories-so-far all on different pathways introduces a way to resist these two but interlinked notions of human capital and developmentalism.

In this chapter I have outlined two models of thinking that are interlinked but bring with them certain ideas of babies and babyhood that have become ingrained in how babies are constructed in research. By resisting these narratives, it provides a space to rethink a new starting point for what a baby is and how research with babies can be conducted. The next chapter will outline three concepts that I argue creates a strong base concerning the physical, theoretical and knowledge making capacities of babies. This base can be used to build different methodologies and methods that align with a situated, agentic and material model of babies in the world.

Chapter 4: Framing and defining the research: reconceptualising babies in space

The methodology for this research emerged in constant motion with the changing circumstances of the pandemic. Attempting to conduct research in the pandemic was studded with confusion, indecision, the building and breaking of plans and panic induced grasps for anything that might be possible. Strangely, the resulting research is not flailing in all directions, flimsy or ineffectual as you might expect given the circumstances. There is a tether to this research that has been constant throughout the process. Although methods have changed, focuses of attention have shifted and ways of thinking have crumbled and

reformed, there are a handful of qualities that have been consistent and have helped navigate the twists and turns. These qualities create a clear focal point or anchor that can be looped back to at any moment of apprehension or change throughout the process. These qualities are a set of three reconceptualisations of babies in the world. They make visible a way of thinking and working that informs this methodology.

What follows here, in this chapter, is three framing reconceptualisations that I have pulled through from the considerations of babies and space that have been outlined in the previous two chapters. I identify these reconceptualisations as critical for researchers to consider when working with babies. These reconceptualisations form the theoretical starting point of the research, from which it is possible to map philosophies, methods and data that works with babies as subjective beings in the world. As I have outlined in the previous two chapters, each reconceptualisation is grounded in theoretical understandings of babies and research but influenced by social, political and cultural aspects that surround common considerations of babies and babyhood. To keep these aspects visible each point is illustrated by representations of babies from art and literature. The three reconceptualisations are:

1. Babies are mixed in with the world and make things happen.
2. Babies live on the edge of human.
3. Babies are never fully knowable.

These three reconceptualisations create the backbone of the research and are expanded upon below. Through these three qualities certain ontologies and axiologies become visible and a methodology begins to take shape emerging in the interstices of these three main pillars.

Reconceptualisation 1: Babies are mixed in with the world and make things happen

We took the orca from the sea and put it in the sky. It was just so beautiful up there, so inspiring. But the calls of the mother never stopped. From a cold and foreign sea, her subsonic wavelength penetrated all concrete, steel and urban clamour,

reverberated through pipes and sewers, kept us awake all night and broke our hearts. We knew we had done something unforgiveable. We promised to set things rights. But so many years have passed, and the mother is still calling out. So many years have passed and the orca is still in the sky. We just don't know how to get it down.

(excerpt from *Orca* in *Tales from the Inner City* by Sean Tann, 2018)

I have chosen to open this conceptualisation with an excerpt from Sean Tann's short story, *Orca*. There is something about extracting a body from its surroundings, from the all-encompassing ocean, and placing it in a different stratosphere, that seems to resonate with the ways that research often separates out the body from its surroundings as if it is not in constant reciprocity with the world that it inhabits. This baby-as-mixture conceptualisation is particularly influenced by posthuman theories of transcorporeality and affect. Early childhood researchers have noted how a posthuman way of thinking resonates with material and multisensorial experiences of babies as they encounter and mix with the world. Osgood and Robinson suggest:

Research in this paradigm attends to microscopic, multisensory investigations into relational entanglements of people, sensations, sounds, tastes, smells and matter. Early childhood is readily characterised by highly physical, emotional, unpredictable and seemingly chaotic encounters and so lends itself well to this mode of enquiry.

(Osgood and Robinson, 2019:38)

Osgood and Robinson link a post-human philosophy to paying attention to the body and its material encounters. They suggest that the decentring approach of posthuman thinking breaks free of the child as a recognised development trajectory, rejecting the developmental narratives that I have outlined in the previous chapter, and considers children and childhood in ways that are constantly interwoven with the world (Osgood and Robinson, 2019:37). Similar theoretical perspectives have begun to appear in existing baby studies literature. Impedovo and Tebet (2021) suggest that new materialisms can help understand the meaning-making that babies do in their environment and their relationship with 'bodies, objects and space' (Impedovo and Tebet 2021:2002). Studies from Bradley and colleagues (2012) and Tebet and Abramowicz (2016) also find insight from theories that have influenced the posthuman and feminist new materialist philosophies. In both of these studies writing

from Deleuze, such as immanence, lines of flight and assemblage, inspire new thinking around babies and their daily environments. These will be returned to in Chapter seven as I consider how babies are involved in space making practices.

Within early childhood narratives babies are often presented as malleable, absorbent and vulnerable beings that need to be shaped, trained and cared for by the expert adults around them. This first reconceptualisation, resisting the developmental models and a focus on shaping functioning adult citizens for the future, foregrounds how active and affective babies are in their daily engagements. Within posthumanism, adapting a flattened ontology destabilises a hierarchy between human and non-human or more-than-human entities but this reading suggests that all humans exist on one level of interaction that precedes any other being. Within black and ethnicity studies posthumanism acknowledges the hierarchy constructed within human systems where those characterised as non-white are placed in a sub-human hierarchy that is somehow other. Kromidas (2019) uses Sylvia Wynter's insights to unsettle the universality of the 'not-yet-fully-human white modal child' (2019:65). She argues:

the white Western bourgeois child masquerading as universal child is key to reproducing our current hierarchical order by inciting the violence of continual measurement, evaluation and ranking, thereby legitimizing and depoliticizing the "achievement gap", and condemning Black, brown and poor children.

(Kromidas, 2019:65)

Kromidas asserts that posthumanism can challenge the traditional way that humans have been conceived and can demonstrate that alternative ontologies of race are possible and do exist. Applying a flattened hierarchy between all human and more-than-human beings destabilises the racialised narrative so that the white, middle class male adult is no longer centred and causes the 'universal child' to disintegrate. Within this model babies have as much influence on events as the adult and any learning, shaping or affecting nature is a (more than) two-way process. This is not to suggest that babies experience the world on a level playing field. I have already established that some babies are welcomed into the world more than others and that some babies' bodies are assigned innocence, beauty and intelligence whilst others are completely disregarded through on-going violence and absence

of care. Race is a key factor of how these babies are divided and effects their world from even before they are born. The *Five X More* campaign identifies how black mothers are currently 3.7 times more likely to die in pregnancy and child birth in the UK compared with their white counterparts (Mbrrace, 2023). What I am emphasising through this flattened hierarchy is bringing attention to the ways in which children and babies have influence on the space around them and the adults that they encounter. As Hackett et al (2018) suggest 'children themselves can shape or frame the experience of adults in their groups and change space itself through their place-making activities' (Hackett et al, 2018:574). Similarly, Osgood and Robinson acknowledge that 'very young children engage with the world in curious and unpredictable ways and have much to teach adults about our (human) place in the world' (Osgood and Robinson, 2019:37).

Working with this first reconceptualisation, I will now extend this thinking by opening up a consideration of the body and the embodied multisensorial ways in which bodies are imbricated into babies' experience of the world. This foregrounds the thinking-through-the-body that takes place for babies in their everyday worldly (or worlding) entanglements. I will then move into the surface of the body, the skin, and how this porous membrane breaks down the idea that we are separate entities. Once I have established the nature of bodies as transient and in constant transformation with their environment, I will consider how this makes it possible for babies' bodies to change the space around them in ways that tap into the miniscule, atmospheric and affective threads that make up each mundane or exquisite encounter.

In this black and white photograph, we see the silhouette of a naked toddler stretching their arms wide. Their back is turned to the camera as they face a large UV lamp hanging in the centre of the room. The lamp is encircled by six toddlers, naked except for goggles over their eyes and socks or shoes on their feet. There are two fully clothed nurses also with goggles. One nurse is crouched down to a toddler and the other is stretching her arms out wide producing large shadows on the wall of the small room.

[Click here to step out of the thesis and view this image ¹](#)

The image above is a photograph of ultra-violet light treatment that was used for children with vitamin deficiencies in London during the 1930s. I have included it here as the mixing of bodies, shadows and light creates a merging and separating of entities that influence and are influenced by each other; the mirroring between the nurse and the centre child, the monstrous shadows playing with size and scale of the adults and toddlers as a toddler's shadow looms over the crouched nurse, the slight inhuman edge that is evoked by the goggles and shoes and the feel of the light that touches the skin of the naked bodies and in doing so transforms the body through warmth and vitamins.

We experience the world through our bodies. This is frequently more noticeable in babyhood where encounters are often highly characterised by physical, sensory and embodied interactions; a baby snuggling into the fibres of a blanket, the weight of a baby as they're rocked back and forth, the tangle of mouth and fingers, milk, nipples or dummies. In

¹ I have included the link and description here rather than displaying a copy of the image to follow copyright law. Following the links out to the various websites provides a break from the academic format of the thesis. In following the link I hope this allows an embodied experience of how different knowledge making worlds jar against each other or fuse together to produce something new.

fact, it is possible to consider that babies are often constructed as bodies but in a way that splits the mind and body into binaries as if babies are not yet developed enough to consider them as mind-ful or thought-ful beings. Gottlieb refers to this image as 'biobundles' (2000) when babies are only considered through biology without language, culture or agency. Consider Piaget's focus on the sensory-motor stage that is often presented as a pre-stage that sets a foundation for thinking *later on*. In many ways focusing on the body with babies taps into a construction of babies that is always lesser; lacking in language, reasoning and symbolic reference. MacRae explains how locating thought inside the brain reinforces these binaries where 'the inferior attentional qualities of the body are contrasted with the superior internal qualities of thinking minds' (MacRae, 2020:101). This superiority of the mind is linked to the superiority of language especially where language is considered as the ultimate form of consciousness. MacRae references Sheets-Johnstone in reminding us that a 'language tethered' consciousness assumes that when we are not using language we are 'devoid of consciousness' (MacRae, 2020:45). Babies are a perfect example that contradicts this and MacRae acknowledges the complex ways of knowing that babies have before language. She quotes Viruru (2001) in suggesting 'the discourse of language acquisition is that of increased possibilities, with no recognition of the knowledges lost through this colonising practice' (Viruru, 2001:39). Considering babies through embodiment rather than bodies moves towards an acknowledgement of the embodied nature of knowledge (Murriss, 2016:7) and tunes into a thinking with the body. I propose that research with babies needs an openness to the knowledges that babies utilise in their myriad of interactions throughout the day; those knowledges that Viruru (2001) suggests may be lost as the Western privileging of language, reasoning and symbolic thought take precedence.

In western reasoning the habit of thinking in binaries begins early on as we learn to separate ourselves from the world around us and consider our being as one of individual, independent existence. Murriss (2016) suggests that dualisms are ingrained in western metaphysics as it 'has created binaries that are now part of the structure (including grammar) of the everyday and academic languages we think, feel and live with' (Murriss, 2016:45). This thinking is not universal and has been contrasted by many indigenous philosophers from different parts of the world who suggest a much more connected existence between humans and the natural world around us. Watts (2013), for example,

focuses on the indigenous concept of place-thought and the violence of colonisation that attempts to disregard its existence. Murriss highlights the danger of relying on binary thinking is that it creates 'othering' that leads to discriminatory practices (Murriss, 2016:45) and a hierarchy of knowledge that closes down possibilities for thinking something new (Murriss, 2016:201). In western thinking, posthumanism has begun to emphasise a move away from this binary nature of thought and is moving towards what many indigenous theories have established over centuries. Murriss (2016) suggests turning to posthumanism troubles the anthropocentric nature of binary thinking (Murriss, 2016:45) whilst Osgood and Robinson identify that a flattened ontology associated with posthumanism deprivileges the human by paying equal attention to 'materiality, affect and corporeality' (Osgood and Robinson, 2019:36-37). Thinking in binaries for western scholars is a hard habit to break so with each reconceptualisation we must ask if this rests on a further construction of binary thinking. Where this feels unavoidable, we can at least attempt to be alert to binary thinking and the effects it creates. By turning towards the body what boundaries are being constructed?

One boundary that seems to occur frequently is that, when considering the body, we are often confronted by an image of an individual (adult) human body that is separated from the world around it and through that boundary holds agency over the space that it occupies. A reconsideration of agency helps to counteract this. There is a body of research that argues for a more distributive model of agency that works across human and more-than-human matter. This means that things happen through the myriad of interactions between different (human and more-than-human) bodies. Whether considered through the roles of objects, the event of the encounter or the molecular level of intra-action, this sharing of agency has been conceptualised in different ways. For Bennett objects hold *thing power* (Bennett, 2010); a particular object might exert a fascination for a particular baby, and they enter into an interaction that rocks back and forth. This power is not attributed to fixed objects with an established function from which the child will learn something, on the contrary, objects are not seen as inanimate things to be illuminated by people, but things that gather agency and power in their encounters with others. Ingold (2013) suggests that this is not so much an interaction as a correspondence between bodies similar to a kite and its flier corresponding with the air. Rather than these moments showing embodied agency in the child, that could then perhaps be compared with individual development trajectories embedded in early

childhood curricular texts, Ingold refers to this as *a dance of animacy*. This has been linked to young children's interactions with materials by both MacRae (2019) and Hackett and Rautio (2019). Within each of these models it is possible to see a baby as one of the things within an interaction that connects and contributes to the event alongside other bodies. This active and affective image of a baby places babies as beings that make things happen. This links back to the earlier discussion on space and the suggestion from Lefebvre (2002) that space is produced through, perceived through and lived through the body. If each body is, has and produces space (Lefebvre, 2002:170) then babies' bodies are no different to any other in that they are involved in the space making of any space that they are a part of. In this way babies make space by being there. Think of a sleeping baby and the affects and actions that are brought into being by the act of sleeping. Voices might be lowered, movements around them might be made lighter or smoother, more considered. Consider the term 'nap trapped' that parents use to describe the experience of having a baby asleep on your lap and not wanting, or feeling able, to move, in case their sleep is disturbed. This links with a new paper from Sparrman that describes the active role that a one month old baby held in an ethnographic study whilst sleeping. She suggests 'the ethnographic baby was almost like a giant in the room because everyone close by accommodated to the baby's need to sleep' (2024:4). She includes this as an example of the baby holding relational agency that weaves through Bennett's *thing-power* (2010) and Ingold's *dance of animacy* (2013).

This example emphasises the active role that babies have in making the world around them which fits the idea of babies as agentic. This carries across much of the literature in baby studies. Gottlieb acknowledges that 'passivity is far from a complete description of a newborn's life. Right from the start, infants demand to be accounted for' (Gottlieb, 2000:124). More recently, Impedovo and Tebet, have advocated for a consideration of babies as 'effective, non-passive, social actors, as protagonists capable of expressing themselves in different ways and languages, and active participants in their development' (2021:2002). I would take this further to suggest that babies' agentic capacities do not only have an impact on their own lives but on the different bodies and spaces that they encounter in their everyday entanglements. This tangling of agency disrupts the image of bodies as separate and bounded and so brings attention to where our bodies begin and end. This brings attention to the skin.

This oil on wood painting is made of tiny green and white shapes formed together in the bottom right corner. They are surrounded by a thick green band which is surrounded by a white cascading river-like band. There is a mixture of smooth and sharp shapes in the bottom left and three larger, sharp pointy star like shapes made of circles and points across the top. The image resembles something that you might see under a microscope. In the centre of the squished green and white shapes is a small human figure holding a staff.

[Click here to step out of the thesis and view this image](#)

When a mother holds her baby in skin-to-skin contact after birth, it initiates strong instinctive behaviours in both. The mother will experience a surge of maternal hormones and begin to smell, stroke and engage with her baby.

(UNICEF guidance, online)

Skin is the porous membrane that holds our bodies together. It translates the world through touch and sensation. Pain, heat, pressure and pleasure are all mediated by skin. Ahmed suggests 'the skin that seems to contain the body is also where the atmosphere creates an impression; just think of goose bumps, textures on the skin surface, as body traces of the coldness of the air' (Ahmed, 2006:9). For this next section I consider the outer layer of the body and how this becomes a transient threshold for bodies that merge with the microbes, molecules and membranes of other bodies. If the section above is our body and the section that follows is the air and atmosphere that surrounds us, then this section is the surface that separates the two.

I have illustrated this section with a painting from Cecil Collins (1937) entitled *The Joy of the Worlds*. Inspired by the technological advances of the 1930s that saw the illustration of cells and an interest in molecular biology, this image brought to mind the molecular topology of skin and how skin works as a threshold that protects the body and translates the world into sensory matter. The skin of another person is one of the first things a baby experiences through touch as they are born (perhaps after water, air or latex) through the established practice of skin-to-skin contact. I include the reference to this from UNICEF at the beginning of this section as the scientific language made me laugh but also brings to mind the animality of this process.

Brownlie and Leith (2011) talk about 'the permeability of the infant body in the context of the boundaries – or lack of them – between infant bodies, vaccines and viruses' (2011:203). This work was created in the context of parent's insights into infant immunisation. Though written almost a decade before the Covid-19 pandemic, this relationship between babies' bodies and viruses takes on a new relevance when considered through the live play sessions of this research and the attempts to keep the Covid-19 virus body separate from the babies' bodies that attended the sessions. Brownlie and Leith (2011) associate this unbounded infant body as a sign of intercorporeality such as when parent's share the pain of their babies during the moment of injection when the skin is breached. They show how the troublesome image of mother and child is often used to evidence intercorporeality based on the flows of experience between this relationship. This description builds on a gendered and simplified image of mothers and babies and creates a very dyadic and human centred model of the interactions between bodies. Brownlie and Leith (2011) are possibly conscious of this when they link babies' bodies with feminist post-structuralist Kristeva's work on abjection (1982). They suggest that 'Bodies of infants, like those of women, are experienced as disturbing exactly because '[They are] what does not respect borders, positions, rules' (Kristeva, 1982: 4)' (Brownlie and Leith, 2011:203).

Intercorporeality, borders and containment are blended into discussions on the development of self. Lafrance (2009), for example, suggests that we gain a sense of self as bounded by skin through our experiences of intercorporeality (Brownlie and Leith, 2021). This stems from the work of Bie who also takes the idea of skin as container of self, developed through interactions with caregivers (Manning, 2009). Manning suggests that it is

possible to think differently around skin as a border and instead consider skin as ‘a porous, topological surfacing of myriad potential strata that field the relation between different milieus, each of them a multiplicity of insides and outsides’ (2009:34). Through this description the body becomes mixed up with the matter that surrounds it. This brings to mind Alaimo’s consideration of transcorporeality.

Transcorporeality was coined by Alaimo in environmental science as a way to consider the different forms of matter that flow through human bodies. For example, Kratfl (2020) takes this up to identify the different types of plastics that are present in children’s bodies in the UK. This notion helps us conceptualise babies’ bodies as mixed up in the matter that surrounds them and not as isolated beings. Transcorporeality also becomes a way to make sense of the Covid-19 pandemic and the virus as a body that interacts with others.

Kristensen (2020) outlines this below:

Stacy Alaimo’s concept of trans-corporeality, which emphasizes the physical embodiment of environments or landscapes through unjust social and political processes, gives perhaps the most profound lens through which to understand this crisis. On her account, human and more-than-human bodies are understood as porous and absorbent of one another, and never truly distinct from the well-being of the other.

(Kristensen: online)

Murris (2016) relates transcorporeality not just to matter that cross the boundary of bodies but also to thinking as something that is involved in a process that is more than an embodiment across different bodies (Murris, 2016:7). There are a number of different perspectives that help conceptualise the body, not as a bounded individual entity but as something porous, ambiguous and emergent. This links us back to Manning’s (2009) description of skin that fields the relation between different senses, bodies and sensations. In studies of childhood, Blaise and Pacini-Ketchabaw (2019) show how Alaimo’s transcorporeality helps shift attention away from the child as an individualised body to something that is overlapping and entangled with others (Blaise and Pacini-Ketchabaw, 2019:116). They show that transcorporeality helps move away from developmental expectations and common binaries and encourages ‘the unknowable, blurry and indistinct

relations between the human and more-than-human world' which refuses 'binary logic, boundaries and closures' (Blaise and Pacini-Ketchabaw, 2019:116). I propose that transcorporeality is a useful idea to think with when considering the physical nature of babies' daily lives. The research that has moved closest to considering babies in this way is Boyer's (2018), which has related the idea of inter-corporeality, which has similarities with transcorporeality, to breastfeeding and the agentic capacities of milk. I propose that considering babies as transcorporeal bodies emphasises how babies are a part of the environment that surrounds them. In a very literal sense babies are a part of the space and are in constant transition with their environment.

Air

The Distance I can Be from My Son is a video installation by Lenka Clayton where she attempts to objectively measure how far she can be from her toddler in a range of environments. [You can watch these experiments here](#)

I emerge from the tissues of ancient rocks and the breath of the first volcanoes. I dwell in the bodies of waters, forests and cities, breathing through micro and macro words. At the dawn of earthly existence, bacteria were the first to harness the sun's energy, pumping out oxygen, changing my composition, and the atmosphere of our planet permanently. (...) I pulsate in the veins and flesh of animal and plant species. My green companions inhale me as a gaseous carbon, exhale me as oxygen, and water as a dressing. They grow from me, they transform me, they filter me. Tiny bits of matter, the dirt of smoggy cities leave my body and disappear in the lush foliage of my green guardians. These magnificent trees feed me and feed you, as I feed them and I feed you.'

Transcript from Bubla's (2024) *Breathing*, a sound installation as part of *Designated Breathing Zone*.

The first text above refers to a collection of films from artist Lenka Clayton as she plays with the distance that she can allow to build between herself and her toddler in different environments. I was initially drawn to the movement of the toddler as it spurs an instant and physical response from the adult. When we think of distance it is often an empty stretch between two entities, a vacuum, but when we think of air and atmosphere, we realise that space is thick with stuff and our bodies are one part of this. The transcript from Eva Bubla's *Breathing* installation brings my attention to all the things that we wade through when creating distance between two bodies. In considering these two art works together the intensity of atmosphere carried through the air plays with the stretching distance.

Considering transcorporeality brings to mind the stuff of the air that Bubla makes so visible and the constant entanglement of relations that happen around us and through us. Barad (2007) uses quantum physics to show that 'edges or boundaries are not determinate either ontologically or visually' (Barad, 2007, cited in Murriss, 2016:55). This has influenced a number of new conceptualisations of the body highlighting ways that it is interwoven with its environment. In the previous section we identified the idea of bodies as transcorporeal. Moving the focus away from bodies, Alaimo (2010) uses 'trans-corporeal space' (Alaimo, 2010:22) to visualise the constant flow of connections that happen through the material world. She suggests that 'the human body is radically open to its surroundings and can be composed, recomposed, and decomposed by other bodies' (Alaimo, 2010:24). Bodies in this sense are not just those of human bodies but any entity that can be physical or otherwise. As well as suggesting that all bodies are porous and intermeshed which informs my understanding of skin in the section above, this also brings about an understanding of the spaces, environments and air that we inhabit. She shows that 'humans are not only interconnected with each other but with the material flows of substances and places' (Alaimo, 2010:24).

Moving attention to the atmospheres that we inhabit brings into focus the ways that babies experience and produce the world around them. Manning (2009) offers a challenge of the body as containment through the sharing of Stern's vitality affects. Stern suggests that 'vitality takes on many forms and permeates daily life' (2010:4) but is often left unnoticed. He suggests considering vitality through dynamics such as surging, fading and fleeting (2010:7) and relates these to dynamic qualities of movement that babies learn to attune to

before moving on to develop verbal language. Stern's immersion in the world of development psychology and the frames of thinking that form the fabric of this approach make it a strange choice to include within this thesis given that this paradigm holds some of the dominant thinking on babies and babyhood that I intend to resist. Stern's vitality affects have been a useful concept to think with throughout this research and appear across the thesis. In Chapter eight I will address how attending to this contradiction in epistemologies adds a generative quality to the theories that I work with through Puar's (2012) suggestion of 'frictive thinking.' As this is the first mention of Stern in the thesis it seemed appropriate to point out that I am aware of the oddness of this inclusion. Manning is a key figure in bringing attention to the generative thinking that is produced by attending to vitality affects through contrasting theories. Manning uses this work to illustrate how babies are part of the on-going creation of worlds which goes against the malleable image of babies that is often reproduced:

The infant is not a passive slate (or a proto-container) into or onto which the world can be written. The infant is itself an emergent experience, an individuation of interweaving strata active in the creation of ontogenetic worldings.

(Manning, 2009:37)

It appears that Manning's description of babies' involvement in the on-going creation of worlds is part of an affective worlding that takes place for babies across the air and atmosphere that they find themselves in. Considering babies' actions in this way has led me to suggest that babies' ways of knowing are mixed in with the atmospheres of a space and taps into a knowing that affirms sensing and affect. Knowledge is made and shared through and with the air that surrounds us.

Stern's suggestion that babies relate to the dynamics of a space connects babies to the atmospheric affects that circulate. In this sense they are experiencing the world through Stewart's description of ordinary affects. Stewart describes these as 'the varied, surging capacities to affect and to be affected that give everyday life the quality of a continual motion of relations, scenes, contingencies and emergences' (Stewart, 2007:1-2). Throughout Stewart's writing there are on-going threads of dynamic qualities and the capacity of attunement that happens across space. In her discussion of atmospheric attunements she

asks 'How do people dwelling in them become attuned to the sense of something coming into existence or something waning, sagging, dissipating, enduring, or resonating with what is lost or promising?' (2011:445). She emphasises how this attention to dynamics becomes tangible in sensory and material ways whilst continuing to be abstract, imagined and uncontainable (2011:445). She states 'they have rhythms, valences, moods, sensations, tempos, and lifespans. They can pull the senses into alert or incite distraction or denial' (2011:445). This is not a sharing of atmosphere that we all experience in the same way but a sharing that we are all involved in which might be experienced differently depending on the different sensations that these ordinary affects have on individual bodies. I refer again to Ahmed's atmospheric walls (2014) as a reminder that race, gender and power are always a part of these encounters even with babies. Considering the experience of affective atmospheres for adults and babies I apply this to the idea of vitality affects. For babies, these dynamic creations of atmosphere, often unacknowledged or unnoticed by adults, veiled by an attention to language and what can be described, is more acutely experienced by babies as sensations, rhythms and tempos that surge through and across the air that they breathe. I am convinced that one aspect of how babies experience affect is a high sensitivity to miniscule actions and movements and that these can become a part of broader narratives. Stewart describes ordinary affects as 'public feelings that begin and end in broad circulation, but they're also that stuff that seemingly intimate lives are made of' (2007:2). This description seems to bring to mind the intricate, small-scale actions of babies alongside the dramatic and long reaching affects that can be produced by a baby's loud cry in certain spaces. Through these connections I find that ordinary affects resonate strongly with babies' ways of knowing as it focuses away from definition and meaning. Stewart suggests that ordinary affects 'work not through 'meanings' per se, but rather in a way that they pick up density and texture as they move through bodies, dreams, dramas, and social worldings of all kinds' (Stewart, 2007:3). This is at the heart of how babies affect and are affected by the space around them.

Considering atmosphere through Ahmed's (2014) observation that atmospheres are felt differently depending on how an atmosphere is angled, or how what might be felt as an atmosphere is entered into, is a reminder of how it is impossible to fully describe how others

experience a shared space. With this in mind I will move onto the next reconceptualisation of babies that pays attention to the unknowability of babies lives for adults.

Reconceptualisation 2: Babies are never fully knowable

This two-page spread shows three consecutive illustrations of a baby riding on the back of a large Rottweiler. In the first image they skid across the carpet knocking things flying. In the second illustration they come to a fish tank and in the third image the dog holds the baby up by the shirt, in a way a dog would carry a puppy, as the baby takes a swim in the fish tank.

[Click here to step out of the thesis and view a video of this almost wordless picture book](#)

The illustration above is from the children's book *Good Dog Carl* by Alexandra Day in which the baby and the dog enter into a series of adventures unbeknown to the parent who returns home none the wiser. The book plays on (an adult's interpretation of) the secret life of babies and animals that adults are unaware of and shows the baby in places and activities that would not usually be made available to them. I have included this book here as it playfully illustrates the parts of babies lives that adults are not involved in and will likely never know about or, in terms of risk and danger, would likely change if they were to become known. This provides what Impedovo and Tebet refer to as 'a child's perspective beyond the adult-centric vision' (2021:2001). I think the mischievousness of this story also taps into what Acevedo-Rincón and Tebet (2021) refer to as 'baby creativity' where babies develop their own ways of doing things that differ from adult's intentions. They suggest 'babies create in their own ways of exploring space and materials, often running away from what was initially proposed' (2021:474). When we move on to explore specific events within this thesis it will become evident how this baby creativity was continuously present in the baby play sessions where babies would find their own fascination with things other than the

sensory materials laid out for them. The corner of the playmat, the pattern of the carpet or the various sheets of paper with information intended for the parents all were involved in sensory engagements whilst the bubbles, sensory lights or coloured spaghetti were often discarded by their side.

Thinking about the unknowability of babies' experiences for adult researchers has crucial implications for participation and ethics within research. This will be considered in more detail in Chapter five which will build on this idea of unknowability. This lack of expertise for the adult researcher when working with babies has been acknowledged in existing literature in baby studies. Impedovo and Tebet (2021) recognize the limits of an 'adult-centred vision' and the unpredictability of babies' actions. In response to this, they suggest that close observation of children can build an understanding which takes a different approach to the methodology that I will advocate for throughout this thesis. Bradley and colleagues (2012) talk about adult researchers as ventriloquists for babies' voices questioning the idea of voice all together. This corresponds with Holt and Philo's (2023) suggestion that babies are non-representational (2023:819) which they deduce from the fact that babies aren't using verbal language. It is worth remembering that this relies on a very specific idea of language and Impedovo and Tebet show babies use 'many other languages that adults do not deal with' (2021:2002).

By rejecting the developmental discourse which is 'predicated on the idea that we can/do 'know' the child' (Osgood and Robinson, 2019:37), and attending to the encounters of the everyday, the concept of babies and babyhood becomes visible in diverse, messy and complex encounters with the material world. By attending to these moments, the concepts of babies and babyhood becomes diverse, messy and complex in themselves. This is only possible by making space for uncertainty, curiosity and speculation and letting go of the image of the researcher as the all-knowing adult and the baby as fully knowable. Osgood and Robinson (2019) suggest that resisting the temptation to be the expert 'makes space for alternative knowledges to be produced' (Osgood and Robinson, 2019:37). This plays into an understanding of participation that I will focus on in Chapter five but it can manifest in a number of different ways. It might be about leaving space for babies to make their own knowledge and allowing them to decide what knowledge they share with us as researchers, it might be about letting go of the temptation to interpret babies actions in ways that make

more sense to us as adults or it might be about rethinking how we document our own experiences with babies as part of our own research encounters. Posthuman researchers in early childhood have tried to illustrate the unknowability of young children in different ways. Murriss (2016) applies the example of a student teacher who draws 'this is not a child' linked to Magritte's well-known piece of art 'this is not a pipe.' Murriss explains that the student 'made the drawing because it is so difficult to capture or pinpoint what it means to be a child' (Murriss, 2016:45). Bradley and colleagues suggest that a position of unknowability becomes an ethical stance that takes in the 'optics of impossibility' (2012:142) which is a necessary move if researchers want to consider babies as genuinely human. Within this they apply caution both to the ideas of self and other and what is knowable or unknowable, suggesting that these concepts still rely on a construction of dualisms. This plays into how researchers consider participation within research and will be discussed further in Chapter four.

Returning to those knowledges that Viruru (2001) suggests may be lost as language, reasoning and symbolic thought take precedence, it is important, as adult researchers, to consider what these lost knowledges might mean for research and particularly representation. This knowledge that is lost can be considered through the inability to fully know a baby's experience as adults as we no longer see the world through the same references. Gottlieb (2000) suggests that this lack of a variety of languages in adults leads to meaning being lost in translation. She suggests that babies are often driven to communicate, but that 'adults are too unenlightened to understand these concepts' (2000:125).

If researchers move away from attempting to represent or fully understand the experiences of babies, this leads to questioning what is the purpose of conducting research with babies if they can never be captured and understood in the ways that research traditionally intends. To answer this would mean to define what the point of research is. In this case, I propose that acknowledging the unknowability of babies as adults re-angles the purpose to consider what we, as adults, can learn from spending time with babies and how does this position us to see and make the world differently. Considering the ways of knowing that are lost as we allow language and reason to dominate, a different perspective would be to consider that these baby ways of interacting and thinking with the world around us continue into adulthood yet go under the radar of what is valued or acknowledged. As Stern suggests, the

vitality affects that I mentioned briefly in the section above, do not disappear as we become adult but become non-conscious and experienced through an implicit relational knowing. (2010:111). Though coming from a development psychology perspective Stern admits that the development of language interferes with this way of knowing but that this is rarely acknowledged within this field. In his own words the arrival of language comes to 'mess it all up' (2010:110).

The ways of knowing that I am interested in are ways that foreground the affectual and the minimal, the atmospheric and the agentic, the more-than-human and the uncategorisable. Perhaps by tuning into babies' interactions with the world we can begin to recognise a different way of being in the world for all of us, a way that is on the edge of perceivable but none the less present in our own daily encounters. Bradley and colleagues suggest moving away from voice and perspective which they describe as tied up with a 'binary logic of identity' (2012:141) and suggest that paying attention to Deleuze and Guattari's ideas of assemblage, event and lines of flight supports research with infants. In this proposition I find an alignment with the suggestion from Kroeger, Persky and Osgood in their discussion of (un)knowing "toddler." In summarising the different authors of their special issue they suggest:

Authors implore us to move away from knowing "things" about toddlers (and interrupting them or answering for them or exerting force on their bodily autonomy), and rather, move our own adult bodies, and thinking capacities, into a space of relating differently (with uncertainty) in adult-child relations as their teachers, researchers, and policy makers.

(Kroeger, Persky and Osgood, 2022:311)

Through this reconceptualisation it is necessary to move to a more speculative thinking that acknowledges certain future possibilities yet does not depend on a representation of how babies' lives are lived. These are unrepresentable and any attempt or claim to this knowledge creates an unstable grounding for the research. Hackett and colleagues (2018) identify the methodological shift that this statement requires to something more improvisatory and the far-reaching implications that this entails:

advocating for improvisatory practice is a political position, standing in opposition to generalisable notions of 'quality' with regards to early childhood education, and to assumptions that 'the child' could ever be fully knowable through western scientific study.

(Hackett et al, 2018:484)

In Elwick's (2020) discussion of children as wild beings she retells astronaut Chris Hadfield's story of seeing the earth from a distance and feeling an overwhelming 'collective sense of us' that many astronauts have experienced. She shows how this collective sense resides in 'the notion that we are always already immersed in relationships with those *with* whom we haunt a single, present, actual locale' (Elwick, 2020:153). Yet she acknowledges through Merleau-Ponty's Wild Beings that 'this does not mean that we live the life of others' (ibid). It is the balance between a shared and entangled present alongside the unknowability of others that drives this methodology. Considering babies as wild beings moves into the final conceptualisation of this chapter which takes in the idea that babies are somehow more-than-human.

Reconceptualisation 3: Babies live on the edge of human

his mother called him "WILD THING!"

and Max said "I'LL EAT YOU UP!"

(Sendak, *Where the wild things are*, 1963)

In *Where the wild things are*, by Maurice Sendak, the small boy, Max, wearing a white wolf suit with ears, whiskers and a giant furry tail, is sent to bed without supper for making mischief. In his room a forest grows, and an ocean appears with a boat that takes him away to where the wild things are. Halberstam (2020) offers a beautiful analysis of how this book works with ideas of wildness, making and un-making, refusal, power, smallness, space and temporality. He suggests that Max has a 'refusal to observe the proper distinctions between humans and animals and between different kinds of animality' (2020:4). Halberstam sees

the wild as ‘a challenge to an assumed order of things from, by, and on behalf of things that refuse and resist order itself’ (2020:3). This resonates with Dyer’s suggestion of queering that encompasses ‘all that is deemed strange and unruly’ (2019:5) and can be found in ‘an objects veering away from expectation’ (2020:5). This resonance brings Halberstam’s wildness to the queering that I propose is enacted by babies in daily spaces. Halberstam highlights a space that I will suggest in this section is one that is often occupied by babies; a threshold space that dwells between human and the more-than-human. He suggests that *Where the wild things are* ‘questions the hierarchies of being that have been designed to mark and patrol the boundaries between the human and everything else’ (2020:5).

The final reconceptualisation that I propose rests on the idea of babies as somehow living on the edge of human and in doing so accessing more-than-human elements of the world that adults tend not to notice. I propose that this is partly related to the ‘baby’s creativity’ that Acevedo-Rincón and Tebet (2022:474) refer to where babies develop their own ways of doing things that differ from adult’s intentions. In my experience, babies seem happy to immerse themselves in entanglements with textures, sounds, movements and spaces that adults have little interest in and will follow these interests where possible, even when more intentional objects such as toys, books and baby centred materials are closer to hand and being given the focus from the older people in the room. I am not suggesting that babies have no interest in other babies, older children, or adults, as there are myriad ways that babies find delight, succour or comfort in other human bodies. Throughout the making of this research there were countless moments where babies interacted with each other, or with the adults of the space, in interesting ways. I would suggest that my interest lies in the impression I am given that these moments do not take priority over their interactions with other, more-than-human, bodies.

My proposal that babies live on the edge of human stems not only from the things that babies do but the ways that babies are considered by others. In the 1980s, Riley saw how developmental psychology’s fixation on the child’s journey from a biological being to a social being was often considered as an ‘adaptiveness to being human’ (Riley, 1983:19). She suggests that this was through an insistence that human infants were in some way different to infants of other species but that this process of adaptation ‘is invoked as if it accounted for some passage by the infant from a prehuman state into a full humanity’ (Riley, 1983:19).

In this way babies are often constructed as barely human. This is an idea that Holt and Philo (2023) have taken further in their proposition of babies as 'barely human life' (Holt and Philo, 2020:819). They discuss the characteristics that make something or someone human. They suggest that babies inhabit a unique space where they are accepted into the human sphere but constantly display characteristics that are not considered as human. They suggest 'these tiny humans occupy the boundary between the human and non-human' (2023:821). A clear example of this is the definition of humans from other animals as being able to 'walk and talk' but both of these, taken in the literal sense, are not present for newborn babies and does not take precedence for a considerable amount of their babyhood. Within this, babies also possess qualities that may be considered as more 'animalistic' which places them on the edge of human. For example, Stern (2010) identifies that babies possess a highly sensitive sense of smell and have the ability to detect their own mother's milk from others (2010:205). These abilities to interact with and sense the world in ways that are no longer available to adults may be part of the lost ways of being that Viruru (2001) refers to when we focus on developing particular (colonial) forms of communication and logic.

Working from a similar perspective, Arculus and MacRae (2022) identify how children are often constructed as less than adult and therefore, based on the idea that human is based on a model that is fully adult, toddlers and babies become constructed as less than human. They link this to a history of childism and the developmental image of childhood that shows how we present what is identified as human. To counter-act this narrative they introduce the concept of the toddler as 'more-than-Adult' (2022:209). I think this is a strong concept to bring as a reminder of all the aspects of communication, sensory engagement and ways of being that disappear as we become adult.

A consideration of babies as living on the boundary of human or presented as more-than-human is not a new phenomena. Consider the Olmec babies from the previous chapter from the first civilisations of Mexico. These small figurines were often created with animal like or plant-like qualities such as fangs and claws or sprouts erupting from their bodies in an embodied connection between babies and agriculture. Babies have often been considered in ways that are somehow out of the human sphere. In some cases, historians have suggested that this was often a way of dealing with the trauma of early infant death. This was a high

risk for new babies in many historical cultures across the world and still is in areas with limited or inaccessible health care.

These considerations of babies and toddlers as more-than-human, more-than-adult or living on the edge of human create interesting ripples that begin to have a queering effect on our own understanding of what it means to be human and the odd things that we do in certain spaces. This brings us back to Sendak's space of wild things and in finding such spaces, Halberstam notes that 'we can decide whether to answer the call to stillness or whether, instead, to start the wild rumpus' (Halberstam, 2020:6). Spending time with a baby in different spaces and paying attention to the different spatial entanglements, through an awareness of our human centric activity as adults, brings out our rather limited use of space and our lack of active engagement with the more-than-human around us. Horton and Kraftl (2006) have noted how our experiences of space are always 'personal, partial, individual, subjective and contingent' (2006:84) and that some of the things that our experiences are contingent on might be not knowable or sayable. Our experiences of spaces are haunted by our own bodies, habits and pasts (2006:85) whilst always overladen with myriad different things in any given space. I suggest that the ways in which babies occupy the more-than-human provides a queering that make these elements of space, that are unknowable or unsayable, briefly visible if only for a moment. As Tebet and Abramowicz propose: 'babies make us look at what is not so readily visible, such as nonverbal ways of communication and relationships, or what is commonly overlooked, such as care related to the body and its processes' (2016:5). Holt and Philo (2023) suggest that this process becomes visible through the friction that is created through babies' defiance of what it means to be human. They suggest that babies 'hold resistance and friction that risks undoing that neat subjectification as 'human'' (2023:821). I suggest that resistance also applies to our adult understanding of research, methods and knowledge making. In a similar way to the experiences of the pandemic, that created a queering of our daily actions and spaces, spending time with a baby can build knowledge that is not so much about how babies experience the world but about making visible and making changes to our own ways in which we inadvertently make the space around us.

Moving into methodology

Over the last three chapters, in a mini trilogy of the theories that influence constructions of space and babyhood, I have delved into different perspectives on babies and space and hinted at some of the ways in which these different theories intercept and influence each other. I have outlined space as messy, multiple, embodied, subjective, social, political and historical. I have drawn different considerations of babies from media, politics, history and economics. Through these different threads I have pulled out three reconceptualisations of babies that I offer as essential in carrying out research with babies. Outlining these key concepts has already started a path for how a methodology would work within these particular ideas of space and babies and what implications these might have on the purpose and practice of research going forward. The next chapter takes these ideas further and outlines the methodology that emerged within this particular piece of research.

In the next chapter I will move further into the methodology and method of this research which I propose as a 'tentative ethnography.' I will keep the threads of the three reconceptualisations visible as they pull through the methodology. This will draw out the anchoring quality that they have provided for me through the different directions and turbulent changes that occurred in the doing of the research through the all-encompassing pandemic.

Chapter 5: Tentative ethnography: babies as methodological agents of change

Babies disrupt how we, as researchers, think about research. I propose that research with babies requires tentative steps, an openness to the unknown and a dedication to the affective atmospheres that build across human and more-than-human bodies. This chapter will detail the methodology of this research, which I refer to as a tentative ethnography, with particular attention to how this emerges from the three reconceptualisations of babies that I have outlined in the previous chapter. These reconceptualisations are that (1) babies are mixed with the world and make things happen, that (2) they are never fully knowable to adults and that (3) they live on the edge of human. This chapter applies these three key

ideas to what babies do to research and how research can take account of babies' entanglements with space. The discussion focuses primarily on considerations of participation through methodological and ethical implications ensuring that the three key ideas are kept visible. I will show how this methodology emerges through a loitering of both human and more-than-human actants and follows a shift in thinking on what counts as participation. Drawing on writing from Braidotti's nomad, Springgay and Truman's propositions of research-creation and Deligny's commons I will outline how this tentative ethnography leans into the queering that babies enact on our habitual ways of thinking and doing.

Ethnography, risk and the ask of others

I am cautious to align my method with ethnography. Ethnography has its roots, both historically and epistemologically, in colonisation. Tuck and Yang (2014a:227) have shown how ethnography, amongst other social science categories and disciplines, works to maintain logics of domination and plays into how ethnography is still used in the present (2014a:228). They show how the colonial nature of ethnography is not just a part of its global history but linked to Cartesian philosophy that aligns the 'right to know' with 'the right to conquer' (2014a:224). This imbalance of power in ethnographic research is not easily overcome. This is a widely debated issue and some researchers find ethnography unthinkable through fundamental issues with notions of transparency, saturation and being able to fully know the other. Deloria (1988) for example, states that anthropology, and therefore ethnography, is based on a premise that 'people are objects for observation, people are then considered objects for experimentation, for manipulation, and for eventual extinction' (Deloria, 1988, cited in Tuck and Yang, 2014b:811). Alternatively, there are researchers that argue ethnography can be done in a more caring and equitable way, such as Campbell and Lassiter's (2010) Collaborative Ethnography, or in ways that attend to the complexities of embodied knowledge making such as Sarah Pink's Sensory Ethnography (2009) and Kathleen Stewart's (2017) slow ethnographic practice.

Though evidently problematic, ethnography continues to be a popular research method (Gherardi, 2019:741, Mellander and Wiszmag, 2016). Osgood and Robinson (2019) highlight

how ethnography is well established within post-structural feminist research so that the 'material and affective are omnipresent' (2019:6) yet the emphasis of these tend to cater towards a focus on the human subject through observation, data collection and textual accounts. Due to the nature of ethnography, it is easy for these deep-rooted ideas of representation and knowledge making to re-appear. This is why I apply caution and suggest a tentativeness, not only to the space and actions of research but in the application of ethnography in itself. There are, however, considerations of ethnography that feel generative when considering babies and space. Mellander and Wiszmeg (2016) suggest ethnography is built around a closeness, not just in proximity to the research space but a closeness within emotional encounters with participants and an immersion within the data and stuff of research (2016:94). Through this closeness ethnography can no longer be considered as a detached record of observation from an untainted world but becomes an interference that puts participants and researchers 'at risk' (2016:95). This links to Elwick's idea of research with young children as built on moments of relationality and vulnerability where the potential to affect and be affected by each other form the starting point of inquiry (2020:150). This entanglement of relations, and the risk that is produced, creates a need to be in constant navigation through 'articulation, conceptualisation and re-configuration' (Mellander and Wiszmeg, 2016:95). I suggest that it could be this closeness and unsettled nature that brings about a generative quality to being in a space with others and a heightened sensitivity to this holds potential for a respectful and tangible way of working.

The pandemic was characterised by constant renegotiation. Coupled with the acknowledgement that closeness, in a physical sense, was often a risk in itself throughout the research. As I have outlined in Chapter one, the children's centre team and I built spaces that attempted to reduce the possibilities of the Covid-19 virus passing from one person to another. Families could share space in a large room but distanced from each other in separate baby nests or could share virtual space whilst distanced even further apart. With this distance came strange intimacies like seeing the inside of people's bedrooms on Zoom screens or standing on their doorstep as we handed over the sensory play gifts. The restrictions also placed babies and parents in an even more close proximity to each other than the usual closeness that comes with a newborn baby. Whereas a play session might previously have brought opportunities for babies to experience the bodies of others –

perhaps as things to cuddle, as things to balance with or things to hold on to - the restrictions meant that each family had to stay fixed together. The inability to offer yourself to hold the baby while their parent nipped to the loo or reach out for a baby as they pushed their body towards you in a pre-crawl lumber, all worked to reify the closeness of the mother-child bundle that so easily becomes the norm.

Risk also felt evident in what I and the children centres could offer to families. We would often only plan for the next few weeks ahead and could never give a definite answer at the end of a round of sessions as to what would happen next. This precarity and constant renegotiation played into the ethical dilemma of what we ask of others for the sake of research. This was made particularly visible by the pandemic and the additional stresses that this caused to families. During Covid-19 many researchers working with families paused to ask if it was right to continue research (Faircloth et al, 2022, Garthwaite et al, 2020). For many new parents the pandemic was a time of anxiety, fear, guilt, helplessness and confusion alongside the usual sleep deprivation and the breathtaking loveliness of holding a sleeping newborn babe. To consider inviting families in the middle of all this to be involved in research would be inappropriate and lacking in sensitivity (Garthwaite et al, 2020:online) without a careful reconsideration of what the research is and what it can be for families.

Covid-19 brought with it new considerations where straight forward ethical assumptions were turned topsy turvy. For example, even if we could create a space that limited any risk of transmitting Covid-19 to others, we still had to consider the risk of travelling from homes to venues. For example, by encouraging families to attend a physical session at the gallery in the city centre we could put the families and communities at risk of increased infection rates. The journeys that families would take to the gallery could involve walking through, and contributing to, busy crowds in the city or using public transport. These were areas known at the time for contributing to the rise in Covid-19 cases.

On the other hand, considering the existing relationships between the university, the gallery and the children's centres, the option to wait until the pandemic was over rather than do something that supported this network and the families that they were positioned to support during a difficult time would ignore the existing responsibilities that were already written between these spaces. As a post-graduate research student, it is possible to consider my role in the research space as fairly minor and with little influence; a small part of an on-

going, well established relationship between larger institutions. The beauty of doctoral research is that it allows a certain amount of autonomy and it was this that allowed me to acknowledge myself as already entangled with the space of the gallery and the work of the multi-professional team and continue this lasting responsibility into the pandemic. By making practical changes such as moving the research out to the children's centres, which were both based in residential areas and catered for local families in walking distance, we could find ways to work that attended to the comfort and safety of families.

From a methodological standpoint, researching in the crux between the pandemic and the queering effect that babies can have on our habitual following of the norm, positions the researcher as a nomad. As I outlined in Chapter one, my nomadic role that swayed between the children's centre, the gallery and the university without residing directly in either place, was part of the specific conditions that produced a tentative approach. This multiple belonging brings to mind Braidotti's discussion of ethics as an intersection of situated responsibilities (2006) where the turbulent and unsettled environment of researching within the pandemic produced multiple layers of responsibility. This has underpinned my understanding of ethnography as responsive to emerging spaces and interdependent bodies.

Ethnography, established at the heart of qualitative methodology, is often described as a tool to help understand experiences of others, relying heavily on the use of descriptive language to add detail and in-depth images of practices, places and people. Geertz (1973), for example, advocates for 'thick description' and ethnography has developed along with technology to include film, photography and sound recordings in an attempt to capture what is real and recreate it as data. When applying this intention to capture and understand the experiences of babies I have already established through the reconceptualisations of this research that it is not possible for a grown adult to fully understand how a baby experiences the world. Elwick, Bradley and Sumsion (2012), for example, have shown the difficulties, or even impossibilities, of researchers acquiring an understanding of babies' perspectives, specifically within non-parental care, and in some cases have asked whether it is even possible to consider that babies' experiences relate to a specific perspective as such. This does not mean that the research is pointless but that its intentions need to shift to something that aligns with this way of thinking. For Elwick and colleagues, this resolution is

found in suggesting the basis for research with babies should be an ethical, rather than epistemological practice (2012:196). Through these layers of ethical and responsible practice I suggest an ethnography built on tentative moves within a space of interdependence.

Tentative ethnography

On first glance, the nature of ethnography presents a well-suited method for research with babies. Ethnography provides a way to follow babies' interests and observe babies in their everyday spaces without reliance on words or direct explanation. This method has been taken up by many of the recent studies on babies and babyhood (Ornmalm, 2020b, Gottlieb, 2000 and so on). The key to this style of ethnography is often hooked on 'being there.' Geertz (1998) uses the term 'deep hanging out' to present participant observation as an immersive practice where the researcher spends a considerable amount of time with the community that is being researched and gets involved in the day-to-day activities rather than standing back and attempting passive observation. The ability to 'be there' within this research was flawed by the pandemic and the impossibility to share physical spaces with others. The challenge of ethnography across virtual space is not a completely new concept and has been developed by researchers such as Kozinets (2019) who proposes a method of virtual ethnography which he refers to as 'netnography.' Working online, however, was not the only influence that played with this idea of being together. Once we could share spaces, both virtually and physically, this didn't automatically create a strong ground for ethnography. My work with the babies at the two children centres hesitated quickly as I found that the traditional methods of observing then recording information and turning it into data became flimsy and ineffectual. Attempts to describe what the babies were doing in writing, or capture their experiences in film or photography, felt awkward and I became aware that it was not just the method of capture that was inappropriate but that the nature of ethnography did not sit well with my experience of sharing space with the babies and their families. The model of deep hanging out that Geertz (1998) describes still relies on the ability to then somehow understand or know what is happening in these spaces through participation and to document this knowledge through the abstraction of some sort of data.

Continuing the belief that it is not possible as adult researchers to fully know the experiences of babies, or, as Glissant argues - accepting the unknowability of others as a characteristic of all beings that iterates in perhaps more tangible ways between adults and babies - this means that an ethnography with babies must start from a position of accepting this unknowability. No measure of time will reveal this knowledge to the researcher. Somerville and Powell (2018) merge the concept of deep hanging out with 'curious practice' (2018:829). They take this from Haraway's (2015) understanding of the term where research becomes a 'thinking-with' that takes place between human and more-than-human bodies so that 'everything, especially the very mundane and every day, is regarded as fascinating and thought provoking' (2018:1). Taking 'thinking-with' (Haraway, 2015) as a mode for ethnography with babies sparks a host of ontological, epistemological and practical questions. When conducting research with babies, communication, reciprocity and relationality (amongst other things) differ from most experiences with older children and adults. As discussed in the previous chapter, this difference could be considered through Viruru (2001) or Stern (2010). This difference could be related to Viruru's (2001) lost qualities that disappear as we acquire literacy. Or, rather than considering these qualities as completely lost, we could take Stern's suggestion that vitality affects, a sensitivity to the dynamics of liveliness and movement, is still present in adulthood but continues under the radar as we move our attention elsewhere. Rather than thinking of research with babies as different we can consider how paying attention to our interactions with babies draws our awareness to different relationalities that are present in our engagement with others. Taking this into account produces a rethinking of any method and breaks down habitual thinking on how to do research. Through these considerations the babies become agents of methodological transformation and pose the question – what can babies do to method?

Just as you would have to rethink an interview with a baby to account for non-verbal communication and envision a whole new model of transaction for questions and answers, an ethnographic study can also be reworked into something more open, careful and respectful. Orrmalm (2020b) has already articulated how working with babies directly changed her understanding of ethnography and altered how she went about her research. She outlines how the babies' engagements brought an awareness of the embodied and sensory elements of the research which 'unsettled' her planned methods (2020:3).

Considering ethnography through research with babies questions the purpose and nature of ethnography and brings about potential for a new way of conducting this method. This questioning of method becomes relevant, not only to work with babies, but to any ethnographic study that attempts to hold a respectful and generative space with participants.

Tuck and Yang (2014a) suggest that it is important to ask 'What does social science research do?' They suggest that considering this question pedagogically is not about finding an easy answer but providing a space for generative conversations that lead to something meaningful (Tuck and Yang, 2014a:225). After initially considering ways to improve the methods of data collection, I stripped back the layers of what I was doing to ask the much-needed question - What is the point? In this case, what is the purpose of practicing ethnography? And why is this the right thing to do with these babies? By opening up these questions of purpose I have found guidance in a post-qualitative thinking that moves from an individual search for understanding and representationalist logic to a more relational model of knowledge making that I suggest corresponds to the affecting, unfolding and unsettling ways of babies.

What babies do to research

A handful of researchers are finding new ways to research with babies that resist the binaries and representational logic that dominate existing research (Elwick, 2020, Orrmalm, 2020b). Elwick (2020) relates research with very young children who are not yet speaking to the astronaut Chris Hadfield's description of 'a collective sense of us' (2020:149) that is felt when looking at Earth from space. She shows how considering research with babies as a 'collective endeavour' starts with the entangled connections that arise in the research rather than a dichotomous logic of self/other, child/researcher. Elwick suggests that considering research as a more collective endeavour makes space to be open to 'moments of wonder' where unexpected happenings can open up new thinking. She relates this to MacLure's (2013) description of wonder as an entanglement and disruption where wonder might act as a jolt from the mundane (MacLure, 2013). The methodology described in this thesis has been shaped collectively by the people, places and things involved. All of these aspects have

changed since the initial conception of the research. The eventual layout of the study is almost unrecognisable from the neat research design that was carefully planned back in 2019. Each change (such as the temporary closure of the gallery, the move from a large-scale interactive art installation to a small bag containing a handful of objects, the additional pressures on members of staff, and so on) required a sensitivity and a flexibility that rolled with the different needs and desires. In attending to these changes, the methodology has been gradually moulded as the ocean continually reshapes the sand on the shore. Though it is possible within traditional research models to consider each twist and turn as failure to deliver the original design, it is precisely the changes in circumstances that have become its strength. Orrmalm (2020b) applies Law's (2004) suggestion of method to her work with babies as a way to work with those moments where babies have unsettled her methods and role as researcher. Law suggests that method is a 'slow, uncertain, risky and troublesome process' (Orrmalm, 2020b:3) that requires us to unmake our expectations for security. St. Pierre, in her conception of post qualitative inquiry, suggests that research is immanent: 'It never exists, it never is. It must be invented, created differently each time' (St Pierre, 2019:6). From this thinking I have taken an understanding of method and methodology as not static but fluid.

In 2015, a collection of researchers experimented in the darkness of an Autumn forest as a way to disrupt their use of habitual methodologies (Anderson et al, 2017). In their discussion of the experience, they describe that rather than hiding the context, the 'darkness produces a heightened presence/intensity of it... The context appears to exist before us' (Anderson, 2017:8). In this instance, the researchers were keen to deliberately seek out unsettling aspects of scenarios that pressed at the boundaries of their own understanding. The pandemic was not a comfortable discomfiting experiment but something that could not be avoided that unexpectedly created a productive nature in its twists and turns. Babies themselves have a similar elusive effect of refusing to be still and fit within predefined parameters. The tentative nature of the pandemic created a heightened ability to be 'unsettled' by the actions of the babies as Orrmalm (2020b) describes above. In the case of this research the chaos and precarity of the pandemic acts as a darkness to create a heightened sensitivity to the context and the inability to be separated from it. If everything had gone to plan, this attention to surroundings and willingness to adapt may have been

deadened in an eager stride to carry out the original design resulting in a rigidity that lacked relevance or use to those involved. Through these circumstances I have followed the post-qualitative intention to pay attention to the process and to sense in the darkness (Anderson et al, 2017).

Researching in the thickness of the pandemic caused a queering that prompted people to reassess their habitual interactions such as sneezing into elbows and standing two meters away from each other. Taking Dyer's (2019) suggestion that queerness and queering can encompass 'all that is deemed strange and unruly' (2019:5) I have found an unexpected capacity in the strange and unruliness of the pandemic that made it possible for babies' affecting qualities and ways of being to become more tangible. During the weekly play sessions in the first phase of the research there was something about the unusualness of sharing space (both physical and virtual) and having to reconsider your habitual bodily movements with every step; resisting the urge to momentarily pull the face mask away when smiling with a baby, or attempting to catch a sense of conviviality through the distance of a shared Zoom screen; that perhaps made it easier for the actions of babies to become visible, for my own body to become more aware, or heightened, to the affective qualities of the babies. The stuttering in the usual habits provided a pause where the babies' actions, so transient, tiny and often in between, could slip through into my consciousness.

Within these actions was an on-going scattering of moments of refusal that permeated our time together. For example, in a previous paper (Boycott-Garnett, 2023), I have outlined how the actions of the babies during the online sessions resisted the Zoom screen in its desire for a centred, speaking subject. This was enacted as their bodies waded in and out of the screen or the way the babies were often in dialogue with bodies that were always outside of the frame; watching the light from a nearby window, stretching their hands to things unknown. Babies enact refusal in their everyday actions in miniscule or major ways. This everyday refusal of the babies resides in each of the three reconceptualisations that run through this thesis; As they make their desires clear by turning away, as they resist certain rules that centre the human and as they follow their capacity to constantly defy adult reason. Following the babies allows a refusal to emerge within the methodology. This sense of refusal from the babies enacts a queering to the research and is an example of how research methods are queered or de-familiarised by the babies. These refusals were often in

collaborations with the more-than-human. For example, during one round of live sessions, a newborn baby developed a fascination with the fluorescent poster paper that filled the background of an empty display board. Without direct intention this shaped the use of the room and actions for the rest of the group, such as greeting the paper when the baby turned her gaze towards it and ventriloquising conversations between the baby and the paper: 'Hello Paper!', 'Hello Baby!', and, once movement was possible, we ended up finding ourselves gathered around the display board rather than more central parts of the room. This entanglement between the baby and the paper has also shaped my lasting impressions of the space, long after the sessions have finished, as my memory of the room always starts with the fluorescent poster paper on the wall, something that I may not even have noticed if the baby hadn't refused the centre of the room and followed her own pull and perhaps the thing-power (Bennett, 2010) of the paper.

Following these queering aspects of the babies' entanglements changes the political positionality of the research and basis for knowledge making. Braidotti (2013) writes about defamiliarisation as a political strategy. She suggests that estrangement and a 'radical repositioning' can cause a shift away from existing hierarchies. She suggests this is made possible through creating a 'critical distance from the dominant vision of the subject' (2013:88). The babies build a distance between what we already know about research and what happens between us as we share space together, either in the space of the play sessions, the virtual space of the Zooms or the public spaces that my daughter and I found ourselves in. Braidotti (2013) introduces the character of 'Man' which she describes as the 'former measure of all things' (2013:2). Aside from 'Man' being a universal model built on a male, able bodied, white image that upholds colonial and patriarchal structures, this idea of Man above all things facilitates a distinction between nature and culture or what she describes as the constructed and the given (2013: 3). While a social constructivist model would emphasise the human in a historical, political and social construction of identities and practices, Braidotti shows how this model relies on a nature-culture divide. She suggests displacing this dualism through paying attention to 'the self-organizing (or auto-poietic) force of living matter' (2013: 3). Though babies are often the focus of nature/nurture debates I suggest that babies enact a blurring of these boundaries by their attention to the human and more-than-human as their desires guide them. They build a picture of a world in

dialogue between different bodies. By turning away from human interaction when they have had enough or fixating on the more-than-human around them, babies encourage us as researchers to follow their gaze to the more-than-human around us and in doing so decentre the logic of 'Man.'

A relational self

This attention to the more-than-human and the interactions between different bodies moves my attention away from the creation and documentation of data and capturing of perspectives. Hackett (2021) emphasises that a merging of deep hanging out and curious practice resists the temptation to collect reams of detailed data as a way to fully comprehend but focuses on being in the space so that the researcher can 'continually open up to possibilities for new thinking that might emerge through body being in place' (Hackett, 2021:31). The danger here is that we can end up recentring the researcher and the logics of domination through a centring of the self. To counter act this, I have found guidance from Braidotti in her emphasis on an outward-facing (2018:209) practice and a move away from identity. Though she acknowledges that identity is a 'necessary grammar of social interaction' (2018:210) and can form a starting point for research, she suggests that nomadic subjectivity is practiced through the self as a relational threshold (2018:211) and 'allows for a web of connections to be drawn on the zig-zagging paths of shared subjectivity' (2014:168). In terms of data, she suggests this moves empiricism to a 'grounding in lived experience' (2018:208). This helped to allow me to be present within the family play sessions but also helped make sense of the experiences that followed between myself and my own baby.

As I began to realise that my experiences with my daughter were feeding into my experiences of the research, I was unsure what this meant for the role of researcher and the blurring of private and public worlds. I briefly came across the work of the Motherscholars collective (themotherscholarcollective.com) but found little resonance. I think this is because the Motherscholar collective, though doing important work, is centred around the voice, experience and identity of mothers. Even though much of my research has become focused around encounters with my daughter in different public spaces I am not interested

particularly in what that means for me as a parent, or my identity in this sense, but more about what these encounters do, not just to me, but to the other bodies in a space – human and non-human - and the different ways of thinking that are brought about by spending intimate time with a baby. Through asking these questions of self within research my understanding of purpose for the research begins to emerge.

This attention to ways in which bodies affect each other is where I find resonance with the writing of Stewart (2007) as she writes from a situated self but drawing from the collective affects that surge across different bodies. She does not aim for a documentation of everyone's experience but certainly fits with Braidotti's emphasis on facing outwards. I regard Platt's (2023) paper on walking-with infants as a bridging paper that starts from the lived experience of mothering but draws on mothering as something that emerges in relation to the other human and more-than-human bodies that are involved in the process of walking-with. She emphasises the 'emergent, embodied and relational nature of mothering as a more-than-human story in motion' (2023:2). This shifts focus from the human activity of babies and adults and brings in the more-than-human entanglements that are part of the many intra-actions that make up the event. As I take up the proposal that babies live on the edge of human, and through this are often in conversation with the more-than-human around us, it feels appropriate that a study concerned with the entanglements of babies requires a rethinking of participation that draws on this acknowledgement of the more-than-human. I suggest that considering the self as relational and following the babies in their engagements with other bodies pushes against the logics of domination and keeps an outward facing practice. Within this is an acknowledgement that relational doesn't automatically solve ethical issues or disparities of power in participation but acknowledges the self as entangled in relation with other bodies and opens up an awareness of non-human subjectivity (Bennett, 2010). This attention to the more-than-human within the research reminds me of Deligny's instigation of communities, or commons, that were made up of the human and more-than-human. Before establishing a meaningful answer on the purpose of the research this opens up a new question on participation in research and what participation looks like both for babies and more-than-human bodies.

Participation and inclusion

Taking the ideas that I have outlined so far around refusal, wonder and nomadic thought brings about questions of participation and what participatory practice might look like with babies. Before considering how babies might participate in research there is a need to consider what participation does. Springgay and Truman (2019) offer a critique of participation and what it means to be included when the structures we participate in reify discrimination and white supremacy. This resonates with Tuck and Yang's (2014b) concern with academic institutions as upholders of colonial systems of power. Sykes (2016) shows how to take part in certain practices that are built on inclusivity upholds structures of violence and injustice and avoids creating possibility for change. This is created through building an 'absent presence' through participation (Sykes, 2016, cited in Springgay and Truman, 2019:69) 'where the inclusion and visibility of diverse bodies naturalizes and neutralizes their on-going oppression and debilitation' (ibid).

Attempting participatory research with babies brings new ethico-onto-epistemological challenges (McNamee and Seymour, 2013, Hultgren and Johansson, 2018, Sumsion et al, 2018, Bradley et al, 2012, Elwick, 2020) which have been constant throughout this research both in productive and troubling ways. Orrmalm (2020b) suggests that the emphasis of voice and perspective in children's participatory research often excludes babies through their limits in using speech and vocabulary. Bradley et al (2012) relate this to the 'radical ambiguity of infants' non-verbal expressions' (2012:141) causing any attempts to find the 'real' experience of infants to be elusive (2012:150). Springgay and Truman show how participatory practices are often 'instrumentalized to minimize conflict and friction, and reifies utopic notions of emancipation, voice, and agency' (2019:74). Research with babies exemplifies how a reliance on voice and agency, with little attention towards refusal or disruption, is not fit for purpose. This is not just an adaptation that is required to include babies in an existing system of participation but shows how babies' ways of being unravels the basis of participation within research. The ability to communicate your involvement with the world, whether as a baby or an adult, relies on the idea of individuals as knowing, autonomous beings. Gallacher and Gallagher (2008) urge caution to this Cartesian model within participatory methods. Christensen (2004) suggests an attempt to navigate this by

entering children's existing 'cultures of communication' (2004:165) and Ormalm suggests that a 'move beyond the dichotomy between the discursive and the material' (2020b:464) will allow pre-verbal children's perspectives to be taken seriously. I propose that an attention to the affective, embodied and atmospheric events that occur through touch, matter and movement can help to tap into a more relational epistemology (Gallacher and Gallagher, 2008:511) that builds new knowledge with the babies, rather than from or for them, with a relational ontology that illuminates 'children as interdependent with other entities' (Sumsion et al, 2018:120).

Through the development of this research the concept of participation has morphed and mutated into various fleeting forms. My initial understanding of participation within research was a much more compartmentalised process of including babies within every step of the research divided into separate stages such as planning and analysis. This led to an initial research design that intended to use sensory play methods and focused observation of babies within specially designed installations. Within this was a belief that including the babies in every aspect of the research would somehow give babies ownership of the process and create something that was truly *with* the babies. Springgay and Truman show how considering participation as inclusion places participation as 'outside of the event' (2019:80) or as an addition to something that already exists. They show how this way of thinking forms an inside and an outside to collectivity that 'continue to demarcate some bodies as belonging and others not' (2019:80). This also limits the possibility for change. Springgay and Truman note that by bringing participants into an existing event, both the event and the participant remain separate (2019:78). As my understanding of participation evolved, I began to see how my original model was backwards to my intention. Similar to the point that I made in the introduction to the thesis on Gessell's (1926) viewing dome, rather than creating a world and inviting the babies to participate I needed to be open to invitations from the babies as they went about their own participation with the world around them. This relies on the ability to linger with the babies and be available for invitations whilst also respecting boundaries. Taking the specified time and space of the play sessions as clear parameters created a space for encounters of wonder, actions of refusal or jolts from the mundane to emerge. These moments moved to my awareness away from things that could be described or categorised and more towards affective sensations. Springgay and Truman

take direction from Massumi (2015) in suggesting that affect is participatory. He suggests that affects 'are our angle of participation in processes larger than ourselves' (2015:6). Through this acknowledgement of affect they suggest that participation 'is not based on logics of inclusion or belonging, but pulses through life as affect, force, and variation' (2019:80).

Through these variations I began to see the research not as abstraction but about making spaces of possibility. This possibility might be productive to a research question but might also be of no 'use' to the research at all, providing the space to follow threads that go nowhere. This means taking an understanding of participation that avoids taking too much from those that participate and at the same time ensuring that the time spent together is of value for those involved. A significant part of carrying out research in this way relies on an understanding of participation that isn't focused on carrying out specific activities for the sake of research but being open to the ways that bodies participate, or not, in a shared space or purpose. This opens up participation to the different bodies, both human and more-than-human, that partake in the sharing of actions, feelings, atmospheres or stories that emerge through a shared space.

My current understanding of participation for babies within research is grounded by Rautio's (2013) idea that children, and in this case babies, are capable of encountering the world in their own way. Babies do not need special support to interact with the world or in 'expressing to others something of these encounters' (Rautio, 2013: 396). Babies are already doing this, every day, in their own entanglements with other bodies, both human and more-than-human. Rather than creating special ways for babies to interact and express ideas, Rautio suggests that babies 'might need an adult to take seriously the things and actions with which they encounter their worlds anyway' (Rautio, 2013:396). This corresponds directly with the first reconceptualisation of babies in this thesis: babies are mixed with the world and make things happen. Babies are participating within the world through myriad interactions. Participatory research with babies takes their participation seriously by acknowledging their existing practices and following their existing modes of expression, or cultures of communication as Christensen (2004) suggests. Lingering in this way moves away from the direct observation of babies as if finding the right way of observing will eventually make it possible to know how they experience the world. By lingering in moments across

different bodies the research grows with the babies and takes its form through their everyday interactions with the researcher and the world around them and makes space for the researcher to become part of these interactions and collaborate in the space making practices that the babies activate. I have begun to understand participation with babies in research not just as seeing babies as capacious and holding agency and therefore able to communicate something of their experiences but regarding babies as offering a way to see and encounter the world differently and open up new imaginaries for a different way of living. This resonates with McCormack's description of participation as possibility:

Participation takes place through relational assemblages of bodies, materials, concepts, and affects: participation in these terms is always a cofabrication, a coproduction that involves more than the individual human participant.

(McCormack, 2014, p188, cited in Springgay and Truman, 2019:80-81)

The spider webs of babies

Following babies' participation with the world around them brings the more-than-human into focus. Springgay and Truman have identified how the more-than-human has a significant role in embodiment and sensory inquiry, both of which take up a major part of babies' entanglements with the world. They turn to an ethics and politics of the more-than-human as it participates in entanglements of place, affect and transcorporeality (2019:i). This is where I find a resonance with Deligny's commons. Deligny illustrates spider's webs as a way of unfolding the living networks of human and more-than-human life that exists outside of naming or words and suggests an existence through lines of movement rather than language (2016). Miguel (2015) suggests that, rather than starting with the intention of sharing activities, Deligny acknowledged that the simple fact of sharing space and occupying this together allowed for a common to appear (Miguel, 2015:189). When I think of the sessions that I held with families during the pandemic I can see them as a sort of common that doesn't then differentiate between the language-based conversations of the adults and the actions of the babies but holds a space where these bodies co-exist in something common. Thinking of them as commons also brings in the more-than-human bodies that were part of shaping these spaces. It brings in the fluorescent paper, the zoom screens, the

access ramp and the pram wheels. They illuminate, and are illuminated by, the outstretched arms of the babies, the blurred sticky close up of a baby's face, the building of voices both with and without words, and the steady breath of sleeping babes.

I am not the first to find connections between Deligny's commons and research with babies. His thoughts on cartographies and following wander lines have been taken up by Impedovo and Tebet (2021) as a way to map babies' use of space to break adult-centric thinking (2021:2003). I am drawn to this idea of wandering and can see how Deligny's description of these fits with the refusal of babies. Logé (2013) suggests that these wander lines are an invitation to break existing knowledges and move to something more unsettling that doesn't rely on comfortable observation.

Witt (2022) shows how Deligny named his communities, or commons, as *tentatives*. Though the development of a tentative ethnography is not built directly on the commons that Deligny created there is something about the tentative yet experimental nature that resonates here. Witt describes the *tentatives* as 'precarious experiments in communal living for non-professional adults and autistic youth to co-exist in unforeseen ways' (2022:24). She identifies how this way of caring could be described as careless or what she describes as 'a peculiar caring carelessness' (2022:24). This may seem in contrast to the focus on care-ful attention that details my account of a tentative ethnography but I am drawn to his idea that these spaces, through a lack of definition between carer and child and a refusal to educate, treat or focus on language 'did little more than open up the possibility for children and adolescents deemed 'irrécupérables' (unsalvageable) and 'inéducatibles' (unteachable) to participate on their own terms in something common' (Witt, 2022:24). Within these spaces, the adults were instructed to give space to the children by being attentive from a distance. In the discussion of ethnography earlier in this chapter I have shown how distance was an enforced component of the spaces that we shared and considered this separation as a disruption to a closeness that was made strange. Considering the instruction to be attentive from a distance queers how we experience other bodies and shifts my understanding of knowledge making between researchers and babies through touch and proximity. I think there is something about this move from language, direction and institutional practices and a blurring of roles between carer and child or 'the-humans-that-

we-are' (Deligny, 2016) that taps into my understanding of participation and how participation has played out within this research.

To return to the question from Tuck and Yang (2014a) around the purpose of research, through considering participation, more-than-human bodies and the reconceptualisations of babies, I have discovered that the point of this ethnography is not to understand but to consider what spending time with these babies, in these spaces, in this particular moment in history, can teach us. Once this new intention is established it becomes clear that my purpose is not to extract data from our interactions but to dedicate myself to the time and space we share together.

Tentative steps in fixed spaces of ethics

Throughout this thesis I have built an image of research that is shaped by the babies, producing research that is tentative, dynamic, flexible and fluid. Before moving onto the next chapter, it feels important to include this small section on the conflicting and incongruent nature of the relationship between this methodology, that I propose is necessary for research with babies, and the different ethical frameworks that determine whether the protocol of a research project adheres to a very specific ethical code.

This doctoral research started in September 2019, before Covid-19 had become a worldwide concern. The original intention was to work with all the professional partners who delivered services for babies in the gallery and were involved in the design and future use of the new family space. This included the NHS health visitors that delivered the weekly healthy baby drop-in clinic at the gallery for city centre families. Any research that includes NHS staff needs to be approved through a specific health research protocol. From September 2019 to March 2020, the majority of time was spent grappling with the Integrated Research Application System (IRAS) which manages all applications to the Health Research Authority (HRA) and is responsible for granting ethical approval to all research projects involving any NHS services in England. This system is designed to assess the ethical requirements of all health research from new medication trials to service user surveys.

Though participatory methods are becoming more popular in health research the system is based on a positivist image of quantitative and qualitative research that cannot account for the iterative, emergent and collaborative elements of participatory practices (Bussu et al, 2020). Bussu and colleagues (2020) express how principalist ethical approaches, particularly in health research, operates a linear chronological and reason-based logic that assumes ethical complexities can be smoothed out through logical thought. This fixed procedural ethics fits within a very specific ethical frame that prioritises certain aspects and dismisses other aspects as if strangely insignificant. For example, Bussu and colleagues show how the researcher, within traditional research, is seen as the expert of the area of study (Bussu et al, 2020:669). Gallacher and Gallagher (2008) suggest that a contradicting view of the researcher as expert can be found when considering researchers through their primary role as being in pursuit of new knowledge. They offer a proposal that this intention to learn new things places the researcher in 'a position of incompleteness and immaturity' (Gallacher and Gallagher, 2008:512). They suggest that this stance might be beneficial to researchers in considerations of what participation looks like with children in research. This could suggest implementing research that draws on a model of co-research. Considering child participants as co-researchers is becoming more popular within social research. There are significant ethical issues in positioning participants as co-researchers around power dynamics, authorship, control, ownership and transparency to name a few. Rather than opening up these issues and making them visible the IRAS protocol avoided them all together with a continued perception of researcher as expert. Wilkinson and Wilkinson (2017) argue that the IRAS avoids opening up questions on the 'disparities of power' (2017:483) that might arise in participatory research.

In the design of this research protocol my supervisors and I were advised that anyone involved as anything other than participant (such as co-researchers) would have to be named in the application and include CVs to show that they were qualified to carry out research and held significant expertise. The terms 'participant' and 'co-researcher' immediately create different power dynamics. This is not to say that using the label 'co-researchers' automatically creates an equal research space and going through the ethics approval process was the first step in considering what I mean as a researcher when I consider participation within research and how do we make these difficulties visible within

the context of ethics and ethics approval systems. This highlighted the assumptions of participation that Springgay and Truman have identified; 'that we know what participation is, what it looks like, how it operates, and what it does' (2019:74). The ethical review process stands on the problematic belief that we can recognize and represent participation (2019:74). In this sense, the ethics approval system was successful in bringing an ethical issue to the fore even if this was through what was not included rather than the questions that were.

Another aspect that felt disregarded within the research approval process was around the many ethical moments that arise in the everyday experiences and the felt, affecting, embodied and 'in the moment' responses that can alleviate or exacerbate a tricky situation. As included earlier Orrmalm (2020b) shows how the babies she was observing changed her method during data collection in unpredictable ways. This ability to adapt and learn from babies in the moment becomes problematic in the linear IRAS process. Throughout the IRAS there appeared little consideration of children's capabilities, participation or ways of being. Wilkinson and Wilkinson suggest that there is very little space within the IRAS to account for the 'agentic capacities of children' both within a research context and within everyday life (Wilkinson and Wilkinson, 2019:483). During the ethics approval process we were advised to consider much more superficial concerns such as if babies can sign an assent form. The answer to this is 'Yes.' Once they've got some sort of grasp on a crayon or pen, they could make a mark, older babies might even be able to draw a smiley face or enter the first letter of their names. Smaller babies could perhaps do a handprint or footprint with paint. Of course, this isn't the question we should be asking. Can babies comprehend an assent form might be more appropriate. Can babies articulate their assent? Can babies comprehend the meaning of assent? Can babies show assent or dissent? How long does assent last? In an attempt to acknowledge these questions I chose to create a separate document that I named an 'assent promise.' This took the place of the assent form that was required for child participants in the IRAS and though it involved an additional piece of written information for families I found that it's presence, even if never read, was an opportunity to talk about assent and an awareness of the babies' communications of desire or refusal during the first session of each round.

As the pandemic increased, the HRA, understandably, took a quick turn to prioritise any research related to Covid-19. Processing IRAS applications for doctoral research was likely to be delayed or suspended until further notice. With already a variety of timelines for all the different partners involved, and with no certainty that the baby clinic would be able to return to the gallery, it became increasingly obvious that we needed to find another way to continue without the inclusion of the NHS service and staff. Through these changes the research could continue without IRAS approval and was directed through the university's Ethos system. This system provided space for elements of a more emergent and flexible research design but was still based on an idea of ethics that felt ill-equipped for generative research with babies. As Ethos moves further in the direction of an IRAS model this will create new difficulties for participatory research within the university.

This chapter has outlined the different threads that have tangled together to form a tentative ethnography. Through the actions of babies and the defamiliarizing affects of the pandemic I have drawn out elements of participation, refusal and relational subjectivity. I have outlined some of the implications that a tentative ethnography might feed into ethical, methodological and political concerns. Before moving onto a consideration of data and writing practices in Chapter seven, the next chapter will provide a break from the thesis with a trio of stories that have emerged through this research. The next chapter is not a wish list of what spaces could be for babies but takes the third research question as a starting point to consider: *what new imaginaries of public space are made possible by paying attention to babies' space making practices?*

Chapter 6: Through the portal: stories for a (post)pandemic world

This chapter provides a break in the thesis to pause and read some stories. The chapter contains three stories following the idea from Arundhati Roy that the pandemic is a portal (2020). Taking the pandemic as an opportunity to imagine what different worlds are possible becomes a writing exercise to imagine our world differently.

These are not dramatic stories. They are small things in a minor, rather than major, key where very little happens. They have become a way to think-with the different spaces,

babies and possible futures of a city. You are welcome to read these in whatever way feels comfortable to you. You might want to come back to them later, or give them a skim and return to them when you find yourself in more comfortable surroundings. They do not need a comfy sofa and reading lamp as they are not grand narratives to get lost in. However you read them, I hope they take you out of the academic world that this thesis is bound within and act as a portal to a different way of reading, thinking and imagining babies in the city landscape.

These stories have developed into a way of mapping imagined spaces that takes into account aspects of babies spatialities, informed by the existing theories of childhood and space that have been built into this thesis. Generating imagined spaces through stories becomes a way to acknowledge the transient nature of space, mapping both fleeting spaces that build and dissipate in an instant and the gradual morphing of space that moves slower than the human eye can sense. Sensing space through stories also accounts for considering the uncontained nature of space – how inside and outside are interwoven and how boundaries unfold. The result is a use of storying to map imagined spaces that are both concrete, momentary and unpredictable. This brings attention to space, bodies and matter as they materialise and enfold ‘in different temporalities’ (Barad, 2013:17). In this way, these stories take account of Barad’s concept of spacetime mattering where space, time and matter play out through each other. The stories become an account of speculative spacetime mattering.

Thinking of spaces through stories becomes a way of acknowledging seemingly intimate and personal space making within the complexities of broader space. As babies make space in their daily engagements with the world around them, these stories become a different version of space making, an imagined space making that is made through stories.

Speculative methods have a complex history that have been taken up in different paradigms. This use of stories to think-with space brings a speculative practice to an emerging interest in speculative practices within geography, referred to as ‘speculative geography’ (Williams and Keating, 2022) and the consideration from Williams and Keating on ‘how speculation might itself be conceived as geographical’ (ibid, 2022:2). These stories are an attempt at taking account of space as multitudes of Massey’s (2005) stories-so-far and the thrown-togetherness that she brings attention to.

The world created here is not very removed from the one we are now experiencing but includes subtle yet radical changes that make different spaces possible. These stories are fantastical, and not painted as a eutopia where all difficulties have been solved, nor are they a suggestion of things I think we should do, or a map of how to make certain changes. They are stories to think-with, particularly to open up what kind of spaces we have in our cities, and how we use them. Each story is accompanied by a commentary and layered with my research notes, existing research, websites, organisations and snippets of other artforms that are intended to inform you of how I got to writing these particular stories and how they came about whilst hopefully leaving enough space for you to find your own thoughts and cities within them.

Story 1

Layers

After all the mess, we bring a washing up bowl to each nest – filled with warm water and a squirt of baby bubble bath so that a heap of frothy foam folds over the edges. There's a quietness until the specifics of getting gloop from all the creases creates protests and a build of frustration for everyone involved as the water sloshes on the floor. Once dressed and dried, the babies leave with traces of paint on their toes and behind their ears. Communal showers. Baby Baths. Nakedness. Bodies and water. Bodies of water.

(Research notes, phase one, round three, written after a messy play session)

*'hushaby my darling,
hushaby my darling,
hands now I'll wash them, feet now I'll wash them.'*

Collected in the early 1900s, this song came from the Isle of Man sung originally in Manx Gaelic with the title *Arrane Ny Niece*. According to the collector this song was sung by women whilst washing their babies.

(Korczynski, Pickering and Robertson, 2013).

you can listen to a recording of this song [here](#)

The café, the heart of the building, is closed and the first thing you see on entering the building is the shutters to the serving hatch and stacked chairs and tables. Next to the tables is a big stack of crates filled with cellophane wrapped bottles of hand soap. In the book room (also closed) the shelves have been shoved together to make space for piles and piles of these crates. The crates arrived early on in the pandemic. They try to give packs out to anybody who enters the building in a futile attempt to get rid of them and reclaim some space.

(Research notes, phase one, round two, written after a visit to the centre)

'We draw on insights from the concepts of transcoporeality, translocality and moral terrain to illustrate how responsibility to domesticated water is felt in and through working arrangements of technologies, bodies and ideas about water and domestic life.'

(Waitt and Nowroozipour, 2018:1268)

I am fed by the River Calder. It rushes past my back yard. I can't see it, as they built a large wall to stop the back yards crumbling into the water before I lived here. But if I stand on tiptoes and lean over the large coping stone, I can catch a glimpse of its murky waters below. And if I remember to listen, I can always hear it. Along with the constant whirr of the factory on the other side of the water. It is the most polluted river in the UK. Someone told me this whilst I was walking up at the church. I once saw the brilliant blue blur of a kingfisher following its path.

(Research notes, phase 2, written in my back garden)

Commentary

In 2021 a viral video circulated on the internet of a toddler interacting with various objects as if they were hand sanitizer dispensers - an outdoor plug socket, air vents, a solar lamp. She enacts the ritual of repeated handwashing that became part of the everyday. We all now know the scent of sanitizer and the slightly alien squish of the un-water like gel, the clingy film that coats the palms and an eventual dryness that lingers. Hand sanitizer was vital during Covid-19. It made it possible for care to be carried out through touch whilst limiting the risk of the virus transmitting across surfaces. Most hand sanitizer is made from alcohol, distilled water and gel or glycerin and during the pandemic was sold in small pocket-sized bottles that were convenient to carry around or sold commercially in large quantities to fit hand soap style dispensers. These dispensers were previously part of the routine of hospital wards and through the pandemic became commonplace in doorways of shops or public buildings. They became part of the ritual of entering indoors, crossing the threshold and reaching out for the lever or automatic sensor to distribute what always felt like an overly generous squirt of liquid. Though there is now less attention given to our hands as we pass through public doorways the use of hand sanitizer has continued in general use much more frequently than in the pre-pandemic world.

Khaliq and colleagues (2021) raise concerns about the safety of hand sanitizer for young children, citing an increased risk of skin irritations but also addressing that the way children move creates different ways for the gel to interact with their bodies – sucking on fingers for example takes the sanitizer inside the mouth or rubbing their eyes could transfer the sanitizer there and cause eye irritations. Mohammed (2021) notes how sanitizer entering the body can lead to alcohol poisoning and serious health risks. She notes how, in the first half of 2020, The American Association of Poison Control Center reported over 9,000 cases of alcohol poisoning from hand sanitizers in children. This was an increase of 46% compared with the first half of the previous year. Furthermore, these movements could create easier areas for bacteria to enter the body alongside cracks in the skin and other skin damage that can be created through excessive use of sanitizer (Mohammed, 2021).

Considering the porosity of skin brings back Manning's suggestion of skin as a 'topological surfacing of myriad potential strata' (2009:36) and brings into focus the minute world of life

that happens on the surface of our bodies and the microbial shield that guards the human body from miniscule harmful bacteria. Mohammed (2021) discusses how hand sanitizer kills bacteria on the surface of the skin without differentiation between what is harmful to the body or helpful, altering the microbiome of our bodies. Moving out from considering the effect of hand sanitizer on human bodies, Mohammed (2021) shows how accidental spills of key ingredients of hand sanitizer can cause environmental harm. Allowing Ethanol into lakes, rivers and oceans can harm aquatic species and large amounts of isopropanol can deplete oxygen in water, which will ultimately have adverse impacts on the ecosystems there. This takes us into a different discussion that has recently been brought into the public consciousness on the devastating condition of the UK's waterways (you can find examples of the current water and sewage crisis [here](#)).

In official guidance on hand washing, hand sanitizer was often included with a caveat that this substance was not as effective as hand washing with soap and water and should be removed from the skin as soon as an opportunity for washing with soap and water arises. This advice was part of many different guidelines on handwashing that shifted the strangely personal and intimate action of washing the body into a public concern with policy related specifically to how, when and with what song this activity should be carried out. Posters appeared in public bathrooms with detailed diagrams on how to wash hands most effectively. Hand washing was now an action that tangled with public, political and global narratives.

Detailed instruction on washing the body is not a new phenomena and has been a part of cultural, professional and religious practices for thousands of years. In Islam, for example, the Qu'ran outlines how to practice Wudu before prayer with a clear pattern of actions and words that are performed in a particular order. During the calmer moments of the pandemic, as perceptions of what was safe shifted to allow more mingling of bodies, I imagined spaces where babies might be able to mingle together in the same space, swapping sucked objects with little concern, crossing pathways and squeezing their way between other babies' bodies. I wondered what washing practices would make this possible and if it could even be a part of the welcoming practices that occurred when families crossed the threshold into a public building. To be welcomed with hot towels and fresh water rather than hand sanitizer and wet wipes. I never worked out a satisfying answer to this, but I think

that is what started the next story. As our enthusiasm for washing our hands begins to fade, I wonder how we find a balance between harmful contamination and building a thriving microbiome when/by sharing space with others and how that contributes to a biodiversity for the earth including the rivers, lakes and oceans.

In May 2024 I attended a workshop lead by Artist Eva Bubla, through the *Microbial Futures Collaboratory* at Tampere University, Finland, where she encouraged us to invent future medicines that attended to the treatment of microbial concerns. Although this story was already written at that point, it has caused me to return to it and consider what this scenario contributes to the future health of bodies both human and more-than-human and I made one last edit.

Sticky baby goes to the library

Sticky fingers.

Sticky fingers, sticky palms.

Sticky palms, sticky cheek, sticky hair, sticky eyebrow.

Sticky palms, sticky knees, sticky carpet.

Sticky carpet, sticky hands.

Sticky hands, sticky pages.

Sticky-carpet-book-palm-cheek-pages-pages-pages.

Sticky Baby is in the library. The stickiness catches the attention of the room. Librarians watch from a distance, students glance over their screens. The stickiness has broken free from the boundary of body, pram, shoes and coat and is no longer containable. Mama fumbles in the bottomless nappy bag, reaching past cups, spare vests, old socks, snack tubs, barrier cream and teething rings only to hold up an empty wipes packet, flimsy and deflated. A dry tissue is futile. Sticky Baby struggles free, makes a beeline for the perspex partition. Sticky hands, sticky perspex, sticky hand prints. Suspended in mid air for all to see.

Mama scoops up Sticky Baby against yells of delight and frustration. One swift move that closes books, catches cups, kicks off the breaks, gathers coat, shoe, hat and makes an exit. Sticky-baby-adult escapes from the library; tight arms, grasping hands, kicking legs, wheely buggy, all flailing in different directions. They deflate onto the edge of the fountain.

The fountain is no longer neglected. It feeds the city. They say some time in the past, a baby had crawled onto the edges and sucked at the wet stone. The sight of the baby sucking on its damp edge caused an uneasy stir in the people that passed by on their way to other things. Complaints were made but the public budget for Monuments and Maintenance had run out years ago. Eventually a local entrepreneur saw the potential of taking it on, it was a marketing managers dream. Saving the baby from the dirty streets of the city. They cleaned it up, fixed filters and monitors into the pipes, heaters for the winter, posed for pictures with the shiny new stone. Then forgot all about it.

Since then, the fountain has never been lonely. In the early hours the revellers would take a rest, removing high heels and restoring toes in the trickling water before heading off towards bed. Fighters would soothe their bruises and their tempers with the cool water before retreating home. In the depth of the night a roaming fox or a city cat would reach a rough tongue to the water and break the surface with a flurry of perfect arches that race out towards the water's edge.

As the sun rose the people of the streets would gather to cup their hands in the streams and splash fresh faces for the day ahead, taking gulps of clear water from the taps. Pigeons would come down to rest on the stone, dipping feathers and beak in the pools. As the trains started to roll in there was always a flurry of workers who would ritually dip their hands in the springs and wash away their morning's journey before heading inside big buildings. Next came the young and the old who would always stay a while, carefully catching the ripples and making long strokes of smooth water along their arms.

It was during this morning lull that the first washerwoman appeared, with a cart of fluffy towels, silky bars of soap and soft face cloths. These days there's a team of Washers, they take it in shifts, guiding passerbys to the water, attentive to the fountain and its visitors. Rumour has it that the Washers brought the first fish. As the Washers take care above the

surface, the fishes clean the stones beneath. Their lovely scales glint and flash as they dart through the crooks and pools of the fountain.

They also brought clay. Slipped slabs of silky grey clay into the water to form a deep fountain bed. Rich clay drawn from the depths of the rivers above the city and bursting with tiny life. The washers became caretakers of the clay. They would invite passerbys to print their hands into the clay surface and feel the squish between their fingers. For those with their hands full they brought tiny brushes and would decorate their faces with stripes of earth. Workers would enter their offices with dry clay on their arms and faces and sit at their desks whilst the clay danced with the surface of their bodies. Turning off the lights as they exited the building the washers would be waiting with soap and towels to help them shed their skin.

Soon the life within the clay began to make itself visible. A green sheen wrapped the fountain in a velvet bed of moss. The sparkling water continued to splash from the taps and merged with the clay, the moss, the fish and the city in long swirls before disappearing back through the drains taking the sticky finger prints of the city dwellers with them.

Sticky Baby and Mama begin to breathe again. Sticky Baby seeps into the softness of the moss and the solidness of the stone and turns to catch the eye of the water. The continuous movement of the ripples and splashes sends a soft dizziness. Sticky baby dives a finger deep down into the clay. The washer begins to hum a tune as she cleans nearby. She takes a fresh cloth and soap from the cart and places it down on the moss next to Sticky Baby. Baby takes up the cloth and squelches the water across face and chin, sucking on the wet fibres. Mama dips her fingers in the water and scrubs little circles on Sticky Baby's feet. Baby leans into the tickle, keeping their eyes on the ripples and arching their toes. Water trickles down their body and vest, travelling over sticky trails and back into the pools.

Soon all sticky traces have slipped away with the soap suds into the pools, past the fish and down into the depths of the filters. Not So Sticky Baby is lifted up and wrapped in thick fluffy cotton from the Washerwoman's cart. Buggy, baby, clean clothes, milk, bread stick, adult, hands, hair, hugs, lips all fold into each other and weave away into the crowd.

Washerwoman watches them go then continues with cleaning the stone, the stone continues to hold the water, the water continues to feed the moss, the moss continues to clean the air and the air mixes with the tiny forms of life.

Story 2

Layers

We see the babies in momentary sweeps of the phone or as they move their bodies into the periphery of the screen. As a mam tells us a story of her day, the baby's hand stretches out to the ceiling and stays in the centre of the shot, fingers splayed, a solid silhouette. Sometimes the weight of their bodies, and the movements they make in their mam's arms, causes moments of juggling, shifting and rearranging of baby and phone so that the phone lies at an angle and I see the whole room on a slant.

(Research notes, phase one, round two - online. Also included in Tesar et al, 2021a)

'when you walk inside that solid-seeming light and turn your eyes back towards the projector, strange things start to happen. The circles, ovals and triangles of light beaming around you form corridors and gothic arches, spooky tunnels and apocalyptic vortices of silvery whiteness where clouds of smoke stream by in an ever-changing stormy spectacle. It is like being inside a painting by JMW Turner, enclosed in cascades of luminous mist, revealing endless vistas of skies and seas that melt and merge in a glowing cosmic spectacle. Step out of the beam, and it vanishes in an instant. Run your fingers through the light and you can draw with shadows, like putting your hand in a running stream to see the water dance.'

(Jones, 2018 – in a review of *Solid Light Works*, Anthony McCall's exhibition at the Hepworth Gallery, Wakefield)

'There is chatter and movement and everyone is engaged in something or other, somehow bolstered and soothed by being able to edge closer to one another. In all the busy-ness and bustle a baby leans her body out from her mother's arms so her face is caressed by the fibre optic strands of a lamp, the lamp who's ineffectual light is dampened by the brightness of the room, and slowly closes her eyes into sleep.'

(Research notes, Phase one, round three)

'Following sexual assaults on women in public spaces in cities, discussions tend to frame the issue in terms of women's safety in the streets rather than their right to access public space. The overarching narrative appears to be that cities are violent spaces that women are better off not accessing.'

(Phadke, 2013:50)

What the phone records when wedged in the sling:

Wall. Drain pipe. Wall. Window. Wall wall wall. Wing mirror. Car. Wobbly reflection. Leaves. Car. Road. Car. Road. Car. Prickly bushes. Lamp post. Wooden fence. Silver posts from a tall metal fence. Stripe. Stripe. stripe. Glimpses of machinery and blue paint. Holly bush. Honesty. Blackberry bush. Water sluice. Green wire fence. Diamonds. Diamonds. diamonds. Meadow. Sky.

(Research notes, phase two)

'One might say that many women are horribly unsafe at home, a space often of unfriendly bodies and speech and yet we do not stop women from being there. In fact we urge them to be in that very space.'

(Phadke, 2013:53)

'I employ 'world-ing' to illustrate how walking-with contributes to the emergent, embodied and relational nature of mothering as a more-than-human story in motion.'

(Platt, 2024:1)

Places to wake up:

On a busy train facing strange faces.

In a church where women are singing.

In a charity shop.

On a comfy lap.

Bumping along the canal.

In the living room where the light streams in from the window above the door.

At the college surrounded by babies.

In the hallway of a theatre with voices whispering nearby.

In the library.

In the car.

In the library again.

To the sound of the rain under a market stall roof.

To the sound of a toddler playing out of view.

To the chattering and clinking of a bar.

On a jostling bus.

In an icy park.

Wrapped up in warm arms.

(Research notes, phase two)

Commentary

A while back Horton and Kraftl suggested human geographers should pay attention to the geographies of sleep, sleeping and sleepiness (2007). This story started out as a consideration of babies as they sleep in a milieu of times and spaces so it is perhaps unexpected that it ended up set in the middle of the night with very little sleep occurring. It partly developed through my own fascination with light and the significant impression that Antony McCall's exhibition, *Solid Light Works*, has had on my own understanding of the affect of more-than-human bodies in space and atmosphere. Originally the story developed

into an exploration of activists and artists in making public space through interventions with light alongside the sleeping practices of babies. The artists have slowly disappeared from the story with each edit and the story moved into a much broader consideration of space at night and the queering affect that darkness produces in creating different worlds layered over the spaces that are so familiar during the day.

It is very rare to see a baby out in the city at night. This is not the case for some cities around the world but in the north of England children become space invaders after dark. Which seems strange considering how much of the night they spend awake. Life with a newborn baby often places parents in a strange world that plays with time, disrupts their space and challenges their knowledge of themselves and the world around them. This can be an isolating experience and the pandemic magnified this isolation as families were encouraged to avoid meeting others coupled with the lack of available spaces that they could go to meet other families. Without sharing these experiences with others, it is very easy to slip into the idea that there is something awry. That your baby is the only one that doesn't sleep at night, that you are the only parent that isn't doing something right and that the world is toppling around you. Baby groups are a space where you can see other parents in the same position and realise that nearly everyone is making it up as they go along. This wasn't available to families during Covid and during moments of stricter lockdowns there was no viable way of bringing families together in a real space. During the Zoom sessions for this research parents began to share their experiences of night time. Some of these families lived a few doors away from each other but had never met in real life. They talked about being awake at night. During the conversations the babies would come and go on the screen, reaching out to things that I could not see interacting with the rooms that they slept and woke in. It made the box of the Zoom screen more visible. All the families in little boxes on the Zoom screens and the babies reaching out. It felt like a similar thing was happening at night, all the babies and their parents who were awake at night but still in little boxes, alone, but everyone else is awake too.

There is a strange secrecy to being awake at night, that we forget about in the morning, we put it away and carry on with the day, and yet, one of the most common and often dreaded questions that bounce around the baby play groups is 'how are they sleeping?'. This suggestion from Horton and Kraftl (2007) to pay attention to the geographies of sleep is

particularly relevant to the daily lives of babies as they sleep in different locations throughout the day and often wake in a place completely different to where they started their sleep in the first place. Sleep is such a large part of babies' lives, whether considering through the lack of sleep during the night, their naps during the day or the different ways in which sleep is encouraged, avoided, ignored, required, worked around.

In the Epilogue for *Feminist Futures of Spatial Practice* (2017), Stratigakos tells a story of Berlin at the turn of the 20th Century. She tells how, with words and architecture, women began to claim city spaces. Recognised as a "women's Berlin" she tells more:

critics decried the loss of familiar places and routines [whilst] some women glimpsed their freedom in these dislocations. In the city's alienating potential – the unmooring of the individual from traditional social ties - ... these urban female collectives succeeded in building a visible network of women's spaces.

(Stratigakos, 2017:234)

I am drawn to how the queering of space worked in this story of Berlin and the different responses to queering from those who perhaps benefited from the way things were beforehand and those that possibly did not. It reminds me of Palmer's (2022) idea of defamiliarization as something that happens through the process of queering and her suggestion that 'it is precisely this process of defamiliarisation that is necessary to awaken us from automatic habits in our perception, creation, destruction and infinite reimagination' (Palmer, 2022:6). It also makes me think of Puwar's (2004) space invaders as they enact a queering of space just by their presence. I have included it here as I was also struck by Stratigakos's suggestion that one of the catalysts for this change of space that the women instigated in Berlin a hundred years ago, was linked to women walking alone. She says, 'police harassment of "public" women, including those who dared to walk the streets alone, prompted women to assert their right to be visible' (Stratigakos, 2017:345). This links to the many narratives of women walking alone that continue in the present day.

This second story is a story of a walk. It is not a walk with the intention of getting from A to B but one that occurs between the push and pull of different human and more-than-human bodies. I acknowledge that in a world where the risk of violence that accompanies women walking at night is ever present this story is nothing but fairy tale. Various organisations such

as *Reclaim These Streets* and *Sisters Uncut*, have hosted vigils and protests to draw attention to the persistent violence that occur daily in public and private spaces. Protest marches are another version of walking with a different purpose, different again to the walking-with a baby that Platt (2023) describes as an emergent worlding between relational bodies. This story is not advocating for any particular action or practice. There are many reasons why you might stay in the confines of a bedroom whilst trying to get a baby to sleep at night - getting them used to the idea of being asleep when its dark, being warm, not waking up the neighbourhood, not putting shoes on, and so on. But I wonder what babies would make of the city at night and what they would do to the city at night if they were more a part of it.

Streets

They are under the streetlamp again. The glow of the light turns their faces, hands and night clothes into different shades of orange. The older one wraps the tiny one close to her body and zips the large fleece over both of them. The tiny one's body is wrapped warm in her cotton bodysuit, pressed against her mother's skin and the soft fibres of her mother's thin sweater, held by the tension of bodies and fabric. Gazing out from her mother's arms she feels the prickly fingers of the breeze on her damp cheeks. She can see her mother's face, the dip of her collar bone, her jaw, her cheeks, the wisp of her breath. Though her attention passes all these familiar little things and flows up to the glow of the light. Everything is still now, everything is quiet.

In the new tranquillity, the older one scans the building for signs of life, how many slumbering bodies have been prickled awake by their noise? A few squares of light look down on them, a curtain flickers on the third floor and the old Auntie from 14 gives her a nod then leaves her to it. The other night, as they gazed up at the glow, number 14 had appeared at the front door of the building, set a mug of steaming tea down on the concrete and potted back into the hallway. Just a little longer and she will rock the baby back and forth up the stairs. By the time they reach the last step, the little one will be asleep. As she waits for the right moment, her ears adjust to the little sounds all around them; the beat of her heart, the soft snuffles from the baby, the buzz of the streetlamp, the hum of a car or two from the main road, but mainly that soft not-silence.

The stars aren't visible here, but the moon is. While the tiny one watches the streetlamp, the older one watches her. While the older one watches the baby, the moon watches them. They linger a little longer tonight, perhaps the task of ascending the stairs one more time is too much, or the thought of climbing back into bed has lost its usual pull. In that little lingering the little one is stirred from her usual fascination and begins to take in the night around her. The block of flats is different to the block she knows in the day, the street is not the same street. Yet, just outside the forecourt, on the other side of the road, is another orange glow. Glow! She sips in every bit of it, her eyes widening to take in every last drop. She needs to be closer. She fixes her gaze on this new, lovely thing and arcs her body towards the light stretching the sweater and tightening it around their bodies. She wills the light closer with a stubborn sort of patience. The older one watches her. Marvels for a short moment at this new, lovely thing. She looks back at the door to the building, the bright yellow hallway waiting through the glass, then gives a little squeeze on the tiny one's toes and follows her new gaze across the street.

A few steps forward takes them both into new nighttime ground. Away from the forecourt, from the watchful eye of the flats, the streetlamps wind round to the main road. From this lamp, there's another, and another. They pick up speed with each one, there's something in the air. The older one is spurred on by something comforting; the darkness, the quiet. The excitement of having the street to themselves. They notice their shadows growing and falling as they pass each light. As their shadows swing around them the tiny one wriggles to see the strips flicker across their bodies - dark, bright, dark, bright - a distinct line between each one. Each colour makes them different; stretching shadows change the shape of their faces. Soon they've turned the corner and the flat is out of sight.

The flat above the post office has an orange glow. It silhouettes a woman and a child at the window. They're counting stars to get to sleep and tracing all the shapes. The child spots the tiny one and points towards them. He remembers his wellies and his raincoat are waiting by the door. By the new blocks on the corner there's a buggy by the entrance hall and someone is sat on the steps pushing the handle back and fourth. She gives a little wave as they pass by. On the little street the older one spots a person up ahead. She has a snuggled baby in her arms and a toddler tugging at her legs. On the little bench near the bus stop there's a

man in a dressing gown testing the temperature of a bottle of milk on the back of his hand with a little one draped over his shoulder.

On the main road there's bright white street lights from high up in the air, there's traffic lights that change; red, amber, green, amber, red. There's a woman with twin babies waiting to cross the street. There's red and green figures walking and standing still, there's buttons with 'WAIT' in a rosy warm glow. There's a Moses basket being rocked by the side of the road. There's lamps over road signs with big red circles around the edges. There's lamps over shop signs and shutters and one small red dot that blinks steady from a camera. There's a couple sharing a hot chocolate while a baby has finally fallen asleep stretched across both of their laps. There's moving lights in the window of a takeaway that make up travelling letters P.I.Z.Z.A H.O.T F.R.I.D.A.Y D.E.A.L. There's a baby being lulled asleep by the soft movements of a low branch that hangs over the park fence. There's the moving headlight of a solitary car.

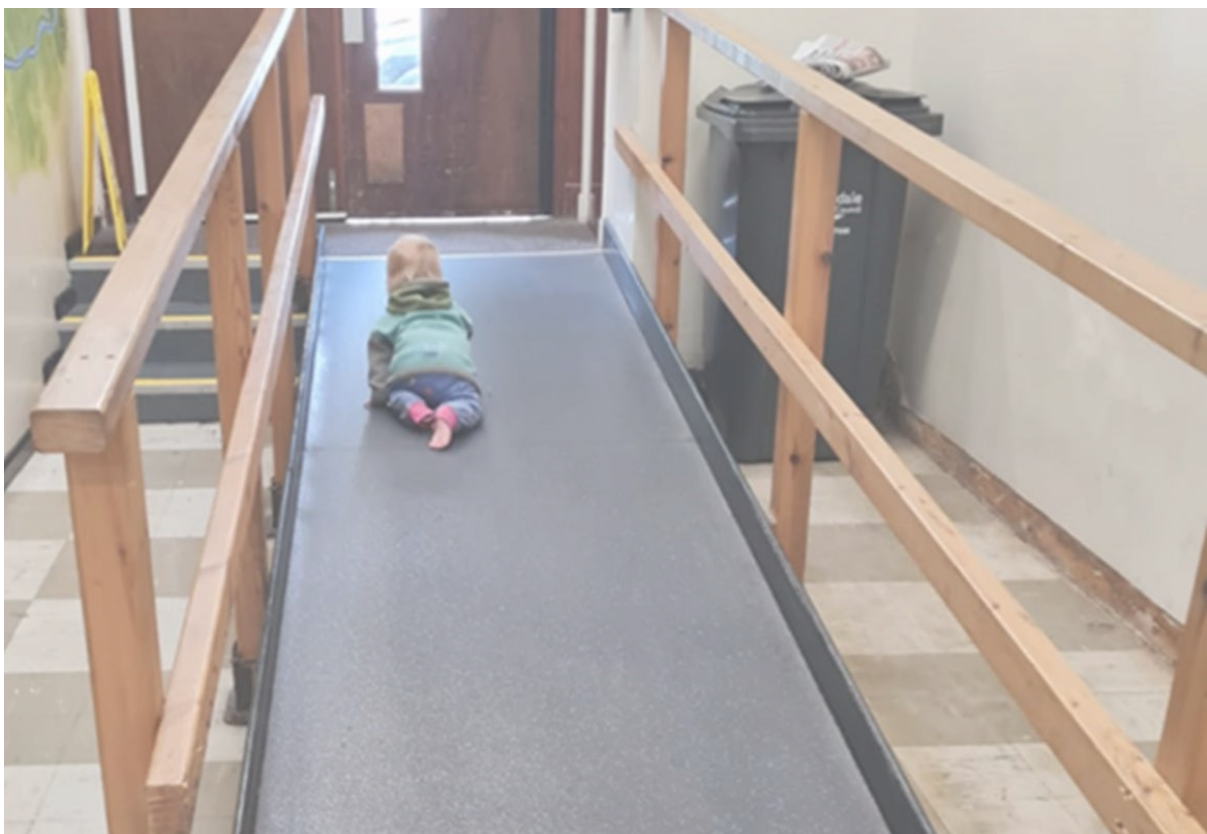
As they pass the gates to the park there's another light, a silver light that seems to shimmer up from the ground, just behind the gentle curve of the path. It draws the attention of the older one as they wander a little further. The older one stretches her neck to see, the tiny one snuggles into her chest. She takes a step or two, just to the bend to catch a glimpse. She takes a few more steps. They can hear each other's heartbeats. A car drawls past the gates momentarily lighting up the path as they slip round the bend.

A solid beam of light streaks over the grass. A flood light that bounces off the midnight mist and all the particles in the air to make a wall of light, sharp and bright against the dark night. The light skims across the grass bringing each blade and dew drop into focus. It catches the ripples on the concrete pond and scatters across the water's surface. Beyond that it leaves a darkness that swallows the park into nothing but soft shapes and valleys. They move towards the light. From the older one's feet, giant shadows loom over their bodies. The little one uncurls from the depths of the fleece and reaches up, catching the light in her fingers and setting the mist swirling. Their bodies merge to make monstrous breaks in the light. As they travel the length of the beam they become aware of a sound, a soft full sound that breezes in from the dark. It is the snuffles and snores of babies.

Through the threshold of light they blink into the darkness. The older one kneels down in the grass, her knees instantly wet with dew, comforted by the slow content breaths that surround them. She's tired now and feeling the weight of the tiny one. She rests back on her hands as they both watch the particles dancing in the beam – moths, dust, pollen, water vapour.

Story 3

Layers



Learning to crawl on the access ramp. Photo credits: author

'The social safety net has been badly damaged by drastic cuts to local authorities' budgets, which have eliminated many social services, reduced policing services, closed libraries in record numbers, shrunk community and youth centres and sold off public spaces and

buildings. The bottom line is that much of the glue that has held British society together since the Second World War has been deliberately removed and replaced with a harsh and uncaring ethos. A booming economy, high employment and a budget surplus have not reversed austerity, a policy pursued more as an ideological than an economic agenda.'

(United Nations, 2019)

Walking up and down these rows of shelves until her eyes start to close, until my pace slows, until a book calls my attention and I stop still and reach out, drawing it from the shelf.

(Research notes, phase two)

'The photos show enormous wooden and metal structures, usually near a large housing block or in large empty space, with children leaping, hanging and balancing on the various platforms, slides, planks and ropes – smiling for the camera as they go.'

(aiucentre, 2019)

Commentary

This final story takes a sideways step from the others and brings us back to a world that we are perhaps more familiar with. In the wake of the pandemic we find ourselves spiralling through crisis after crisis as spaces continue to reform, merge, close down or fall apart. This last story brings us back to the post pandemic era that we are now living through, a story which is much more situated in the everyday spaces that my daughter and I would loiter during our first year together.

I love our local library. It is not only a favourite space for my daughter and I, but also one of the main local spaces where I have hidden away to write this thesis. I am currently sat in the library as I type these words. Our local library has RAAC in the ceiling. RAAC is cheap air-filled concrete that was used in construction since the 1950s to the 1990s commonly in public buildings such as schools, hospitals and libraries. The problem with RAAC is that it only has a

lifespan of approximately 30 to 50 years. This entered the public consciousness in the summer of 2023 after a school ceiling collapsed and it became more generally known that many of the public buildings that contained RAAC had reached their time limit and were no longer safe. The story of RAAC became a literal example and much used metaphor for the crumbling state of infrastructure within the UK (Weiss, 2023, Nerlich, 2023).

The story that follows here is largely based on a real space and history where the spaces that babies make are constantly in renegotiation with financial, political and historical events. I could write about the cuts to libraries over the last decade, or the things that libraries bring to communities, but these have been written about in so many ways that to re-iterate these things would be pointless. I would recommend Ali Smith's book, *Public Libraries and Other Stories* (2015), in which she invites authors to write on their own experiences of libraries and summons an array of images of what a library is.

In 2015, the Royal Institute of British Architects (RIBA) commissioned artists Simon Terrill and Assemble to create *The Brutalist Playground*, an interactive play space inspired by the concrete post-war playgrounds that were developed in the centre of housing estates in the 1950s. The RIBA Collection archives a handful of images of these playgrounds that reflect a specific time and place. You can see these images [here](#).

Considering spaces of play over time and the constant renegotiation of space led me to an article on the website for the Iqbal Ullah RACE (Race Archives and Community Engagement) Centre at the University of Manchester. The article describes the discovery of a folder containing images of large, wieldy and exciting structures in housing estates and open spaces that became the first playgrounds of the city (aiucentre, 2019). The folder, the article and subsequent comments on the page reveal a story of play, protest, risk and space making through the continuous push and pull between children and local authorities. It reminds me of the temporality of all space and how what feels established is often fleeting. Even the rocks and stone of a place will one day become something else.

This story has become a living example of what Rasmussen (2004) refers to as children's places rather than places for children, these informal places that often go unnoticed by adults that become actualised through matter, action, feelings and atmospheres. The reclaiming of spaces post-pandemic is a slow process that tips and sways. Spaces that seem

to be building into assemblages of excitement are suddenly gone as many different sociopolitical threads materialise as obstructions. Young children's and babies' abilities to occupy and make space, even in spaces that are not intended for them, is an example of the unpredictability of space narratives. Space's might rest in certain choreographies but the pull and push of space making never ends.

Ode to an access ramp

The access ramp is grubby and sometimes the wheelie bins are stored next to it. The cracks at the edges, when you're sat close to them and find the cracks at eye level, are filled with a grey grime that has built up over years from the soles of shoes, the tread of wheels and the stickiness of cleaning spray. The thin strip of window catches very little natural light and gives the impression of entering into a cave, passing through the dark of the corridor and into the vast space of the library. The beauty of this place was discovered when the children's books, and therefore the area assigned as safe and right for children, were arranged just by the access entrance.

Oh to be the first baby who wandered away from the books and peeped round the corner to discover this perfect playground. To feel the change of incline under their feet as they took their first step onto the rough non-slip surface. To run their finger for the first time over the imprints of the grainy ramp texture on their knees. Perhaps at that first moment a visitor entered through the door and a curtain of light led their eyes up the ramp to the very top, revealing the summit in the distance crowned by the shiny green exit button. The joy of the first toddler to discover the never-ending loop of stomping up the access ramp and down the three chunky steps to end up back where you started and ready to go again. The first baby to realise the slats for a handrail are for climbing and endless games of peekaboo.

Away from the watchful eyes of the library this dark corner is the meeting place for toddlers. They shout in glee, make games of the circuit, the ones on feet overtaking the ones on hands and knees. They chase new small strangers from the top to the bottom and pause, watching with frowns as visitors to the library pass through their patch. Sometimes the sound of playing seeps into the library and an adult steps in and brings things back down to a hush.

For a short while the clatters of playing are accompanied by whispers but only until the sounds are irresistible again. The negotiation of toddlers and adults rises and falls throughout the day.

There are also quieter moments. When one baby lifts their body over a step, trying out new muscles and following the jagged flow of the ground with their limbs. Or a small child sits at the bottom of the ramp watching the movements of the library through the doorway, finding comfort in the threshold. This playful indoor sanctuary.

When the library was built the brass band led a parade all around the town and crowds lined the streets. When the extension came a hundred or so years later, and the access ramp with it, there was much less ceremony. And all that time the sounds of playing from the babies and toddlers flowed up through the concrete, filling the gaps of air that made it so light and affordable.

As the children played, the adults shared stories. They had heard of ceilings falling in towns nearby. Someone's nephew is having Zoom classes from the kitchen table, again, while their school building is shut. There's gossip that the sport's centre might be infested. The tiles in the ceiling listen to the gossip and feel the drip and tickle of the rain.

The playing stopped when water began to seep into the RAAC. Surveyors arrived with tools and uncovered the damp tiles that hung over the children's area and the beloved access ramp. The rest of the library was unscathed. The children's area was reassigned to a far away part of the library. They manage to open up the ramp but it's no longer a place to dwell. The ramp is hemmed in by scaffolding and sharp edges. Adults with prams would hurry through the access corridor as if the squeals of joy and running, climbing bodies never took place. They skirt past the old children's area that sits in darkness cordoned off with heavy tables and chairs. A jungle of steel fills the space from floor to ceiling, stuffed with scaffolding to hold up the roof.

At night, the adults – the librarians, the parents, the old men at the newspapers, the freelancers, the students, the young men at the computers, the delivery drivers, the crafty women, the historians - they start to see things in their dreams. They see the toddlers creeping out of bed, helping the littler ones out of their cots, carrying the sleeping babes like giants in their arms. They gather in the streets and swarm towards the locked library.

When the adults return in the light of day they avoid looking too closely into the thicket of steel. If they peer long enough they begin to see movements in the darkness, slow furls of dark bodies and soft rolling velvet. They see the strength of babies' limbs as they pull themselves up on steel bars, the furrowed brows of small children as they balance across beams, the joy of toddlers as they let go from up high and slide down diagonal poles. As the adults try to look back at their books or their screens the toddlers are held by the steel. They heave, roll, pull, balance, squeeze, push, climb, step, chase, slip, jump, slide and run through the darkness.

Chapter 7: Zoom, residue and story-making

Story-making is a thinking-with that works to produce the questions that matter. Now that I have laid out a selection of the stories that became a key component of this research, I will detail how the stories came about and the thinking that this process brings to research with babies. I hope you enjoyed reading the trio of stories in the previous chapter and I hope you will continue to find resonances with your own local spaces and the different bodies that you encounter. Within this chapter I attend to the process of story-making rather than what the content of the stories might say about babies and the world around them. My understanding of data within the research process has been one of the key journeys of learning that I have experienced through this research. In this chapter I have tried to express not just my current understanding of data and all the processes that surround it but how my journey through the research has brought me here. Through this journey I have come to refer to this process as story-making. This chapter details what became data, how this data emerged from the research and how the collection of stories came about. I will discuss how this story-making process came into being through a thinking-with between different bodies – babies, adults, stone walls, cameras, paper, market covers, water, grit, covid-guidance and laptop screens. This chapter works with my first research question: *How can researchers use story-making to pay attention to babies' spatial encounters?* and it identifies what this particular practice brings to existing knowledge around babies and processes of knowledge making.

Story-making is something that came about through the very specific situations of the research and I don't intend to suggest that this should be taken up as a new method that researchers can adopt to their own research practices. I intend this description and consideration of story-making to open up thinking for doing things differently when it comes to research with babies and a new way to produce imagined space. Covid-19 brought about new questions and required new methods to bring awareness to the social, material and political conditions that brought the pandemic into fruition. Sometimes the answers to these global concerns are in the tiny interactions that happen in everyday spaces. Butler asks the important question of how we might 'rethink bodily relations of interdependency, intertwining, and porosity during these times' (2022:45). She suggests that discovering ways to illuminate 'the vexed and overlapping senses of sociality and livability' (2022:45) becomes a way to acknowledge the systemic racism and environmental destruction that proliferates as a starting point and produces a revision of key political concepts (2020:45). Osgood and Odegard express a similar concern bringing this perspective into an early childhood context. They suggest:

The current geopolitical epoch in which we find ourselves – that is at once generative of, and implicated in, complex social, political, and cultural systems, demands that childhood researchers reappraise how and why we undertake research in the ways that we do and what potentialities exist from embracing more speculative and tentacular approaches.

(Osgood and Odegard, 2022:228)

For me, this story-making process leans into the overlapping sense of sociality and livability that Butler (2022) brings to mind and attempts to lay these bare without assuming the narrative of a space is already written or attempting to replicate individual's experiences and exposing them to misinterpretation. In a way the stories that are produced here are made stronger by mis-interpretation, if mis-interpretation is even possible, as it provides a space for different perspectives to interact and start a conversation. This story-making takes account of the three reconceptualisations that run through this research which will be threaded throughout the chapter. Story-making became a way to hold on to the affecting and material ways that babies made the space around them within the research whilst acknowledging the unknowability that lies between babies and adults and accepting the

'non-representational' (Holt and Philo, 2023) nature of babies' lives. These stories also became a way to engage more centrally with the more-than-human that proliferate in babies' daily entanglements and provides a space to consider the muddling of narratives and intentions that brings in the political, environmental and economic threads that are a part of babies' daily lives. The result is a collection of post-developmental stories informed by the babies, matter and existing theories of space. This chapter will identify how stories were produced through elements of Haraway's thinking-with (as described by Puig de la Bellacasa, 2012), attending to Stewart's (2007) ordinary affects, making space for Jackson and Mazzei's (2020) thinking-with theory and Puar's (2012) frictive thinking to produce new knowledge around babies' spatialities.

The thing-power of Zoom

In Chapter five I described how the spaces that became the sites for this research were made up of a mix of intentions, needs, desires and purposes that worked with, across or against the research. In phase one the need to create data was given less priority as myself and the children's centre team attended to the different needs of the space. Some of these different needs and desires include the need to follow the social distancing guidelines to reduce the number of Covid-19 cases during the live play sessions or the desires of parents on Zoom to share their experiences with those in similar situations and continue conversations whilst the babies slept. In phase two, in the different public spaces where my daughter and I would dwell, data was never a main concern and was often surpassed by either the need to find somewhere dry and avoid the rain, find ground that was comfortable enough for the baby to crawl on or find an open building with a public toilet and changing facilities. In phase one, attempting to produce in-session notes, images or film and working with the camera, notebook or Zoom screen alongside the ways that babies resisted being captured by these mediums, made it possible for me to notice things about my own gaze and my understanding of data.

In Chapter one I identified how I came to a process of writing. Noticing the disruptive quality of the camera, and my use of it, I moved to the written word to document our sessions together. In a previous paper (Boycott-Garnett, 2023) I have identified how this move was

partly informed by the technology that became a part of the encounters. This was evident through my own camera during the live sessions and the various phones and laptop screens that enabled the online Zoom sessions. In the paper I state:

During these sessions, the babies were frequently present but out of shot, or glimpsed as a small limb or movement or sound on the other side of the screen. The babies' bodies, movements, and sounds exceeded the boundaries of the frame and in so doing shattered the potentially rich visual recordings that were imagined of babies in their ongoing interaction in the world. The limitations of Zoom with babies contrast with the traditional uses of video and its long history in educational research where video is considered as "raw data" and "indexical of a given time-space relationship" (de Freitas, 2015b, p. 318). The role of recording apparatus and seemingly objective technology has been acknowledged by previous researchers as having effects on the data that is collected. In *The Posthuman Child*, Karen Murriss (2016) found that the microphone used to collect children's stories interfered with the recording and the knowledge being produced. From this posthuman perspective, the Zoom screen is not something that alters pure data that exists independently from the researcher but becomes an active participant in creating what can be seen and done and what can happen in the liminal space. The screens create a layering of living rooms, bedrooms, offices—spaces that leak into each other with boundaries that break and rebuild. The small rectangular space created by the screen determines what is visible and sharable of these different spaces. Babies' momentary movements in and out of the field of vision resist meaning or interpretation and displace the site of the encounter.

(Boycott-Garnett, 2023:128-129)

I go on to suggest how this experience relates to posthuman research practices and adjusts my thinking:

Susanne Gannon (2016) asserts that "posthuman research practices demand attention to materialities and affects, and they prompt experiments and interferences with data" (p. 144.). Working through Zoom draws attention to these affects and breaks the habit of veering toward more conventional data collection

methods. Carol Taylor (2016) warns against adding posthuman analysis to the interpretation of data that has been conventionally collected (p. 18). Instead of attempts at playing with snapshots of collected video to tune into micro moments, as was the initial intention of the research in the gallery, Zoom generates “thing power” with the “curious ability of inanimate things to animate, to act, to produce effects both dramatic and subtle” (Bennett, 2010, p. 6). This ability to trouble and agitate the event does not fall solely within the power of Zoom itself and is not necessarily present in all Zoom meetings. Rather, Zoom is in between the babies’ movements, the speaking mums, the visible living rooms, the mobile phones and the laptop screen in a congregational distribution of agency. While filming with a group of girls, Gabrielle Ivinson and Emma Renold (2016) describe an “affective intensity” that grew between the camera, landscape, bodies and histories of the area and suggest that the camera became a posthuman participant that “interrupted dominant flows” (Ivinson & Renold, 2016, p. 169). In this case the affective intensity lies between the Zoom screens, the babies’ bodies, the different spaces and the myriad of movements in each moment.

(Boycott-Garnett, 2023:129)

As a posthuman participant, Zoom made visible the unknowability of babies lives as they constantly defied the boundaries of the screen. Accepting this aspect of babies’ lives had been in my consciousness but what this meant for my understanding of data was only beginning to become tangible as I went through the motions of attempting to collect something from the spaces that we shared together.

The thing-power of recording equipment, held between the solid boundary of the gaze of the technology and the resistance of the babies, was also evident in the live sessions and attempts at documenting short film clips of each baby. I have already identified in previous chapters how this intention separated the baby out from their surroundings and seemed to interrupt or dampen the affective stories that were happening across the space. Through these unsatisfying attempts at collecting data my understanding of data and made visible a developmental and individualized gaze that had crept into my research. My attempts at recording individual babies had slipped into narratives of development and individual competency. I found that I was championing babies as being skilled in ways that centred the

humanness of their being, that they were perhaps more developed (e.g. more human) than they were often given credit for. Moving to writing notes after the session became an opportunity to break this habit and pay attention to the collective moments of the space. In this way I could move my attention from the individual babies to the different stories that played out across a mixture of bodies. This move from focusing on the individual action of babies is not about obscuring the babies from view or under valuing what they bring to a space. Osgood and Odegard (2022) have considered what it means to focus on the more-than-human in an early childhood setting and consider 'child' as an open concept 'replete with tentacular connections' (2022:229). The image of tentacular babies helps me shift my thinking from championing what babies are doing in a human centric lens to following the babies' attention to the more-than-human around them.

Ahmed shows how following attention in this way becomes a political choice. She reminds me that 'there is a politics to how we distribute our attention' (Ahmed, 2008:30). Moving away from focusing on individual babies worked in a number of ways. The first shift was that this moved away from the narratives of development and championing individual babies through competency and cuteness. The second shift is that this move felt more comfortable with my own unease of attempting to represent or replicate the babies' experiences and became both an ethical and epistemological shift.

Attending to affect

The shift in my understanding of how data reifies or compels certain embedded ways of thinking invited me to reconsider what the purpose of data is, what it does and how the way it is collected or created tells a lot about the concepts and thought processes that surround research practice. In finding a new way to think with the idea of research collection I am drawn to Braidotti's idea of the nomad as there is something about the situatedness that brings us back to space and the on-going stories-so-far (2005) that Massey describes. She suggests that the task of the nomadic subject is to engage in 'drawing a cartographic reading of the present' (2014:167) which brings to mind Massey's stories-so-far (2005) as a slice of time across a plain of on-going events. The story that I drew out in the first chapter of this thesis; of the pram, the baby, the mud and the wheels; has a rhizomatic quality that brings

these different threads together momentarily where each body is entangled with the other. With this story is an awareness that these different bodies might then set off in different directions to tangle with other bodies. Each body is changed, if only slightly, by the encounter and holds a future that is not dictated by the encounter or the recording of it. Braidotti acknowledges the politics of location in research is 'situated and accountable' (2018:208). It is this starting with a situated and relational space that brings the affective and attentive work of Stewart into the fold of the research and ensures that the theoretical and methodological threads work together.

During the play sessions that we delivered through this research, attempts to describe or record the individual actions of babies led to unsatisfying data, as if a moment thick with meaning, movement, intentions and feelings could fall apart in your hands as if it was never there. Following the babies and their resistance to the research and human centred activity encouraged me to look elsewhere, and by looking elsewhere I found my notes shifted to something more akin to Stewart's commitment to 'speculation, curiosity and the concrete' (2007:1). In chapter four I described how Stewart's descriptions of affective atmospheres and ordinary affects appear to hold a resonance with how babies experience and produce space. This linked particularly with Stern's (2010) suggestion that babies are more tuned to dynamics of a space rather than the physical or symbolic characteristics. Stewart describes how these atmospheric attunements are:

palpable and sensory yet imaginary and uncontained, material yet abstract. They have rhythms, valences, moods, sensations, tempos, and lifespans. They can pull the senses into alert or incite distraction or denial.

(Stewart, 2011:445)

In attempting to tune into affect and the dynamics of a space I found guidance from Stewart's slow ethnographic practice. This practice pays attention to the fleeting, sudden or lifting moments that happen across a space. This makes it possible to consider space through the 'throwntogetherness' (Massey, 2005) that Massey composes as a way to encapsulate the multiplicity of unpredictable, relational entanglements that occur across an on-going plain.

Stewart describes moments of fascination where ‘something throws itself together in a moment as an event and a sensation; a something both animated and inhabitable’ (2007:1). She suggests that these moments matter because they hold promise rather than the content of exactly what happens. This changes where the interest lies within a moment or how a moment might be described or considered. It opens up attention from the actions of individuals (though these can be significant) to the intricate mingling of the environment. This acknowledges how moments are mixed up between the human and the more-than-human in material-discursive and political ways and how they appear, move and surge in different formations. By shifting attention to these threads, a different sort of knowledge is produced. Stewart describes:

affect studies offers an ethnographic method of mattering that slows to gather into an account any number of things the modernist mode of critical thinking misses: all the bodies, the lines of things on the move, the widespread joking, the sonorousness, how any line of a life vies with an unwitting ungluing, how things get started, how people try to bring things to an end, why thought as such might become an add-on or window dressing, why conceptuality might take radically different forms, or why it matters that attention sometimes slows to a halt to wait for something to take shape.

(Stewart, 2017:196)

In writing notes that took account of affective, embodied and personal accounts of the space I was aware that these collections were not, and never intended to be, an objective account of things that happened or described an event in a way that captured how something was experienced by all the bodies that were involved. Not only is it impossible to write something that catches the experience of every-body that is involved, it is also impossible to replicate my own experience of an encounter in an objective manner. In writing notes, I was aware that I was thinking how to effectively get these atmospheres and collective encounters across, choosing particular words that were most compelling or clear. It occurred to me that the idea that these notes would be used to then think about these spaces in the future was a nonsensical idea of what was happening. Thinking was already occurring as I selected which words to write. This led me to consider when the thinking started, moving back the steps to the moments that I was trying to record; before I put pen

to paper, driving home in the car after a live session, the moment the screens switched off from a Zoom, the moments of stillness as I fed my baby. Thinking was already happening in these spaces but even these were not the starting points. It became visible to me that the thinking that produced this writing was occurring as the events unfolded. Holmes and Jones (2016) have drawn out methodological implications from Deleuze's consideration of texts. His description of texts is as follows:

Texts are traversed by a movement that comes from without, that does not begin on the page (nor the preceding pages), that is not bounded by the frame of the book; it is entirely different from the imaginary movement of representation or the abstract movement of concepts that habitually take place among words and within the mind of the reader.

(Deleuze, 1985, cited in Holmes and Jones, 2016:108)

Holmes and Jones suggest how even before pen and paper have collided, they are already a part of a relational and heterogeneous field of tensions, echoes, cuts, feelings, comments and things unsaid. From this suggestion I begin to understand the story-making process as built on a multiplicity of 'with's.

Springgay and Truman (2018), in considering walking as a methodology, contemplate each walk as a 'walking-with', the *with* bringing a milieu of other bodies, sensations and theories into the fold. They describe this motion as:

foot touches matter but matter touches foot as breeze touches skin; the world displays sensibilities other than our own, prior to consciousness, even to bodily-based perception. There is a sense, if not recognition, of the vibrancy of matter, of a worldly sensibility, of the force of the world's causal efficacy.

(Springgay and Truman, 2018:xii-xiii)

Platt (2024) has associated this walking-with to the walking that happens between a mother and baby and how this becomes a process of worlding that is always collective and relational. Though walking brings a very specific movement and way of being in the world there is something about the constant motion and queering that babies enact that becomes a worlding between babies, other humans and the more-than-human bodies around them.

In this there is constant renegotiations, interceptions, merging and resisting that happens through a thinking-with. This thinking-with is not a reflecting, analysing or filtering that happens after the event but a thinking in the body that constantly works with the sensory, felt, haptic, atmospheric changes that occur in the moment. This thinking-with breaks the idea of a separate researcher collecting data to represent the experience of baby participants and situates each of us as bodies thinking-with each other and producing space. By the time any notes are written this is not a record to be utilised in a following stage of analysis but a way to continue thinking and holding moments in tension. Truman, in an experiment on writing as research-creation, suggests 'rather than representing research "data" through art/writing, the process of art/writing is the research and theorizing' (2016:138). This becomes a way to resist the temptation to reduce these moments and the experiences of babies into explanations or representations. Taking a lead from Haraway (2016), the writing that occurred between encounters allowed a tentacular layering of new thoughts, objects and actions (pen, theories, comments, memories, the movement of writing and so on) to add into the event and keep the thinking-with in motion. This moves away from considering the writer as a 'pre-formed subject with distinct authorial intentions ... and consider[s] the emergent qualities of language expression' (Truman, 2016:137).

Considering the research spaces as thinking-with prompted new possibilities. For example, following the babies' resistance of data collection and turning away from the centre of the room encouraged me to turn away too, to follow their gaze and write about the more-than-human bodies that were also part of the space - writing about the luminous paper, the linoleum floor, the weeds on the towpath and so on. In phase 2, as my daughter and I dwelled in various public spaces in our local neighbourhood, these moments of loitering would sometimes become little experiments, such as wedging the phone camera in the fold of the sling to record the sensation of walking out of the house, or, inspired by an exhibition from Clewlow (2017) entitled *My paths are my ideas of imagination*, taking little notes of things we encountered at specific points of the day resulting in reams of lists of seemingly random objects and events.

Data as a residue

This awareness of thinking-with opened up my understanding of what counted as data. Jones and colleagues describe sticky data that ‘sticks out, sticks to and often gets stuck in our thoughts...’ (Jones et al, 2010). They relate this data to the wonder that MacLure (2013) identifies that dwells between the data and the researcher and can cause a jolt or pull. The reams of notes that I wrote held varying degrees of stickiness, many of which did not stick at all. There were, however, other things that stuck that I had not considered part of an official data set. The notes were mixed in with all the different moments and encounters that came with each session or, later on, from encounters in the streets and public buildings of our local environment, many of which had not made their way into my notes, often because they were things that were hard to put into words. This included the felt moments, the expectations, the gnawing feelings, the odd looks or pull of everyday objects that couldn’t be easily translated. In this sense I realised that I was not collecting data by writing notes but allowing data to emerge by being in the moment. As the research continued, the writing, feelings, comments, touches, images, memories and atmospheres slowly percolated until only the things that wouldn’t go away were left. This allowed data to form like a residue.

Through this percolating process, I am left with the sticky data that Jones and colleagues (2010) describe. Considering this data as residue is helpful in bringing to mind, not just what the data is but how it is formed. Thinking-with residues becomes a filtration of the events over time allowing some residues to take form whilst others dissolve. The residue that remains is made up of interactions, intra-actions, small moments, whisps of conversations, small movements, stuck memories, little scribbles and a handful of written notes. Through this the writing of notes was a process for keeping some things in the air and letting other things sink, bringing attention to small moments and making them big, or writing out the big moments and realising they were not as significant as I might’ve thought.

Story writing

Writing stories became a continuation of keeping things up in the air. It took me a long time to work out why I was writing stories. Many supervisions were spent trying to decipher what

it is I was expecting them to do, why I didn't think they were doing anything and why, despite this, I couldn't leave them behind and continued to write. I am fairly certain that the process of writing stories came about through the strange isolation that occurred in the various lockdowns, the little need for complex equipment and the conviction that stories held an answer to the issues of representation that is at the heart of the three main reconceptualisations of babies that held this research together.

In her writing on inhuman literacies, Truman (2019) takes Wynter's suggestion that the human brain developed through storytelling. She suggests that this means that the human species has not only developed through a biological process but produced through a process of storying (2019:113). With this is the potential for storying to produce a 'rewriting of our present now globally institutionalized order of knowledge' (Wynter & McKittrick, 2015:18, cited in Truman, 2019:113). My initial understanding of this was the power of stories to change narratives and create new thinking. What I have come to learn through this research is that it is the making, not the presenting of a final and finished story, that holds the capacity for new knowledge to unfold. This is why I am concerned with the process of how the stories came to be and what was produced in the process of writing them rather than what the stories do as finished products. Through this focus I refer to this process as story-making as it was the making that made new thinking possible. This making started from the first encounter between myself and the families involved in this research as we spaced ourselves around an empty function room and leant in. The capacity of story-making is not just the writing, the telling, or the stories in themselves but the moments from which they were formed.

As I continued to write, the stories would shift and change. Sometimes one story would mix with another, sometimes endings would disappear, sometimes the thing that started the whole story in the first place would be enveloped by something bigger. With each change the stories became an extension of thinking-with. The stories brought different elements of events into focus or gave space to dwell in tricky sensations that still couldn't find their way into written words. Puig de la Bellacasa (2012) writes about a thinking-with that she describes in the work of Haraway. This variation of thinking-with 'resists the individualization of thinking' (Puig de la Bellacasa, 2012:199) and acknowledges the collective moments and relational encounters that produce new knowledge. Though these stories are a slim world

away from the spaces that were shared during the research they become a vehicle for continuing the thinking-with that started in these spaces and sets them off in unexpected directions. These stories become a way of gathering the layers that have built across the research from tiny interactions, policy documents, art installations, dreams and children's picture books and sets them to work in a way that keeps things visible. The stories become a writing-with, rather than writing about, the encounters and layers that are produced. Continuing a commitment to the 'with's that fold into the story-making, each story is produced through and presented within layers of other texts and images that shape the stories and reach out in tentacular movements. Holmes and Jones (2016) describe how their own experience of working with seemingly separate layers of empirical materials brought their attention to an 'immanent relationality' (2016:109). They suggest how:

a background movement of affordances somehow maneuvers the image and text to the forefront of the ... ongoing commotion. Unfolding in/onto each other, as generative forces that participate in the production of new subjective possibilities.

(Holmes and Jones, 2016:109)

Rather than attempting to reduce things down to a neat and final end, As Puig de la Bellacasa suggests of Haraway's work, there is instead, a pull to make things 'thicker' (2012:201). In writing these layers into stories I found that the process created new patterns for my own thinking. This is not to suggest that I found clear answers to my initial questions but instead found new questions that mattered.

Thinking-with theory and the friction of vitality affects

This thinking-with that permeated across the research made space for a further stage of writing, after the stories, that attempts to bring together some of the encounters, stories and theories that make up the body of this study. The stories made space for a thinking-with theory that Jackson and Mazzei refer to as a plugging in between different theories and forces (2020). This thinking-with theory is a 'co-composition' (2020:133) that enacts something new and is applied to this research in the next chapter as a way to explicitly bring theories that attend to space and movement into the fold of the babies and stories that

make up this study. Puig de la Bellacasa (2012:200) highlights that a key role in Haraway's use of thinking-with is that it holds multiple strands of conflicting theories together. This action breaks the pre-existing boundaries that are held up by seemingly in-congruent ontologies and epistemologies that become further entrenched by the often inward facing nature of the structure of separate disciplines. Instead, she suggests that 'trajectories and positions can connect and transform each other without needing to erase their divergences' (Puig de la Bellacasa, 2012:205). In this way, thinking-with becomes a way of holding things together. Developing this idea further Truman (2019) suggests a 'frictional thinking-with' which she takes from Puar's (2012) frictional practices. Truman suggests that these are frictional in that 'they undo the binary of mutual exclusion and force different kinds of logics to rub against each other' (2019:114-115). This becomes a 'productive way of thinking-with seemingly mutually exclusive theoretical paradigms' (2019:115). The intention is that holding these contrasting lines of thought together will produce space for new thinking.

Throughout this research I have found something meaningful in Stern's vitality affects. These forms of vitality are interesting because they pull together what he refers to as 'theoretically separate experiences of movement, force, time, space and intention' (Stern, 2010:5).

Though he comes from a development psychology perspective and takes a somewhat apolitical and objective approach to something that I am certain is political and subjective, there is something about this drawing of different angles that merges with my own intentions for this thesis.

Mayes (2019) identifies how attending to work from counterpointing disciplines can be productive even if there is a juxtaposition of ontologies that appear incompatible. She suggests that diffractive reading of different work can create 'inventive provocations' (Barad, 2007:50, cited in Mayes, 2019:1194) finding insights by reading different areas of study 'through one another' (2007:25). This produces an intention to work across the boundaries that have been built up around different disciplines and find constructive ways to work together.

As Bargetz and Sanos (2020) have outlined, the 21st century has seen a growing call for a reframing of critique for a more generative and affirmative engagement that seeks to create new possibilities and 'transformative potentialities' (2020:501). This call, though hailing from several different directions and perspectives, is a central thread within feminist new

materialism. Osgood and Robinson (2019) show how feminist researchers, through an intersectional lens and post-structural feminism, have 'exposed how power operates in childhood contexts' (2019:2) by 'taking the personal as political into the heart of the research investigations to radically shift how children are conceptualized' (2019:2). They show how the political and power structures are kept visible through 'important deconstructive work to identify the concepts that define and denigrate' (2019:3).

Bergetz and Sanos (2020) warn that a move beyond critique may surrender specific genealogies of feminist thought such as these and hide existing power relations (2020:501). To ensure these aspects remain visible, Osgood and Robinson turn to Haraway (1994) in a practice of 'materialized reconfiguration' (2019:3) where textual discourse and social production are entangled with the material. This leads to an ethical responsibility to seek out dis/continuities of objectivity and detached knowledge claims (2020:4) and to 'reconfigure what we think we see and what we think we know' (2019:5).

It is this reconfiguring that compels me to include the theory of vitality affects in this research. As I return to my written notes from the different research spaces the dynamic qualities of vitality affects seem to appear often in the words that I have written; solidness, the fuzz of sounds, slowness etc. I emphasise here that what I've written in these notes are not a representation of what the babies actually experienced, as I have no way of accessing that knowledge. I am not trying to recreate exactly how a baby enters a room but to follow their attention and to speculate, and in doing so I seem to have tuned into these vitality affects. Through this I am not suggesting that these notes are evidence towards vitality affects as an explanation of how babies experience the world and is more likely related to my adult perspective and how we as adults attempt to place babies' multimodal experiences into our own understanding of words, but I wonder if vitality affects are a useful form to think with when considering the role of babies in spaces. Perhaps there are generative contradictions within the different ontological stances that can provide a different possibility of events by keeping the differences open and in tension with each other.

Focusing on the glimmer of the vitality affects in this research and the presence and influence that these vitality affects possess within the research spaces, I suggest that we can consider these vitality affects as bodies of their own. These are not dynamic concepts formed through an understanding that a baby acquires nor as evidence that reinstates the

mother-child dyad, but as something that is created through the babies' presence and their entanglement with other bodies of the space; bodies that are both human and more-than-human, material and metaphysical. This is not just a human's interpretation of a space but a tangible momentary quality. Considering vitality affects in this way takes them out of a linear step towards human language development and into bodily entanglements within a specific time and space.

What next?

What do the stories do once they are made? My hope is that these stories make space for a conversation that moves away from the usual narratives – they side-step developmentalism and bring attention to the spaces that babies frequent or where the absence of babies is made visible. I don't know if this process will become relevant to another research space in the future as it felt so specific to the conditions that it grew from, but I would be really interested in bringing these stories back to the babies. To allow the stories to form into sensory experiences or narratives that could be conveyed to the babies in tactile, material and sensory ways that attended to the sensation and transcorporeality of spaces. I imagine the next steps that emerge from the specific stories that have been written into this thesis could lead to building a make shift fountain in their usual play space, constructing scaffolding that babies can crawl on, or walking with the babies and families to their local park at night. By lifting the stories out of the written word and back to the places where babies dwell it would return the written language to the embodied, atmospheric and collective ways of knowing and produce new folds of thinking-with. Bringing the stories back to the babies in multi-sensorial ways would accentuate the ways that babies contribute to collective knowledge making.

Chapter 8: Thresholds, atmospheres and hospitality

This chapter takes some of the moments of the research and draws out particular concepts that appear to be at work in these spaces. Throughout the thesis I have already merged

certain ideas that appear to do something to understandings of babies' spatialities. In Chapter two I identified different spatial theories that existing research has applied to babies and young children's space making practices. In this chapter I re-imagine some of these existing theories and I go on to draw in new perspectives that have become visible through the journey of this research. The chapter has become a mapping of possible tentacular extensions that arise from moments that have stuck and reach out to different possible responses.

This chapter is an opportunity to bring babies spatialities into the contexts of the different spaces that we encountered and particularly back to the space of galleries and museums that were the starting point for this research. The chapter extends and develops the thinking-with that I detailed in the previous chapter. In this case the thinking-with has moved from an embodied and relational thinking that occurred during the opportunities to share space with babies and it has turned to Jackson and Mazzei's idea of thinking-with theory. Interestingly, Jackson and Mazzei liken this thinking-with theory to the threshold where 'something happens' (2020:6). They suggest that 'the excess of a threshold is the space in which something else occurs: a response, an effect, an affect. An intensity that is perceptible – sensed, felt' (2020:6). They also note how a threshold is often considered as somewhere that signifies movement from one thing to the next and is not a place to stay in for long. Considerations of thresholds take up a hefty amount of this chapter as they seemed to feature across the entirety of this research. The idea of thresholds as intensities that are felt resonates strongly with how the threshold unfolds in this chapter whilst the idea that thresholds are not for lingering in is utterly unsettled by the actions of babies.

Thinking-with thresholds

The ramp that leads to the accessible entrance at the library,

The automatic doors of the college,

The wobbly bit on a train that joins the two carriages,

The place the lino meets the carpet,

The gap between the blind and the window.

(Research notes)

In many of the stories and snippets that I wrote during the course of this research thresholds appeared again and again. They appear in each of the three stories that I have included in Chapter six. As each story follows the one before the thresholds take more presence. In the first story the change of space from the indoors of the library to the outdoor fountain brings a change of atmosphere, action and possibility. In the second story there are thresholds between the cosy bedrooms and the outdoors at night alongside thresholds of light that reveal and play with the physical world. The space identified in the final story is a threshold in itself, a space that stands between the entrance and the main space of the library, holding a whole liminal world in its in-between-ness.

Researchers following young children in museums have noted the effect of architectural structures on children's navigations of museum spaces. Hackett, Holmes and MacRae (2020) show how these structures seem to hold significance for young children (2020:8) with a multitude of accounts of young children dwelling around stairways, swing doors, corridors and lifts. Wallis, for example, dedicates a whole chapter to children's interactions with a revolving entrance door (Wallis, 2020). This attentiveness has been significantly fuelled by Hackett, Procter and Kummerfeld (2017) through developing a framework that worked with spatial theories and architecture to foreground young children's perspectives of museums. Within the slim yet significant body of literature the dwelling possibilities of liminal spaces seem to emerge frequently with thresholds often attracting the attention of children where the change of a space is signified, either with doors, archways or changes in the floor. Noble and Wallis (2022) document the stairs of the museum as space to 'be' rather than to transport somewhere else, Hood and colleagues (2022) show how liminal spaces become important moments for young children to enact everyday moments of rest or play and Mulcahy (2017) maps liminal spaces as key to 'liminal learning' with older children in museums. Alongside this, researchers have considered boundaries within museums not only as the physical spaces that children cross in their journey through a museum but also as boundary objects that create opportunities for innovation and new learning making museums a particular space for 'boundary crossing' (Carr et al, 2012:56).

Thresholds are scattered thickly across the journey of this research. My daughter showed a sensitivity to thresholds that I myself must have dulled my own senses or awareness to over time. As early as 8 weeks into our journey together she had a strong preference for certain

rooms in the house, particularly the bathroom and the kitchen, and her body would change the moment we stepped through the open doorway either out or into the room. I don't know what it is that she enjoyed about these rooms. Noticing that both rooms had much more hard surfaces than the bedroom or living room and therefore different acoustics, perhaps her interest was in the sound. Perhaps it was not the sensory characteristic of the rooms themselves that she enjoyed but the change of going to a space that she spent less time in generally and the newness and uniqueness that these spaces provided. Perhaps it was not the different space but the event of crossing through the threshold that moved her. Whatever the reasons, it was her awareness of the threshold that resonated with so many of my notes when working in the lively space of the children's centres. Within the notes is a fixation on how babies enter the space and where does the beginning of an event begin. Questions that I seemed to return to often include; What happens when a baby enters a new space? What are the thresholds throughout a space and how do we experience them collectively?

This is a new place. Wrapped inside layers, smooth rolling of the wheels on linoleum, a change of rhythm and a different rumble. The air is different; there is no breeze, no movement. The unstoppable coldness on nose and cheeks is stopping. Slow prickles of warmth. The fuzzy cloud of sound made from traffic and weather and workmen is gone. Sounds are closer, sharper, thinner. Definitive words and melody of new voices. Mama's voice rings through the others. Her face looks away, at things and people that you haven't seen yet. Above her, so far away, are squares of solid light. You hold on to their solidness.

(Research notes)

In *The Smell of Red - Cinnamon*, Erin Manning (2015) uses spices, sculpture and wind machines to create the conditions for 'thresholds of experience where change is barely perceptible' (online). These thresholds are multiple in the affective atmospheres of the everyday and swell, often unnoticed, into moments of action or feeling. As Sara Ahmed (2014) suggests we experience these thresholds and atmospheres differently. Sometimes they are light and easy to walk through and sometimes they are as solid as a wall that blocks your path. Sometimes they may do each of these things in the same space for different bodies. Difference in the experience of an atmosphere is not just evident in the feelings or

actions that happen as a result of passing through a (sometimes barely perceptible) threshold but also the perceptibility of a threshold differs depending on *how* we navigate through them. Perhaps this is most evident when moving through a physical threshold, a doorway, into a new space or atmosphere. Manning and Massumi (2014) illustrate this difference through Mukhopadhyay's experience of a door.

When Mukhopadhyay sees the "door" he does not immediately see a threshold for passage, as a neurotypical person might. He sees qualities in a texture of integral experience. Colour fields first, and from that interplay, shape asserts itself. Here I am! Then with shape comes size. This relay of emergence is now ready to be described as a door.

(Manning and Massumi, 2014:16)

They show how this differs from a neurotypical practice where habitual experience makes crossing a threshold 'likely to occur as if automatically, without the interplay of qualities, their relay, the emergence of door, and the opening of the affordance even registering' (2014:16). This habit becomes an 'experiential short hand' (2014:17) which can abridge any event rather than needing to start again with every new moment. They suggest that through this habit 'Doorness disappears' (2014:16). Although the focus of Manning and Massumi's inquiry is positioned around neurodiveristy and not related specifically to childhood, the absence of habit resonates here. The way in which a baby might experience 'doorness' without relying on habit allows the relational folds of experience to be felt.

This experiencing of the world through relational folds brings to mind the work of Stern on vitality affects. In development psychology, Stern (1985) suggests that babies in their first few weeks, rather than distinguishing between things, shapes and colours, experience 'temporal contours, rhythmic patterns and intensity gradients that can underlie all sorts of actions, gestures, mimics or tactile sensations' (Mühlhoff, 2019:2). Stern calls these dynamics vitality affects. He describes them as 'intensity contours' such as surging, bursting or fading away (Stern 1985:54). As I have outlined in the previous chapter I am hesitant to include Stern here as his work jars with the general ethos of this thesis. For Stern, vitality forms are a part of 'implicit relational knowing' which he defines as a mastery of the dynamics and structure of 'interpersonal exchanges' (2010:110) that must be developed *before* verbal language. This places vitality affects on a developmental trajectory that zooms

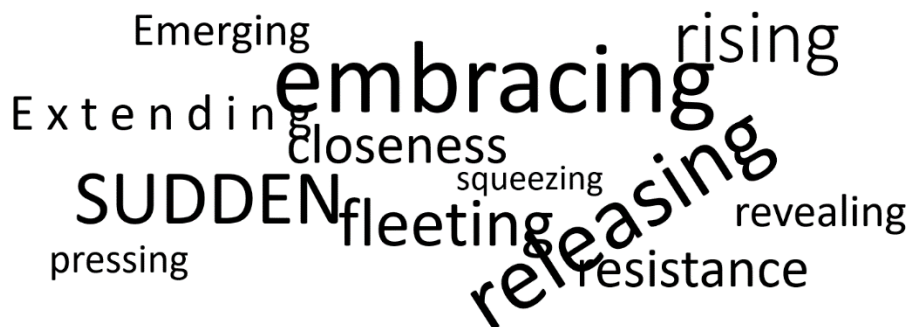
in on what the human can do. Stern identifies many of these vitality forms through existing controlled tests with infants such as Bornstein's (1981) study on colour discrimination and Olsho et al's (1982) study on volume levels (referenced in Stern, 2010:112). I include these particular aspects of Stern's work as they are directly at odds with the main concepts of this research. His research actively defines babies through a developmental perspective of which I have spent a good portion of this thesis trying to move away from. His knowledge making is also grounded in the idea that babies can be known through controlled tests that extract babies from their everyday lives and hold them as objects of study. My main concern with Stern's work is that much of this exploration of vitality affects is presented in a traditionally scientific, a-political format that ignores the religious, political, medical and cultural concerns that some of this work entails. Not only does Stern search for the first signs of vitality in utero without acknowledging or contributing to the debate that this evidently feeds into, Stern's focus on the parent-infant interactions between babies and their mothers draws to mind the image of Riley's bell jar and the mother and baby that are encased within.

There is, however, something of Stern's vitality forms that are interesting to think with. Manning makes this visible through a discussion that questions the idea of the skin as containment through considering the relational experience of strata for babies. She does this through engaging with Stern's vitality affects. In this way she finds vitality affects a generative theory to work with. Through vitality affects Manning describes experience for babies as a 'qualitative merging of edge and contour, intensity and affect' (2009:39). Rather than seeing this as a precursor to becoming more human, Manning brings a more-than-human capacity to these affects. She takes vitality affects out of a linear progression of development through a durational process and relates the forming of vitality affects to babies' experience of time as 'an immanent becoming-present of experience in experience, the feeling of a 'd  j  -vu' in a nowness without, as yet, a past or a future' (2009:37). For babies, habits are not yet formed to dampen their awareness of the qualities of spaces, things and interactions. She suggests that babies 'bathe in pure experience' and that this quasi-conscious state is 'of the edge, not the centre' (2009:40).

This dwelling on the edge may be at play when my daughter registers the doorway and seems to want to linger in the liminal space between the two rooms. Without habit we can

recognise that each time we pass through the doorway from the living room to the kitchen we are part of a unique moment. Stern suggests that each action has a thousand possibilities such as 'a thousand getting-out-of-chairs' which each produce different vitality affects. Manning builds on this to suggest that 'Vitality affects function in a field of relation: they merge with experience's tendencies-toward feeling and emerge as the feeling of the event' (2009:38).

Returning to Manning and Massumi's (2014) idea of 'dooriness', and the relay of sensory qualities in the example above on passing through thresholds, the vitality affects of the door are not just a different way of considering interactions between a person and a door but tap into essential qualities that are part of 'dooriness.' Depending on how we travel through the doorway we might feel the door as emerging, rising, sudden, fleeting, closeness, resistance, pressing, embracing, squeezing, releasing, extending, revealing. We might feel all or none of these and we might feel them in varying intensities and in relation to each other. Not neatly as the list that appears here but in a simultaneous merging and emerging of affects that would appear more like this:



Though perhaps centring the doorway is approaching these minute interactions from an awkward angle. Perhaps when Manning says it is 'of the edge' (2009:40) maybe the doorway is a pause, a breath from all the intensities of each room, a holding space, where the senses rest. This allows the babies to be of the edge of experience, to side-eye the world around them momentarily before the next wave of pure experience washes through from the next busy room. A breath between the next set of acoustics, intensities and atmospheres that are thrown into the babies' ever-changing world.

As my baby began to crawl and could move herself further around the house, perhaps this is why she still would take herself to the doorway and sit across the threshold, creating a

space with the doorway that provided shelter from the intensities of the centre. Perhaps this is why families in museums find themselves in these in between spaces as referenced at the beginning of this section. Perhaps this why we find the babies in the play sessions being held in the edges of the room. I will come back to this experience later on in this chapter.

In the previous chapter I outlined how I have come to consider vitality affects through the glimmer that they produce. I suggest that we can consider these vitality affects as bodies of their own. These are not dynamic concepts formed through an understanding that a baby acquires but as something that is created through the babies' presence and their entanglement with other bodies of the space; bodies that are both human and more-than-human, material and metaphysical. This is not just a human's interpretation of a space but a tangible momentary quality. Considering vitality affects in this way takes them out of a linear step towards human language development and into bodily entanglements within a specific time and space. Considering the vitality affects as bodies that permeate human and more-than-human entanglements works to lift these affecting and ever-changing bodies out of the mother-child dyad that they are so often associated with and brings babies interactions with an abundance of bodies across different spaces.

The affect of a threshold of experience such as Manning's (2015) imperceptible thresholds seems to be held somewhere in, through and between bodies and spaces. These tiny, cumulative and powerful forces bring us back to Stewart and her interest in the intensities of form and force that unfold in scenes and encounters (Stewart, 2017) and the gossamer like way that these affective stirrings, being so tricky to capture, often dissipate when attempting to describe them in words. The next section attempts an articulation of those almost intangible affects that build, move and disintegrate through shifting atmospheres.

Thresholds of atmospheres

A loosening of restrictions: For the first time there is a large circular mat in the middle of the floor strewn with shiny play-things. There's a giddiness as we edge nearer to the centre and nearer to each other. The cheery playlist adds to a sense of joy and celebration. Babies lie close enough to touch, cameras are held high above to catch

an aerial view as hands touch hands, feet kick out and collide with knees, a stretch of desire turns into a grab for another baby's bow. A cry rises, a baby shouts as he struggles to push himself round from facing the floor. An adult lifts a baby up high and her own feet fumble on the mat. An actual tipping point as she catches her balance. There's stuff everywhere and the music is too loud. It adds to the noise.

(Research notes)

Throughout the live play sessions there were countless moments where babies, objects, sounds, spaces and adults would build intensities, gradual affections or sudden cuts in atmosphere. These moments were hard to define, often due to the slow, almost imperceptible building of feeling in a space until the room is a buzz of excitement or sometimes the minuscule of an action that sets off a reel of affective changes - a stretch from a baby or an interruption from something outside the room. In the previous chapter I identified how these moments seem to resonate with Stewart's description where 'Something throws itself together in a moment as an event and a sensation; a something both animated and inhabitable' (2007:1). Stewart relates these moments to ordinary affects which she describes as 'the varied, surging capacities to affect and to be affected that give everyday life the quality of a continual motion of relations, scenes, contingencies and emergences' (2007:1-2). By connecting these ordinary affects with Manning's understandings of vitality affects and containment, it is possible to consider that babies' experiences of these moments are heightened or shared through something transcorporeal. That they are perhaps more attuned to these forces of affect because of their capacity to keep their body in motion with everyday affects. Manning suggests 'when we grow up and learn how to distinguish the world from the body [the body] actually cuts off from the welling event the ecology that was emerging' (2012: online). When one baby's cry sets off an imbalance of feeling, a shuffle of discomfort and collection of responding cries from the rest of the room perhaps this is the babies sharing the sensation of the moment, not crying from fear of a noise or something unknown to them but a collective sensing. Perhaps this is part of what is lost as we develop language and reason and learn to see ourselves as separate.

In my experiences of working with babies, I have always felt an awkwardness in crossing thresholds, particularly in the beginning of play sessions and 'welcoming' families into

whatever space we are about to share such as a gallery, a baby room, a theatre, a marquee or a function room. I seem to repeatedly lean towards the moments that the families enter the space or click into the online screen and find difficulty in putting these moments into words. My awkwardness resonates with questions around welcome, beginning with *who owns this space we're in? Who is it for? and who is hosting who?* I am particularly interested in Sara Ahmed's atmospheric walls (2014) that are palpable and can keep certain bodies from entering certain spaces and yet are imperceptible or perceived completely differently by others. As Stewart suggests, 'atmospheres are never neutral' (2011:445) and are felt from different angles, or 'already angled' (2011:445) as we enter into them. These atmospheres are felt on entering a space and are active in making it possible or not possible to cross a threshold as solidly as a wall can block your path.

Zembylas's discussion of hospitality in education fits well with these questions where hospitality is considered not simply as hosting an open space but uses Bulley's image of hospitality as 'both maintaining *and* disrupting [...] both consolidating and transformative' (Bulley 2015:189, emphasis in original). Zembylas relates the work of Bulley to suggest that 'hospitality can be theorized as a spatial and affective relational practice' (2019:43). His initial reason for considering hospitality as spatial being that it 'clearly involves the crossing of borders and thresholds' (2019:43). This mirrors Morin's (2015) conceptualisation of thresholds that function simultaneously as the place of openness and closure (Morin, 2015:31). Where Zembylas suggests that it is through hospitality that 'the affective and material practice of *my* crossing is made possible' (2019:43) he notes that the same hospitality 'delimits space' by excluding '*your* crossing' and becomes a closure in the same stroke. Through this double-edged sword of inclusion and exclusion we must ask *who is welcome in this space?* and perhaps just as importantly, *who is not welcome here?*

During a relaxing of restrictions in the back and forth of the pandemic my family and I visited an outdoor museum. The museum had a large expanse of grass with trees dotted about where families could shade underneath with picnics and play-things. As we strode across the grass a toddler stood up to greet us and welcomed us into his family's picnic with open arms and a heartfelt greeting that adults would usually save for long lost friends. It occurred to me that perhaps these were his first experiences of sharing spaces with strangers and if there are no strangers, or spaces where you are made a stranger, what does

this mean for hospitality and feeling welcome? The queering of the pandemic in our experiences of normal and of babies in their ability to transform space with one swift movement seem to collide in this fleeting and everlasting moment.

The positioning of thresholds as welcoming and unwelcoming, opening and closure, brings to mind the human body in its lively assemblage with other matter and the thresholds that are sustained, transformed or interrupted as they merge with other bodies. We experience borders and thresholds in multiple ways through our bodies in all our encounters with the world around us. This brings into focus the trans-corporeality of babies' bodies and what this does when considered through the microscopic world of viruses and the global perspective of a pandemic and the sensing across bodies that sets a ripple of reactions when a baby welcomes a stranger into a picnic.

Nomadic babies

Returning back to the live play sessions that took place during the first phase of this research, the families were spaced out across the room in 'baby nests' that followed the social distancing guidance. This idea of 'baby nests' were popular with other baby groups and spaces and there was a sense, in discussions with other practitioners, of the babies being easier to manage rather than toddlers, as they would stay relatively within their marked space. What we had not accounted for, and later became more obvious, was the realisation that babies, though considered small, compact, and unlikely to move, actually sometimes need big spaces. Repeatedly the babies in the play sessions made it clear when they needed to move. Parents would scoop them up and tentatively step around their mats to keep on the move but within their designated areas, or, more often, they would step away from the mats and out to the edges of the room, away from other babies, so they had more space to move. It appeared that it was not just the rocking and bouncing small movements that the babies needed but to travel within the space, to change their position to somewhere new. A year later when my own daughter arrived, she loved to be on the move. Like the babies in the play sessions, she could not traverse a space independently but would, mostly, appear calm and content on the move, either in arms, in the sling or in the pram. There was little space for this in the house and as the weather turned colder I was

less inclined to walk for long periods outside. We found ourselves in the library. For a few months it became our place to walk, not just in the children's section but around the corridors of shelves, the daily newspapers and the computer desks.

Young babies are often categorised as 'non-walkers' or 'pre-crawlers' which builds this image of the stationary being that must be transported by carers. One way to disrupt this idea is to reconsider what is meant by walking. Ingold (2016), for example, references the Batek women of Malaysia where it is understood that roots of vegetables walk as humans do. In this case roots can be seen to be walking where 'walking is a matter of laying a trail as one goes along' (Ingold, 2016:78). In this sense, babies are already walking. In a study of babies' experiences of everyday space, Orrmalm (2021) shows how babies' things travel around their living space throughout the day and are in a constant flux of being tidied away and redistributed. Though this study is with slightly older babies who might be walking in the more traditional sense, this moving of objects occurred in our home well before my daughter had established walking herself. Nappy change items, teething toys, sippy cups, muslins all travelled about the house with the baby and were often moved in the baby's hand whilst being carried, or by the baby herself as she perfected her rolling and pivoting to move around the room. This movement of objects and material things brings to mind the work of 31 different photographers around the world who share images of seemingly random placed objects and baby related paraphernalia as evidence that 'kids were here' (see the [Kids Were Here blog](#)). These object-orientated images, without a child in sight, at once bring the presence and absence of children into focus. The affective power that this creates is a little like the feeling of peering into a derelict building and spotting mugs of tea waiting to be drunk.

Platt talks about walking-with a baby, taking 'walking-with' from Malone and Bozalek's (2021) use of the term which acknowledges 'that walking is never solitary but, 'emerges as a multifaceted, multi-sensorial stimulation located within a particular lived landscape' (Malone and Bozalek, 2021:142). By using 'walking-with babies' Platt acknowledges that walking with a baby 'is an entanglement of bodies, a negotiated practice where bodies interact' (2024:2). This becomes a starting point for considering how we talk about babies on the move, particularly when they are being carried, and the influence that they have on where they go or how the carrier moves. Walking-with in this sense tends to be attributed to an

active type of walking, often outside, where one has 'gone for a walk.' By applying this to the walking and carrying that happens between spaces, inside and outside, such as walking around a library or back and forth across the landing at night, we can begin to see the active role that babies have as they move around their daily spaces.

Considering small babies through walking might seem implausible as babies are undeniably reliant on the carrier to transport them from one place to another. The active walker who puts one foot in front of the other is someone else. Yet to consider babies as inactive in these moments or that these moments are not of importance to babies ignores the embodied and affective role that babies have in this movement, their frequent experiences of the walking movement and their desire to traverse through space. Being carried is not just a way to get from A to B but a movement that soothes, excites, stimulates, bores and jostles. To be carried is a way to be in itself. This links with another example of travelling that Ingold retells from Igloolik people in northern Canada where travelling is 'not a transitional activity between one place and another but a way of being' (from Aporta, 2004:13, cited in Ingold, 2016:78). For Ingold, this differs from transport which he defines as 'destination orientated' (2016:79) and can be plotted on graphs or maps with coordinates and destinations. He suggests that for the transported traveller, every destination 'is a point of re-entry into a world from which he has been temporarily exiled whilst in transit' (2016:80). This sits at odds with the experiences of babies as they are carried throughout the day in myriad ways and places and partake in the entanglement of bodies that happen during each carry. For example, saying that my baby liked to be on the move is true, until the occasional point when she decidedly did not want to be on the move anymore and would make this very clear. Her tense actions and vocal expressions would become part of negotiating if we walked any further, how we walked and what type of steps we would take. She was clearly active in influencing elements of walking. It could be argued that this idea of transportation could be applied to babies as they sleep, either in a sling or pram, and wake to find themselves in new surroundings. Yet, even in their sleep, babies influence the carrier, perhaps choosing to walk for longer so the motion of walking keeps the baby asleep, or stopping mid-activity to rock the baby with a new motion when they temporarily stir. Alongside this is the negotiation of bodies depending on the weight of the baby, the position in the carrier/pram and the babies' own movements that influence each step.

In contrast, Ingold compares transportation to that of wayfaring which he describes as a mixture of attention and movement (2016:13) and which has been applied by some researchers to describe young children moving through museums (Hackett and Rautio, 2019, MacRae 2019). Researchers have also applied concepts related to lines and wayfaring to walking with buggies in urban landscapes (Waterhouse et al, 2022). As more attention is beginning to surface on the wayfaring activities of babies it appears possible to consider babies as wayfarers in all of their different modes of movement through space. Ingold suggests that 'The wayfarer is continually on the move. More strictly he is his movement' (2016:78). Babies move through space in myriad ways from the moment they are born and this movement becomes a part of how they experience the world and who they are. Hackett and colleagues suggest that Ingold writes that a wayfaring line continues throughout life from the moment we are born (2020:79) and so, even though they are often being moved by others, babies can be understood as active wayfarers as they travel along and as they live through their constant movement.

Myrstad, Hackett and Bartnaes show how 'attending to the world through wayfaring involves opening up with a lack of fixed intention' (2020:4). It would be inadequate to suggest that babies on the move are without intention but possible to consider that walking with a baby is often with an intention that is additional or different to that of travelling from A to B. Walking to get the baby to sleep, for example, is measured more by time than distance and so might lead to walking routes that waver and loop rather than continue in a straight line from one point to the other. The following note shows that the actions of a baby can bring attention to the different type of walking that happens in different spaces.

Mainly there is space. Bigger than any room in the house, the play group, the library or anywhere else that we go indoors. Not just a big space but one with not a lot of stuff in it. We fall into that way of walking, walking in a gallery is a very specific walk. Slow, pausing at each piece of art, one after another. And it's this moment, raising her head, craning her neck to spot something we've passed, that changes everything. There's a realisation, a break in footing, where we stop and turn and we break away. She's looking across the room, at a bright high contrast painting and we walk across the space, breaking the usual circuit. Now we can go anywhere and she can lead. I follow her gaze going from one thing to another, zigzagging across the space,

sometimes quickly to catch up with her eyes, and we go back again. Always back again to the bright high contrast painting with markings like a road.

(Research notes)

In our first visit to an art gallery, I found myself entering into a very specific way of walking but it wasn't long until the baby showed me that we could walk differently. In this instance, the art gallery could be considered through Deleuze and Guattari's description of smooth and striated space. One form of space is measured, structured and organised where the other is felt and haptic.

Smooth space is filled by events or haecceities, far more than by formed and perceived things. It is a space of affects, more than one of properties. It is haptic rather than optical perception. Whereas in the striated forms organize a matter, in the smooth materials signal forces and serve as symptoms for them. It is an intensive rather than extensive space, one of distances, not of measures and properties.

(Deleuze and Guattari, 1980:479)

At first it is possible to identify opposing characteristics of each of these spaces. Deleuze and Guattari outline these characteristics in contrast to each other but soon make it clear that these spaces move from one to the other. Through a range of different models they identify smooth and striated forms in technology, music, maths and so on. For example, in the technological model, striated space is present in woven cloth where each thread is ordered and organised alongside other threads to form a piece of fabric through a repetition of movements. Smooth space, in contrast, is aligned to felt which is created by the meshwork of fibres in a heterogenous jumble.

The surges of events that occurred in the play sessions were not just created by the immediate things to hand as bodies in the space – the people, play objects, cleaning supplies and so on - but were part of a 'social-aesthetic-material-political worlding' (Stewart, 2017) where social and political structures played out across the material and embodied encounters. For example, how the centres were funded, the covid risk assessment policies and the measured impact assessments of the children's centres were all present in the

space through spatial layouts, objects and interactions and were mixed in to how a session would unfold from the moments the families were invited into the space.

The description of smooth and striated space brings a new way to consider the actions of the babies in the play session and how the Covid-19 regulations and the specific actions we took through the risk assessments worked to create a highly striated space that lacked movement and fluidity. This striation worked to make the space safe. Yet, it was the work of the babies that changed this into smooth space by their need to move. The parents and practitioners became navigators constantly shifting between the smooth and striated. Deleuze and Guattari suggest 'we must remind ourselves that the two spaces in fact exist only in mixture: smooth space is constantly being translated, transversed into a striated space; striated space is constantly being reversed, returned to a smooth space' (1980:474). Bradley and colleagues (2012) have mapped elements of smooth and striated space onto the daily flows of an early childhood setting. Through applying this concept into the spaces that babies inhabit I have begun to think of babies as key in the back and fourth of the smooth and the striated and the tension between the two. Certain striations make it possible for babies to dwell in a particular space whereas others grate with the urge for something more smooth.

Importantly Deleuze and Guattari show that these spaces can happen simultaneously (1980:475). When applying this consideration to the gallery it helps illuminate what goes on in these spaces for families. What is the space of the art gallery doing? Such large and quiet spaces seem to be working on the bodies of visitors to make them slow and quiet, possibly awkward, overly self-conscious or uncomfortable, or perhaps relaxed and calm depending on the body. At the same time gallery space offers a different type of space to move differently in. It brings potential to follow the babies' gaze or provides a large clear space to crawl through. Not only could this provide a space for wayfaring, it could provide the ultimate space that is open to the loitering of wayfaring babies.

Within this chapter I have taken moments from the research and applied different theories and concepts to the ways in which babies make space. Through this tentacular mapping of different perspectives I have identified that babies make space in many ways that often push through the common expectations that work across public space. This queers the everyday habitual space making practices that we partake in with little consideration and

brings our attention to the more-than-human around us. In this way, I return to the idea from the beginning of this thesis that babies are space invaders (Puwar, 2004). Through their presence they create a smoothing of striation or an ability to bring out the 'dooriness', or the qualities of a space that adults have forgotten to notice – the physical qualities of matter and the qualities of atmospheres that reverberate among us. In their making of space babies bring our attention to the felt and material dynamics that we are a part of and in doing so make space into something fresh.

Endings and beginnings: making spaces

We are nearing the end, though, of course, there is no end. There are only more questions to be asked, more conversations to be had and more spaces to be made. In this closing section I will return to the three questions of this research and consider what new threads they have created that take me out from this thesis and into new configurations that are produced by story-making with babies and their spatialities.

Space, babies and stories

My first research question is concerned with the entanglement of story-making practices and babies spatialities. I ask: *how can researchers use story-making to pay attention to babies' spatial encounters?* Throughout this thesis I have shown how paying attention to babies' spatial encounters moves focus away from a developmental lens and attends to the here and now. Attending to these spatialities through story-making provides a new way to consider the transient, continuous and ever-changing elements of space through intimate, embodied and personal accounts. These become a way to inhabit, produce and think-with space differently.

Considering imagined spaces through story-making opens up encounters with many different threads that work across and feed into public space in a way that leans into new possible futures. These threads include, but are not limited to, threads of welcome, ownership, thresholds, risk, and loitering. Considering babies entanglements in each of

these threads opens up questions of what kinds of spaces we would like to encounter in our local environments for ourselves, for the babes that we know, and for the little strangers that we are yet to meet.

For me, story-making has been a way to think-with the many entanglements of the research. The stories are not so much a way of presenting findings, but, as they are included in this thesis, they are a presentation of something and in this sense I hope they reflect the process in which they have been a part. They present a vision of future spaces and in doing so perhaps bring attention to the habitual uses of space that proliferate across an ordinary day and emphasise the potential in making space differently.

Using such a language-based method for work with babies seems at odds with the sensory, atmospheric and embodied ways of knowing that babies inhabit but in doing so, makes the non-representational aspect of babies lives present by jarring against it. I am not claiming that the babies wrote these stories, nor that I am the sole author, but leaning into the nomadic subjectivity that Braidotti advocates for within research, I suggest that this writing practice takes account of a subjective authorship that Truman (2016) identifies. She suggests:

Once we cease viewing writers as pre-formed subjects with distinct authorial intentions represented in unambiguous texts, a new materialist informed conception of writing also allows us to consider the emergent qualities of language expression.

(Truman, 2016:137)

One of the aspects of story-making that I would like to hold on to as I draw this thesis to a close is that working in this way is not closing. Making stories provides space for different interpretations to emerge. This is not just through the process of making stories as an on-going reinvention that brings new threads into focus with each re-writing, but also, these stories are presented with this remaking still in place. Working with the ideas of non-representational babies and the acceptance that babies' intricate experiences of being in the world are never fully knowable to adults, these stories are not presented with one interpretation in mind. They are presented in hope that each reader will find something different in them that sparks thoughts, memories or conversations around their own spaces.

These could be spaces that they share with babies – ones that they know and ones that they don't - or bring to mind the spaces in which babies are rarely visible.

These stories are not a presentation of pre-decided ideas of how babies experience space or clear suggestions of what spaces should look like when taking babies needs into account. They are what Manning and Massumi call a 'mutual interpenetration of processes rather than a communication of product' (2014:88–89). For me, this means that the reader becomes a part of the process and each new interpretation, memory or connection that is brought to mind when reading these stories continues the thinking-with of this research into new configurations that extend from the thesis in their own tentacular movements.

Babies as (queer) space makers

Throughout the thesis I have maintained the conviction that babies are space makers and involved in the everyday space making practices that proliferate across public spaces. My second research question is concerned with what actually happens when babies make space. I ask: *how are babies involved in the on-going construction of space and how do these actions queer common space making practices?* I have argued that this queering of space comes from the positionality of babies as they live on the edge of human and engage with the more-than-human world around them. In doing so, within some public spaces, they take on the role of space invaders (Puwar, 2004) that marks them as trespassers and changes what a space can be. In an attempt to identify what is happening in these spaces I have turned to different theories that illuminate certain ways that space is made and how babies can be mixed in with these theories.

In Chapter two I identified the work of the *Loiterers Resistance Movement*. Rose and Casini of the *LRM* suggest that walking, loitering and playing in different ways with space can make certain processes visible that shape the city (Casini and Rose, 2022). Through following the thread of loitering I have found other collectives around the world who see the quietly radical and transforming affects of loitering in public space. Lieder (2018) describes the work of *Why Loiter*, a group of women who loiter together across different locations in Mumbai, and how this act holds political power and potentially radical repercussions. She describes:

The women of *Why Loiter* were not loitering only to make themselves more comfortable doing nothing in the public space of the neoliberal city; they were also loitering for an audience, normalizing the idea of women doing nothing in the public space of the neoliberal city for the host of people moving through the streets who might catch a glimpse of this uncommon sight.

(Lieder, 2018:146)

Loitering with babies, both during the children centre sessions and with my own baby in our local spaces, has foregrounded expectations and exclusions where babies' limited access to public space has altered significantly in the wake of the pandemic and global political shifts. I suggest that the queering practices of babies work alongside this playful resistance that is proposed and enacted by *LRM* and *Why Loiter* by drawing our awareness to how these spaces are in constant negotiation with other factors and ways that babies are intricately woven into these negotiations. A significant aspect of space that has become tangible within this research is the lack of public space where babies and toddlers can loiter in comfort and safety. As we near closer to the close of this thesis I find that Rasmussen's (2004) distinction between spaces *for* children and *children's spaces*, is particularly key to the lives of babies and toddlers. Within these specifically designated spaces for children, Satta (2015) shows how desire and agency is considered, or not, within these confines. Considering the many ways in which babies and toddlers might move in different ways to the adults around them, there is potential in loitering for longer in public spaces. This loitering might come about through following a particular interest of a toddler, or in providing the movements that soothe a tiny baby. The spaces that are allotted for babies and toddlers to loiter for any length of time are few and far between. Loitering for anyone, for that matter, is often only acceptable in very specific spaces and it can be more restricted when it does not involve spending any money. Consider walking to the end of the street, or a busy area where you live, and standing there for five full minutes and note how it feels. Or try sitting down in a shopping centre for a good while without spending any money. It is worth returning to a note from the very beginning of this thesis in that the experience of loitering differs depending on the different bodies involved. Loitering as a lone adult or loitering with a baby bring about different possibilities. Sometimes, not always, the presence of a baby makes

loitering more possible than if they were not there. This is where the loitering of babies makes space differently.

Loitering can be a powerful action. Phadke suggests 'loitering offers the possibility of rewriting the city as a more inclusive, diverse and pleasurable one' (2013:50). In the pull between babies and the more-than-human, attention is given to spaces that are often disregarded by adults and considered only as spaces to walk past if noticed at all. Consider the urge to stop and admire the grate on the pavement, the sudden need to be comforted with milk whilst shopping, the need to follow the bricks of the low garden wall, the pull to repetitively crawl the same loop between stairs and ramp or the desire to watch the room from under the table. These are all possible things but made trickier when the grate is covered in grime, when there are no seats around to sit and feed, when the garden wall is by a busy road, when the access ramp is out of bounds or the table is taken elsewhere. Despite these risks and tricky negotiations, these moments between babies and the more-than-human still happen and in doing so spaces are changed. Sometimes these changes are fleeting moments and some are gradual moves that are shaped over time. Grime is cleared from the grate, a stranger nods a reassuring acknowledgement, the wall gradually gets covered in pot plants, two carers share a moment of tiredness as the repetitive loop gathers force and an older child finds a safe space to watch the world from underneath the table.

Future spaces: three propositions

The third question that has shaped this research is: *What new imaginaries of public space are made possible by paying attention to babies' space-making practices?* This has been at the heart of the story-making process and brings attention to the many different social, political, material and environmental elements that feed into public space. With this final research question in mind, I draw to a close by offering three gathering propositions for space that bring together different threads of the research. Following Rasmussen's (2004) suggestion mentioned above that children make informal spaces that often go unnoticed by adults and that differentiate from spaces that are allocated specifically for children, these propositions are not suggestions for new improved spaces for babies that are somehow better than the previous spaces. This would feed into the problematic idea that babies

spaces need to be separated from everywhere else: this space is for you, therefore the rest of the world is not. Instead, I consider space through the agentic, capacious and emergent space making practices of babies that this research has outlined and seek the new imaginaries that these make possible.

These three speculative propositions for space attempt to work affirmatively with babies' space making practices and illuminate aspects of space that manifest through my experiences of loitering with babies in different spaces. Laced within them are the different considerations of space that I have drawn on across this thesis, Massey, Manning, Stewart, Ahmed, Deligny, Deleuze and Guattari, Ingold, Zembylas and Stern are all mixed in with the babies' spatailities. These propositions are written with the three reconsiderations of babies that have been threaded across this thesis, that babies are mixed in with the world and make things happen, that they live on the edge of human and that they are never fully knowable to adults. These propositions are not manifesto demands, grand statements or fixed conclusions. They are presented in a minor key, taking a lead from the small yet significant actions of babies as they make the space around them in intricate and unexpected ways. Yet in these small scale proposals are giant hopes and aspirations to breath more vitality in the spaces that we make together.

These propositions follow babies' space making practices to produce spaces that allow for movement, loitering and unpredictability. I end this thesis with these proposals as way to keep things tentative, in tension and open.

Proposition 1: We need spaces to crawl on our hands and knees.

We travel through space in limited ways. Often walking at speed on two legs. Not everyone travels in this way. What if we had space where we could travel differently, where our bodies interacted with the ground in more ways than one? And what if we made contact with surfaces with bare feet and hands. We need space that isn't just for walking through but space where you can travel in different ways, stranger ways, less grown up, 'walking-and-talking', 'human' ways. Moving to unlearn are straightened ways of carrying ourselves so we can see the world from a different angle. We need spaces that take care of knees. Soft

sumptuous floors, smooth stone, grass without dog shit. We need spaces where movement is ok, where boundaries can be crossed, returned to, crossed over and dwelt within. We need spaces where babies can be nomadic and where lines of movement can be a new form of communication.

Proposition 2: We need space to lie down and loiter.

Space is not always for moving through. Some space is for staying still for a really long time. Where thresholds of feeling are barely perceptible. Where kindness is carried in the air and translated by skin. This is space where you can dwell in loops, where you can spend as much time as you need. This is space where little strangers are welcome. Space that is available whenever you need it. Galleries that open in the middle of the night. Museums at the end of your street. Bus shelters with books and hot tea rather than fag ends. Spaces where it is ok to sleep in the middle of the day. Spaces where you don't have to be in the centre but can find the edges and know that they are (or know that you can make them) habitable.

Proposition 3: We need space where we can be unstable.

We are in flux and spaces are also in flux. We need spaces that can morph from one thing to the next and still include loops, edges, thresholds, clean surfaces. We need spaces that babies will make and remake. We need spaces where we can see the everchanging world around us – the turn of the leaves, the gradual spread of green moss over an abandoned pile of rubble. We need spaces where we can become aware of the doorness of doors and the stoniness of stones. We need to take our place in being a part of spaces that change and rebuild. To be a part of the push and pull of the smooth and straited and allow for different spaces to merge. We need spaces that tend to a never ending mixture of stories-so-far.

Miniature epilogue

In preparing to bring this thesis to a close I return to my notebooks and pour over my handwritten notes. From the very first session where doors were reopened and families tentatively stepped in, the Zooms where babies snuggled against the backdrop of lopsided ceilings, the twinkly lights of the sensory room and the little notes that I wrote while I fed my baby. There's the hand gel, the masks, children's socked feet on the ice outside their doorstep as we hand over sensory gifts. There's the dry stone wall, the fluorescent paper, the towpath, the baby who reaches his arm across the screen, the sloshing of bubble bath from babies in washing up bowls. The sound of heavy rain on the cover of the empty outdoor market. Names of babies and lists of little moments. Moments where touch was needed and not given, moments of tension, moments where a baby would make the whole space burst into laughter. So many forgotten moments that have drifted away, filtered through the thinking-with. I am hit with the sounds, scents and movements. I follow the babies, the many ways in which they prefer the edge and not the centre, and I find myself back in the heady, queering portal that enveloped the world. I find the strange promising threshold and linger in it, for a while.

I am writing these closing remarks in a local cafe. As I write, a toddler walks up to the toy cupboard in the corner. He opens it, and instead of taking toys out, he steps in, takes a last look at the room, and closes the door behind him.

References

Acevedo-Rincón, J. and Tebet, G. (2021) 'Spaces, movements and topological notions, what do the babies' cartographies show?' *Mathematics Enthusiast*, 19(2) pp. 470-500.

Adams, R. (2020) 'The Art of Interspecies Care.' *New Literary History*, 51(4) pp. 695-716.

Ahmed, S. (2006). *Queer Phenomenology*. Duke University Press

Ahmed, S. (2008) 'Open Forum Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the "New Materialism"', *European Journal of Women's Studies*, 15(1) pp. 23-39.

Ahmed, S. (2014). *Atmospheric Walls*. Feminist Killjoys. [Online] [Date accessed: 28/5/24] url: [Atmospheric Walls | feministkilljoys](#)

Ailwood, J. (2020) 'Care: Cartographies of power and politics in ECEC.' *Global Studies of Childhood*, 10(4) pp. 339-346.

Aiucentre (2019). *Playing and Protesting: Adventure Playgrounds in 1970s-80s Manchester*. Reading Race, Collecting Cultures: Collections at the Ahmed Iqbal Ullah Race Relations Resource Centre. [Online] [Accessed 14/7/24] url: <https://aiucentre.wordpress.com/2019/02/08/playing-and-protesting/>

Alaimo, S. (2010). *Bodily natures: science, environment, and the material self*. Bloomington: Indiana University Press.

Andersen, C., Guttorm, H., Koro, M., Löytönen, T., Osgood, J., Otterstad, A., Rantala, T., Rautio, P. and Välimäki, A. (2017). *Special issue: "Darkness matters". Reconceptualizing Educational Research Methodology*. 8. [Online] [Accessed 4/7/24] doi: 10.7577/term.2230.

Arculus, K. (2024) *More-than-words: Reconceptualising Two-year-old Children's Onto-epistemologies Through Improvisation and the Temporal Arts*. Doctoral thesis (PhD). Manchester Metropolitan University. [Online] [Accessed 11/7/24] url: <https://e-space.mmu.ac.uk/633764/>

Arculus, C. and MacRae, C. (2022) 'Clowns, fools and the more-than-Adult toddler.' *Global Studies of Childhood*, 12(3) pp. 209-223.

Bambra, C. (2021) *Health for Wealth: Levelling up the North-South health divide*. Newcastle University. [Online] [date accessed: 12/6/24] <https://from.ncl.ac.uk/research-levelling-up-the-north-south-health-divide>

Barad, K. (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press.

Barad, K. (2013) 'Ma(r)king time: Material entanglements and re-memberings: Cutting together-apart.' In P. R. Carlile, D. Nicolini, A. Langley, & H. Tsoukas (Eds.) *How matter matters: Objects, artifacts, and materiality in organization studies*. Oxford: Oxford University Press. pp. 16–31.

Bargetz, B. and Sanos, S. (2020) 'Feminist matters, critique and the future of the political.' *Feminist Theory*, 21(4) pp. 501-516.

Barron, C. and Emmett, M. (2020). *Report on the Impact of COVID-19 on children's play and friendships in the Dublin City Council area*. Dublin City University.

Bennett, J. (2010). *Vibrant Matter: A Political Ecology of Things*. Duke University Press.

Best Beginnings, Home-Start UK, and the Parent-Infant Foundation UK (2020) *Babies in Lockdown: listening to parents to build back better*.

Blaise, M. and Pacini-Ketchabaw, V. (2019) 'Enacting Feminist Materialist Movement Pedagogies in the Early Years' In Osgood, J. and Robinson, K. (Eds). *Feminists Researching Gendered Childhoods*. Bloomsbury. Pp. 109-120

Blakemore, E. (2018) *Baby Incubators: From Boardwalk Sideshow to Medical Marvel*. History. [Online] [Accessed 12/7/24] url: <https://www.history.com/news/baby-incubators-boardwalk-sideshows-medical-marvels>

Bowlby, J. (1958) 'The nature of the child's tie to his mother.' *The International Journal of Psychoanalysis*, 39 pp. 350–373.

Boycott-Garnett, R. (2023) 'Zooming with Babies: Troubling a Shared Present.' *Journal of Childhood Studies*, 48(1) pp. 126-132.

Boyer, K. (2018) 'Breastmilk as Agentic Matter and the Distributed Agencies of Infant Feeding.' *Studies in the Maternal*, 10(1) doi: <https://doi.org/10.16995/sim.257>

- Boyer, K., and Spinney, J. (2016) 'Motherhood, mobility and materiality: Material entanglements, journey-making and the process of 'becoming mother.'" *Environment and Planning D: Society and Space*, 34(6) pp. 1113-1131.
- Bradley, B., Sumsion, J., Stratigos, T., & Elwick, S. (2012) 'Baby Events: Assembling Descriptions of Infants in Family Day Care.' *Contemporary Issues in Early Childhood*, 13(2) pp. 141-153.
- Braidotti, R. (2013). *The Posthuman*. Polity.
- Braidotti, R. (2014) 'Writing as a Nomadic Subject.' *Comparative Critical Studies*, 11(2-3) pp. 163-184.
- Braidotti, R. (2018) 'Affirmative Ethics, Posthuman Subjectivity, and Intimate Scholarship: a Conversation with Rosi Braidotti.' In Strom, K.J., Mills, T. and Ovens, A. (Eds.) *Decentering the researcher in intimate scholarship : critical posthuman methodological perspectives in education*. First edition. Bingley, UK: Emerald Publishing. Pp. 205-220.
- Brownlie, J., and Sheach Leith, V. M. (2011) 'Social bundles: Thinking through the infant body.' *Childhood*, 18(2) pp. 196-210.
- Bubla, E. (2024) *Breathing*. Sound installation as part of Designated Breathing Zone.
- Burman, E. (2001) 'Beyond the baby and the bathwater: Postdualistic developmental psychologies for diverse childhoods.' *European Early Childhood Education Research Journal*, 9(1) pp, 5–22.
- Bussu, S., Lalani, M., Pattison, S. and Marshall, M. (2020) 'Engaging with care: ethical issues in Participatory Research.' *Qualitative Research*, 21(5) pp. 667-685.
- Butler, J. (2022). *What World Is This? A Pandemic Phenomenology*. New York: Columbia University Press.
- Campbell, E. and Lassiter, L. (2010) 'From Collaborative Ethnography to Collaborative Pedagogy: Reflections on the Other Side of Middletown Project and Community–University Research Partnerships.' 41(4) pp. 370-385.

Carr, M., Clarkin-Phillips, J., Beer, A., Thomas, R. and Waitai, M. (2012) 'Young children developing meaning-making practices in a museum: the role of boundary objects.' *Museum Management and Curatorship*, 27(1), pp. 53-66.

Casini, L. and Rose, M. (2022, October 4). Fostering a disconnect: How verticality is hindering human connection with urban spaces.' *The Sociological Review Magazine* [Online] [Accessed 11/7/24] url: Magazine. <https://doi.org/10.51428/tsr.zajr6609>

Children's Commissioner (2020) *Lockdown Babies*. [Online] [Accessed 11/7/24] url: <https://assets.childrenscommissioner.gov.uk/wpuploads/2020/05/cco-lockdown-babies.pdf>

Christensen, P. (2004) 'Children's participation in ethnographic research: Issues of power and representation.' *Children and Society*, 18(2) pp. 165-176.

Christensen, P. and O'Brien, M. (eds) (2003) *Children in the City: Home Neighbourhood and Community*. Routledge.

Clayton, L. (2013). *The Distance I Can Be From My Son*. [Video Series] Exhibited at Pittsburg Center for the Arts.

Clellow, R. (2017). *My paths are my ideas of imagination*. Touchstones Gallery, Rochdale.

Cohen, J. J. (2015). *Stone: An ecology of the inhuman*. Minneapolis: University of Minnesota Press.

Cortés-Morales, S. (2020) 'Bracelets around their wrists, bracelets around their worlds: materialities and mobilities in (researching) young children's lives.' *Children's Geographies*, 19(3) pp. 364–376.

Cortés-Morales, S. and Christensen, P. (2014) 'Unfolding the pushchair. Children's Mobilities and Everyday Technologies.' *Research on Education and Media*. 1(2) pp. 9-18.

Courage, C., Borrup, T., Jackson, M, R., Legge, K., Mckeown, A., Platt, L. and Schupbach, J. (2021). *The Routledge Handbook of Placemaking*. Routledge.

Crucible (2003). *Changeling*. [CD]. Wild Goose Records.

Daszak P, Olival KJ, Li H. (2020) 'A strategy to prevent future epidemics similar to the 2019-nCoV outbreak.' *Biosaf Health*, 2(1) pp. 6-8.

Day, A. *Good Dog Carl*. New York: Simon and Schuster.

de la Bellacasa, M. P. (2012) "Nothing Comes Without Its World': Thinking with Care.' *The Sociological Review*, 60(2) pp. 197-216.

Deligny, F. (2016). *The Arachnean and Other Texts*. Translated by Burk, D, S. and Porter, C. Minneapolis: University of Minnesota Press.

Deleuze, G. and Guattari, F. (1980). *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Massumi, B. Minneapolis: University of Minnesota Press.

Dolye, J. (2015) *Olmec Babies as Early Portraiture in the Americas*. The MET. [Online] [Accessed 13/7/24] url: <https://www.metmuseum.org/articles/olmec-babies>

Dyer, H. (2019). *The Queer Aesthetics of Childhood: Asymmetries of Innocence and the Cultural Politics of Child Development*. Rutgers University Press.

Education Committee (2022) *Is the Catch-up Programme fit for purpose?* [Online] [Accessed 4/7/24] url:

<https://publications.parliament.uk/pa/cm5802/cmselect/cmeduc/940/report.html#>

Elwick, S. (2015) 'Baby-cam' and researching with infants: Viewer, image and (not) knowing.' *Contemporary Issues in Early Childhood*, 16(4) pp. 322-338.

Elwick, S. (2019) 'Merleau-Ponty's 'wild Being': Tangling with the entanglements of research with the very young.'" *Educational Philosophy and Theory*, 52(2) pp. 149–158.

Elwick, S., Bradley, B. and Sumsion, J. (2012) 'Infants as Others: Uncertainties, difficulties and (im)possibilities in researching infants' lives.' *International Journal of Qualitative Studies in Education*, 7(2) pp. 196-213.

Fanon, F. (1961). *Wretched of the Earth*. New York: Grove Press.

Faircloth, C., Twamley, K. and Iqbal, H. (2022) 'Er, not the best time': methodological and ethical challenges of researching family life during a pandemic.' *Families, Relationships and Societies*, 11(1) pp. 39–43.

Five X More (2024) Five X More: Campaigning for better maternal health outcomes. Five X More. [Online] [Accessed 4/7/24] url: <https://fivexmore.org/>

Francesconi, M. and Heckman, J. (2016) 'Child Development and Parental Investment: Introduction.' *The Economic Journal*, 126(596) pp. F1-F27.

Fullagar, S and Pavlidis, A. (2021) 'Thinking through the Disruptive Effects and Affects of the Coronavirus with Feminist New Materialism.' *Leisure Sciences*, 43(1-2) pp. 152-159.

Gabriel, N. (2020) 'Beyond 'developmentalism': A relational and embodied approach to young children's development.' *Children and Society*. 35 (1) pp. 48-61.

Gallacher, L. (2017) 'From milestones to wayfaring: Geographic metaphors and iconography of embodied growth and change in infancy and early childhood.' Working Paper. Northumbria University, Newcastle upon Tyne.

Gallacher, L. and Gallagher, M. (2008) 'Methodological Immaturity in Childhood Research?: Thinking through 'participatory methods.'" *Childhood*, 15(4) pp. 499-516.

Garrett, P, M. (2022) 'Bowlby, Attachment and the Potency of a 'Received Idea.'" *The British Journal of Social Work*, 53(1) pp. 100–117.

Garthwaite, K., Patrick, R., Power, M. and Page, G. (2020) 'Researching together: the value in collaboration when researching poverty during Covid-19.' *International Journal of Social Research Methodology blog*. [Online] [Accessed 1Available at: <https://ijsrm.org/2020/08/17/researching-together-the-value-incollaboration-when-researching-poverty-during-covid-19/>

Geertz, C. (1973) 'Thick Description: Toward an Interpretive Theory of Culture.' *The Interpretation of Cultures: Selected Essays*. New York: Basic Books. pp. 3–30.

Geertz, C. (1998) *Deep Hanging Out*. The New York Review.

- Gesell, A. (1928). *Infancy and human growth*. NY: Macmillan.
- Gherardi, S. (2019) 'Theorizing affective ethnography for organization studies.' *Organization*, 26(6) pp. 741-760.
- Gillies, V., Edwards, R. and Horsley, N. (2017). *Challenging the Politics of Early Intervention: Who's 'saving' children and why*. Bristol. Policy Press.
- Gottlieb, A. (2000) 'Where Have All The Babies Gone?: Toward an Anthropology of Infants (and Their Caretakers).' *Anthropological Quarterly*, 73 pp. 121-132.
- Gupta (2019) *Culture helps shape when babies learn to walk*. Science News. [Online] [Accessed 13/7/24] url: [Culture helps shape when babies learn to walk \(sciencenews.org\)](https://www.sciencenews.org/article/culture-helps-shape-when-babies-learn-to-walk)
- 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) pp. 5-27.
- Hackett, A. (2022) 'Unruly edges: Toddler literacies of the Capitalocene.' *Global Studies of Childhood*, 12(3) pp. 263-276.
- Hackett, A. (2021). *More-than-human literacies in early childhood*. London: Bloomsbury Academic.
- Hackett, A., Holmes, R. and MacRae, C. (2020) 'Introduction' In Hackett, A., Holmes, R. and MacRae, C. (eds.). *Working with Young Children in Museums: Weaving theory and practice*. London: Routledge/Taylor & Francis Group. Pp. 1-11.
- Hackett, A., Holmes, R. and MacRae, C. (eds.) (2020). *Working with Young Children in Museums: Weaving theory and practice*. London: Routledge/Taylor & Francis Group.
- Hackett, A., Holmes, R., MacRae, C., & Procter, L. (2018). 'Young children's museum geographies: spatial, material and bodily ways of knowing.' *Children's Geographies*, 16 (5) pp. 481-488.
- Hackett, A., Procter, L. and Kummerfeld, R. (2017) 'Exploring Abstract, Physical, Social and Embodied Space: developing an approach for analysing museum spaces for young children.' *Children's Geographies*, 16 (5) pp. 489-502.

Hackett, A., Procter, L. and Seymour, J. (eds.) (2015). *Children's spatialities : embodiment, emotion and agency*. Basingstoke: Palgrave Macmillan.

Hackett, A. and Rautio, P. (2019) 'Answering the world: young children's running and rolling as more-than-human multimodal meaning making.' *International Journal of Qualitative Studies in Education*, 32(8) pp. 1019–1031.

Haraway, D. (2015) 'Tentacular Thinking: Anthropocene, Capitalocene, Chthulucene.' *e-flux journal*, 75 [Online] [Accessed 4/7/24] url: <https://www.e-flux.com/journal/75/67125/tentacular-thinking-anthropocene-capitalocene-chthulucene/>

Haraway, D. (2016). *Staying with the trouble: making kin in the Chthulucene*. Durham: Duke University Press.

Haraway, D. (2019) 'It Matters What Stories Tell Stories; It Matters Whose Stories Tell Stories.' *A/b: Auto/Biography Studies*, 34(3) pp. 565–575.
<https://doi.org/10.1080/08989575.2019.1664163>

Harmey, S. and Moss, G. (2021) 'Learning disruption or learning loss: using evidence from unplanned closures to inform returning to school after COVID-19', *Educational Review*, 75(4) pp.637–656.

Holloway, S. and Pimlott-Wilson, H. (2014). 'Enriching Children, Institutionalizing Childhood? Geographies of Play, Extracurricular Activities, and Parenting in England.' *Annals of the Association of American Geographers*, 104(3) pp. 613-627.

Holmes, R. and Jones, L. (2016) 'Flickering, Spilling and Diffusing Body/Knowledge in the Posthuman Early Years.' In Taylor, C.A. and Hughes, C. (eds.) *Posthuman research practices in education*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan. Pp. 108-127.

Holt, L. and Philo, C. (2023) 'Tiny human geographies: babies and toddlers as non-representational and barely human life?' *Children's Geographies*, 21(5), pp. 819–831.

Hood, L., Bailey, A, R., Coles, T. and Pringle, E. (2022) 'Liminal spaces and the shaping of family museum visits: a spatial ethnography of a major international art museum.' *Museum Management and Curatorship*, 37(5) pp. 531–554.

House of Commons Petitions Committee (2021) Impact of Covid-19 on new parents: one year on [Online] [Accessed 4/7/24] url:

<https://publications.parliament.uk/pa/cm5802/cmselect/cmpetitions/1132/report.html#:~:text=The%20report%20calls%20for%3A%20strengthened,expectant%20mothers%3B%20and%20a%20review>

Horton, J. and Kraftl, P. (2006) 'What else? some more ways of thinking and doing 'Children's Geographies.'" *Children's Geographies*, 4(1) pp. 69–95.

Horton, J. and Kraftl, P. (2007) 'Spaces of every-night life: for geographies of sleep, sleeping and sleepiness.' *Progress in Human Geography*. 32(4) pp. 509–524.

Hultgren, F. and Johansson, B. (2018) 'Including babies and toddlers: a new model of participation.' *Children's Geographies*, 17(4) pp. 375–387.

Impedovo, M, A. I and Guarnieri de Campos Tebet, G. (2019) 'Baby wandering inside day-care: retracing directionality through cartography', *Early Child Development and Care*, 191(13) pp. 2001–2012.

Ingold, T. (2007). 'Materials against materiality.' *Archaeological Dialogues*, 14(1) pp. 1-16.

DOI: <https://doi.org/10.1017/S1380203807002127>

Ingold, T. (2011). *Being Alive: Essays on Movement, Knowledge and Description*. Taylor & Francis Group

Ingold, T. (2013). *Making: Anthropology, Archaeology, Art and Architecture*. London and New York: Routledge

Ingold, T. (2016). *Lines: A Brief History*. London and New York: Routledge.

Jones, J. (2018). *A glowing cosmic spectacle – Anthony McCall Solid Light Works review*. *The Guardian*. [Online] [Accessed 12/7/24] url:

<https://www.theguardian.com/artanddesign/2018/feb/16/anthony-mccall-solid-light-works-hepworth-wakefield-review>

Jones, L., Holmes, R., MacRae, C. and MacLure, M. (2010). 'Documenting classroom life: How can I write about what I am seeing?' *Qualitative Research*, 10(4) pp. 479-491.

Jones, L., Osgood, J., Holmes, R., and Urban, M. (2014) 'Reimagining quality in early childhood.' *Contemporary Issues in Early Childhood*, 17(1) pp. 3-7.

Just for Kids Law, Save The Children Fund and The Children's Rights Alliance (2024) *In the Matter of The Covid-19 Inquiry Closing Submissions*. UK Covid-19 Inquiry. [Online] Accessed: 12/7/24 url: [INQ000399536.pdf \(covid19.public-inquiry.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/123456/INQ000399536.pdf)

Keeling, K. (2019). *Queer Times, Black Futures*. NYU Press.

Khaliq O., Mkhize P,Z. and Moodley J,M. (2021) 'Raising awareness about the unintended consequences of hand sanitiser in children.' *South African Family Practice*, 63(1) pp. e1-e3.

Korczynski, M., Pickering, M. and Robertson, E. (2013) *Rhythms of Labour: Music at Work in Britain*. Cambridge: Cambridge University Press.

Kozinets, R, V. (2019). *Netnography: The Essential Guide to Qualitative Social Media Research*. 3rd Edition. Sage Publications.

Kristensen, B. (2020) *Welcome to the Viralocene: Transcorporeality and Peripheral Justice in an Age of Pandemics*. Medium. [Online] [Accessed 13/7/24] url: <https://medium.com/@bjornkristensen/viralocene-66a954260487>

Kristeva, J. (1982). *Powers of Horror: An Essay on Abjection*. New York: Columbia University Press.

Kromidas (2019) 'Towards the human, after the child of Man: Seeing the child differently in teacher education.' *Curriculum Inquiry*, 49(1) pp. 65-89.

Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). 'Projecting the Potential Impact of COVID-19 School Closures on Academic Achievement.' *Educational Researcher*, 49(8) pp. 549-565. <https://doi.org/10.3102/0013189X20965918>

Lafrance M. (2009) 'Skin and the self: Cultural theory and Anglo-American psychoanalysis.' *Body and Society*, 15(3) pp. 3-24.

- Leadsom A, Field F, Burstow, P and Lucas, C (2013). *The 1,001 critical days: the importance of the conception to age two period: a cross party manifesto*. London: DH.
- Lefebvre, E. (2002). *The Production of Space*. Oxford: Blackwell Publishing.
- Lenz Taguchi, H. (2019) 'Preface' In Osgood, J. and Robinson, K. (Eds). *Feminists Researching Gendered Childhoods*. Bloomsbury. Pp. xvii-xix
- Lieder, K, F. (2018) 'Performing Loitering Feminist Protest in the Indian City.' *TDR: The Drama Review*, 62(3) pp. 145-161.
- Logé, G. (2013). *The surexpression of wander lines*. Mobile Lives Forum. [Online] [Accessed 17/7/24] url: <https://forumviesmobiles.org/en/opinions/12619/surexpression-wander-lines>
- Lunstrum, E., Ahuja, N., Braun, B., Collard, R., Lopez, P. And Wong, R. (2021) 'More-Than-Human and Deeply Human Perspectives on COVID-19.' *Antipode*, 53(5) pp. 1503-1525.
- MacLure, M. (2013) 'The Wonder of Data.' *Cultural Studies ↔ Critical Methodologies*, 13(4), pp. 228-232.
- MacRae, C. (2019) 'The Red Blanket: a dance of animacy.' *Global Studies of Childhood*, 12(4) pp. 348-358.
- MacRae, C. (2020) 'Tactful hands and vibrant mattering in the sand tray.' *Journal of Early Childhood Literacy*, 20(1) pp. 90-110.
- MacRae, C., Hackett, A., Holmes, R. and Jones, L. (2017) 'Vibrancy, repetition and movement: posthuman theories for reconceptualising young children in museums.' *Children's Geographies*, 16(5) pp. 503–515.
- Malone, K. and Bozalek, V. (2021) 'Walking-with.' In Murriss, K. (ed.). *A Glossary for Doing Postqualitative, New Materialist and Critical Posthumanist Research Across Disciplines*, Routledge. Pp. 142-143.
- Manning, E. (2009) 'What if it Didn't All Begin and End with Containment? Toward a Leaky Sense of Self.' *Body & Society*, 15(3) pp. 33-45.

Manning, E. (2015). *The Smell of Red – Cinnamon*. Vancouver Art Museum, August 2015. [Online] [Accessed 11/7/24] url: <http://erinmovement.com/the-smell-of-red-2>

Manning, E. and Massumi, B. (2012). *Affective attunement in a field of catastrophe: Interview med Brian Massumi og Erin Manning*. Peripeti. [Online] [Accessed 4/3/24] url: <https://www.peripeti.dk/2012/06/06/affective-attunement-in-a-field-of-catastrophe/>

Manning, E. and Massumi, B. (2014). *Thought in the Act: Passages in the Ecology of Experience*. Minnesota: University of Minnesota Press.

Massey, D. (1999) 'Philosophy and Politics of Spatiality: Some Considerations.' *Hettner Lecture in Human Geography*, Heidelberg University, Germany.

Massey, D. (2005). *For Space*, SAGE Publications Limited

Massey, D. (2013) *Doreen Massey on Space*. Social Science Bites. [Transcript] [Online] [Accessed 14/7/24] url: <https://www.socialsciencespace.com/wp-content/uploads/DoreenMassey.pdf>

Massumi, B. (2015). *Politics of Affect*. Cambridge, UK: Malden.

Mayes, E. (2019) 'The mis/uses of 'voice' in (post)qualitative research with children and young people: Histories, politics and ethics.' *International Journal of Qualitative Studies in Education*, 32(10) pp. 1191–1209.

Mbembe, A., (2018) 'Politics and Affects: The Dynamics of Social Mobilization' The Holberg Debate, Bergen, Norway, 1st December. [Transcript] In Holberg Prize, *Professor Achille Mbembe's Address at the 2018 Holberg Debate*. [Online] [Accessed: 12/6/24] <https://holbergprize.org/en/news/holberg-prize/professor-achille-mbembes-address-2018-holberg-debate>

MBRRACE UK (2023). *Saving Lives Improving Mothers' Care 2023: Lay Summary* [Online] [Accessed 12/7/24] url: https://www.npeu.ox.ac.uk/assets/downloads/mbrpace-uk/reports/maternal-report-2023/MBRRACE-UK_Maternal_Report_2023_-_Lay_Summary.pdf

- McCall, A. (2018), *Solid Light Works*. [exhibition]. Hepworth Gallery, Wakefield.
- McCall, K. (2020) 'Healthy Child Drop-In and Baby Stay and Play at Manchester Art Gallery.' In Hackett, A., Holmes, R. and MacRae, C. (eds.) *Working with Young Children in Museums: Weaving theory and practice*. London: Routledge/Taylor & Francis Group. Pp. 165-172.
- McCall, K. and Boycott-Garnett, R. (2020) 'Manchester Art Gallery: Co-designing a space for young children and services.' *Journal for Education in Museums*, 40, pp. 3-10.
- McNamee, S. and Seymour, J. (2013). 'Towards a sociology of 10–12 year olds? Emerging methodological issues in the 'new' social studies of childhood.' *Childhood*, 20(2), pp. 156-168.
- Mellander, E. and Wiszmeg, A. (2016) 'Interfering With Others: Re-configuring Ethnography as a Diffractive Practice.' *Kulturstudier*, 7(1) pp. 93-115.
- Miguel, M. (2015) 'Towards a New Thinking on Humanism in Fernand Deligny's Network' In Sharma, D. and Tygstrup, F. (eds.). *Structures of Feeling: Affectivity and the Study of Culture*. De Gruyter. Pp. 187-196.
- Mikkelsen, M. & Christensen, P. (2009) 'Is Children's Independent Mobility Really Independent? A Study of Children's Mobility Combining Ethnography and GPS/Mobile Phone Technologies.' *Mobilities*, 4 pp. 37-58.
- Mind the Gap (2019) *Zara*. Mind the Gap. [Online] [Accessed 14/7/24] url: <https://www.mind-the-gap.org.uk/project/zara/>
- Mintz, S. (2016) *Childhood Has a History*. Not Even Past. [Online] [Accessed 11/7/24] url: <https://notevenpast.org/childhood-has-a-history/>
- Mohammed, M. (2021) *Five ways the pandemic surge in hand sanitisers may not be great news in the long term*. The Conversation. [Online] [Accessed 4/7/24] Url: <https://theconversation.com/five-ways-the-pandemic-surge-in-hand-sanitisers-may-not-be-great-news-in-the-long-term-157074>

Mohandas, S. and Osgood, J. (2023). *Feminist New Materialist Approaches to Childhood Studies*. Oxford University Press.

Morin, M. (2015) 'The Spacing of Time and the Place of Hospitality: Living Together According to Bruno Latour and Jacques Derrida.' *Parallax*, 21(1) pp. 26–41.

Mothership Writers (2021). *Born in Lockdown*. Mothership Writers [Online] [Accessed 14/7/24] url: <https://www.mothershipwriters.com/borninlockdown>

Mueck, R. (2006) *A Girl*. [Sculpture]. National Galleries Scotland, Edinburgh.

Mühlhoff, R. (2019) 'Affective resonance.' In Slaby, J. and von Scheve, C. (Eds.) *Affective Societies – Key Concepts*. Routledge.

Mulcahy, D. (2017) 'The salience of liminal spaces of learning: assembling affects, bodies and objects at the museum.' *Geographica Helvetica*, 72(1) Pp. 109–118.

Murray, L. & Cortés-Morales, S. (2019). *Children's Mobilities: Interdependent, imagined, relational*. Palgrave Macmillan: Londres.

Murris, K. (2016) *The posthuman child: educational transformation through philosophy with picturebooks*. London: Routledge, Taylor & Francis Group.

Musu, R. (2020) *War metaphors used for COVID-19 are compelling but also dangerous*. The Conversation. [Online] [date accessed: 12/6/24] <https://theconversation.com/war-metaphors-used-for-covid-19-are-compelling-but-also-dangerous-135406>

Myrstad, A., Hackett, A. and Bartnæs, P. (2022) 'Lines in the snow; minor paths in the search for early childhood education for planetary wellbeing.' *Global Studies of Childhood*, 12(4) pp. 321-333.

Nelson, A. (2020) 'COVID-19: Capitalist and postcapitalist perspectives.' *Human Geography*, 13(3) pp. 305-309.

Nerlich, B. (2023) *Crumbling buildings: Metaphors we live in*. University of Nottingham. [Online] [Accessed 11/7/24] url:

<https://blogs.nottingham.ac.uk/makingsciencepublic/2023/09/08/crumbling-buildings-metaphors-we-live-in/>

Office for National Statistics (no date). *Coronavirus*. [Online] [Accessed 23/7/23] url: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases>

Ogilvie, B. (2016) 'Living between the lines' In Deligny, F. (2016). *The Arachnean and Other Texts*. Translated by Burk, D, S. and Porter, C. Minneapolis: University of Minnesota Press. Pp. 9-30

Orrmalm, A. (2020a) 'Culture by babies: Imagining everyday material culture through babies' engagements with socks.' *Childhood*, 27(1) pp. 93-105.

Orrmalm A. (2020b) 'Doing ethnographic method with babies – Participation and perspective approached from the floor.' *Child Soc*, 34 pp. 461–474.

Orrmalm, A. (2021). 'The flows of things – exploring babies' everyday space-making'. *Children's Geographies*, 19(6), pp. 677–688.

Orrmalm, A. Annerbäck, J. Sparrman, A, (2022) 'Listening by 'staying with' the absent child.' *Barn*, 40 p. 70-84

Osgood, J. (2021) 'Queering understandings of how matter comes to matter in the baby room.' In Moran, L., Reilly, K. and Brady, B. (ed.) *Narrating Childhood with Children and Young People: Diverse Contexts, Methods and Stories of Everyday Life*, London: Palgrave Macmillan. pp. 213-236.

Osgood, J., Andersen, C. E., and Otterstad, A. M. (2022). 'Portal-time and wanderlines: What does virus-ing-with make possible in childhood research?' *Reconceptualizing Educational Research Methodology*, 13(3) pp. 208-231.

Osgood, J., Kroeger, J. and Persky, J. (2022) 'Editorial: The spectacle of 'tantruming toddler': Reconfiguring child/hood(s) of the Capitalocene.' *Global Studies of Childhood*, 12(3) pp. 199-208

Osgood, J. and Odegard, N. (2022) 'Crafting granular stories with child-like embodied, affective and sensory encounters that attune to the world's differential becoming.' *Australian Journal of Environmental Education*, 38(3-4) pp. 227-241.

Osgood, J. and Robinson, K. (2019). *Feminists Researching Gendered Childhoods*. Bloomsbury.

Palmer, H. (2022). *Queer Defamiliarisation: Writing, Mattering, Making Strange*. Edinburgh: Edinburgh University Press.

Perry, P. (2020). *The Book You Wish Your Parents Had Read (and Your Children Will Be Glad That You Did)*. Penguin Books

Peters, Michael A., E. Jayne White, Tesar, M., Gibbons, A., Arndt, S., Rutanen, N., Degotardi, S., Salamon, A., Browne, K., Redder, B., Charteris, J., Gould, K., Warren, A., Delaune, A., Kamenaracm, O., Hood, N., and Sturm, S. (2020). 'Infantologies. An EPAT Collective Writing Project.' *Educational Philosophy and Theory*, October, pp. 1-19.

Peterson, D. (2016) 'The Baby Factory: Difficult Research Objects, Disciplinary Standards, and the Production of Statistical Significance.' *Socius*, 2. pp. 1-10. [Online] {accessed 11/07/24} DOI: 10.1177/2378023115625071

Phadke, S. (2013) 'Unfriendly Bodies, Hostile Cities: Reflections on Loitering and Gendered Public Space.' *Economic and Political Weekly*, 48(39) pp. 50-59.

Platt, L. (2023) 'Haecceity of Becoming-Mother: A Diffractive Analysis of Babywearing Through a Global Pandemic.' *Cultural Studies ↔ Critical Methodologies*, 23(4) pp. 374-384.

Platt, L.C. (2024) 'Walking-with/worlding-with in a global pandemic: A story of mothering in motion.' *Area*, 56(2) e12925. <https://doi.org/10.1111/area.12925>

Penn, H. (2010) 'Shaping the future: how human capital arguments about investment in early childhood are being (mis)used in poor countries.' In Yelland, N. (Eds) *Contemporary Perspectives on Early Childhood Education*. McGraw-Hill Education. Pp. 49-65.

Pink, S. (2009). *Doing Sensory Ethnography*. Sage Publications Limited.

Polakow, V. (2010) 'Reframing rights: poverty discourse and children's lives in the United States.' In Yelland, N. (Eds) *Contemporary Perspectives on Early Childhood Education*. McGraw-Hill Education. Pp. 66-82.

Puar, K, J. (2012) "'I would rather be a cyborg than a goddess": Becoming-Intersectional in Assemblage Theory.' *philoSOPHIA: A Journal of Continental Feminism*, 2(1) pp. 49-66.

Puwar, N. (2001) 'The Racialised Somatic Norm and the Senior Civil Service.' *Sociology*, 35(3) pp. 651–670.

Puwar, N. (2004). *Space invaders: race, gender and bodies out of place*. Oxford. Berg.

Ramaekers, S. and Suissa, J. (2012) *The Claims of Parenting: Reasons, Responsibility and Society*. Springer Dordrecht

Rasmussen, K. (2004). 'Places for Children – Children's Places.' *Childhood*, 11(2) pp. 155-173.

Rautio, P. (2013) 'Children who carry stones in their pockets: on autotelic material practices in everyday life.' *Children's Geographies*, 11(4) pp. 394–408.

Redfern, S. and Cooper, A. (2015). *Reflective Parenting: A Guide to Understanding What's Going on in Your Child's Mind*. London: Routledge.

Riley, D. (1982) *War in The Nursery: Theories of The Child and Mother*. London: Virago

Robson, J. (2022) 'Unsettling the Trump Baby: Learning from values and pedagogy in the early childhood nursery.' *Global Studies of Childhood*, 12(3) pp. 288-296.

Rogers, S. (2022) 'Play in the time of pandemic: children's agency and lost learning', *Education 3-13*, 50(4), pp. 494–505.

Rohr, J.R., Barrett, C.B., Civitello, D.J. Meggan E. Craft, M.E., Delius, B., DeLeo, G., Hudson, P.J., Jouanard, N., Nguyen, K.H., Ostfeld, R.S., Remais, J.V., Riveau, G., Sokolow, S.H. and Tilman, D. (2019) 'Emerging human infectious diseases and the links to global food production.' *Nature Sustainability*, 2 pp. 445–456

Rose, M. (no date) *Welcome to The LRM*. The LRM: The Loiterers Resistance Movement. [Online] [Accessed 12/7/24] url: <http://thelrm.org/>

Rose, M. (2019) 'Loitering, Resisting, Moving.' In Rose, C. (ed) *Psychogeography and Psychotherapy*. PCCS Books.

Roy, A. (2020). *Azadi: Freedom. Fascism. Fiction*. London: Penguin Books.

Russell, W. and Stenning, A. (2020) 'Beyond active travel: children, play and community on streets during and after the coronavirus lockdown.' *Cities & Health*, 5(sup1), pp. S196–S199.

Satta, C. (2015) 'A Proper Place for a Proper Childhood? Children's Spatiality in a Play Centre.' In Hackett, A., Procter, L. and Seymour, J. (eds.) *Children's spatialities: embodiment, emotion and agency*. Basingstoke: Palgrave Macmillan. Pp. 178-197.

Save The Children (2024) *Gaza: one in 50 of Gaza's children killed or injured in six months of war*. Save the Children. [Online] [Accessed 4/7/24] url: <https://www.savethechildren.org.uk/news/media-centre/press-releases/one-in-50-of-gaza-s-children-killed-or-injured-in-six-months-of-#:~:text=RAMALLAH%2C%20April%202024%20%E2%80%93%20Nearly,education%2C%20Save%20the%20Children%20said>.

Sendak, M. (1963). *Where the wild things are*. London: Red Fox Books.

Schofield, L. (2021). *Ecologies of Touch*. PhD Thesis. Manchester Metropolitan University. Available at: <https://e-space.mmu.ac.uk/628875/1/FinalEcologiesofTouchLSchofieldEdDNov2021-de46dc93c721460abcd81062e781e7ef.pdf> (Accessed 10/7/24).

Sims, M., Calder, P., Moloney, M., Rothe, A., Rogers, M., Doan, L., Kakana, D. and Georgiadou, S. (2022) 'Neoliberalism and government responses to covid-19: Ramifications for early childhood education and care.' *Issues in Educational Research*. Perth, 32(3) pp.1174–1195.

Smith, Ali. (2015). *Public Libraries and Other Stories*. Hamish Hamilton.

- Somerville, M. and Powell, S. J. (2018). 'Thinking posthuman with mud: and children of the Anthropocene.' *Educational Philosophy and Theory*, 51(8), pp. 829–840.
- Sparrman, A. (2024) 'Unlearning the child: An ontological politics outlook.' *Educational Philosophy and Theory*, pp. 1–12. <https://doi.org/10.1080/00131857.2024.2373774>
- Springgay, S. and Truman, S.E. (2018). *Walking methodologies in a more-than-human world: WalkingLab*. Abingdon, Oxon: Routledge.
- St. Pierre, E. A. (2021). 'Post Qualitative Inquiry, the Refusal of Method, and the Risk of the New.' *Qualitative Inquiry*, 27(1) pp. 3-9.
- Stern, D. (1985). *The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology*. Routledge.
- Stern, D. (2010). *Forms of Vitality: Exploring Dynamic Experience in Psychology, the Arts, Psychotherapy, and Development*. Oxford University Press.
- Stevano, S., Franz, T., Dafermos, Y. and Van Waeyenberge, E. (2021) 'COVID-19 and crises of capitalism: intensifying inequalities and global responses.' *Canadian Journal of Development Studies*, 42(1-2) pp. 1-17.
- Stewart, K. (2007). *Ordinary Affects*. Duke University Press
- Stewart, K. (2011) 'Atmospheric Attunements.' *Environment and Planning D: Society and Space*, 29(3) pp. 445-453.
- Stewart, K. (2017) 'In the World that Affect Proposed.' *Cultural Anthropology*, 32(2) pp. 192–198.
- Stirling, B. (2020) 'Childhood, ecological feminism, and the environmental justice frame.' *Canadian Studies*, 88 pp. 221-238.
- Subedi, M. (2020) 'Anthropocene and Capitalocene Caused Pandemics.' *Dhaulagiri Journal of Sociology and Anthropology*, 14 pp. 15-21.

Sultana, F. (2021) 'Climate change, COVID-19, and the co-production of injustices: a feminist reading of overlapping crises.' *Social & Cultural Geography*, 22(4) pp. 447–460.

Sumartojo, S. Edensor, T. and Pink, S. (2019) 'Atmospheres in Urban Light.' *Ambiances*, 5 [Online] [Accessed 4/7/24] url: <https://doi.org/10.4000/ambiances.2586>

Sumsion, J., Harrison, L. and Stapleton, M. (2018) 'Spatial perspectives on babies' ways of belonging in infant early childhood education and care.' *Journal of Pedagogy*. 9 pp.109-131.

Tann, S. (2018). *Tales from The Inner City*. Allen & Unwin.

Tebet, G.G. and Abramowicz, A. (2016) 'Finding a Place for Babies and their Spatialities.' In Skelton, T. and Aitken, S. (eds.) *Establishing Geographies of Children and Young People*. Vol 1. Springer, Singapore. Pp. 1-24.

Tesar, M., Duhn, I., Nordstrom, S. N., Koro, M., Sparrman, A., Orrmalm, A., Boycott-Garnett, R., MacRae, C., Hackett, A., Kuntz, A., Trafí-Prats, L., Boldt, G., Rautio, P., Ulmer, J., Lenz Taguchi, H., Murriss, K., Kohan, W., Gibbons, A., Arndt, S., and Malone, K. (2021a) 'Infantmethodologies.' *Educational Philosophy and Theory*, pp. 1–18.

Tesar, M., Peters, M. A., White, E. J., Arndt, S., Charteris, J., Fricker, A., Johansson, V., Sturm, S., Hood, N., & Madjar, A. (2021b). *Infanticides: The unspoken side of infantologies*. *Educational Philosophy and Theory*, pp. 1–15.

Tesar, M., Guerrero, M., Anttila, E., Newberry, J., Hellman, A., Wall, J., Santiago-Saamong, C., Bodén, L., Yu, H., Nanakida, A., Diaz-Diaz, C., Xu, Y., Trnka, S., Pacini-Ketchabaw, V., Nxumalo, F., Millei, S., Malon, K. and Arndt, S. (2020): 'Infantographies.' *Educational Philosophy and Theory*, pp. 1-19.

Thomson, M. (2013). *Lost Freedom: The Landscape of the Child and the British Post-War Settlement*. Oxford: Oxford University Press.

Truman, S, E. (2016). 'More than it never (actually) was: Expressive writing as research-creation.' *Journal of Curriculum and Pedagogy*. 3(2). Pp. 136-143.

- Truman, S. E. (2019) 'Inhuman literacies and affective refusals: Thinking with Sylvia Wynter and secondary school English.' *Curriculum Inquiry*, 49(1) pp. 110–128.
- Truman, S. E. (2020). 'Feminist New Materialisms.' In P. Atkinson, S. Delamont, A. Cernat, J.W. Sakshaug, & R.A. Williams (Eds.), *SAGE Research Methods Foundations*. SAGE.
- Truman, S. and Springgay, S. (2015). 'The primacy of movement in research-creation: New materialist approaches to art research and pedagogy.' In M. Lavery and T. Lewis (Eds.) *Art's Teachings, Teaching's Art: Philosophical, critical, and educational musings*, New York, NY: Springer. pp. 151-164.
- Tuck, E. and Yang, K. W. (2014a). 'R-words: Refusing research.' In Paris, D. and Winn, M, T. (Eds.) *Humanizing research: Decolonizing qualitative inquiry with youth and communities*. Thousand Oaks, CA: SAGE. pp. 223-248.
- Tuck, E. and Yang, K. W. (2014b). 'Unbecoming Claims: Pedagogies of Refusal in Qualitative Research.' *Qualitative Inquiry*, 20(6) pp. 811-818.
- Tuck, E. (2009) 'Suspending Damage: A Letter to Communities.' *Harvard Educational Review*, 79(3) pp.409-427.
- Unicef UK Baby Friendly Initiative (no date). *Skin-to-Skin Contact*. Unicef. [Online] [Accessed 4/7/24] url: <https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/implementing-standards-resources/skin-to-skin-contact/#:~:text=What%20happens%20during%20skin-to,and%20engage%20with%20her%20baby.>
- United Nations (2019). *Visit to the United Kingdom of Great Britain and Northern Ireland : report of the Special Rapporteur on Extreme Poverty and Human Rights*. [Online] [Accessed 14/7/24] url: <https://digitallibrary.un.org/record/3806308?ln=en&v=pdf>
- Valentine, G. (2004). *Public Space and the Culture of Childhood* (1st ed.). Routledge.
- Vandenbroeck, M. (2020) 'Measuring the young child: on facts, figures and ideologies in early childhood.' *Ethics and Education*, 15(4) pp. 413–425.

Vieira, p. (2022) 'What Future for the Future? Utopian Lessons from a Global Pandemic.' *In* Simon, Z, B. and Deile, L. (Eds) *Historic Understanding Past, Present and Future*. New York: Bloomsbury. Pp. 141-51.

Viruru, R. (2001) 'Colonized through language: The case of early childhood education.' *Contemporary Issues in Early Childhood*, 2(1) pp. 31–47.

Waite, G. and Nowroozpour, F. (2018) 'Embodied geographies of domesticated water: transcorporeality, translocality and moral terrains.' *Social & Cultural Geography*, 21 pp. 1-19.

Wallis, N. (2020) 'The power of objects: Little things please little minds?' *In* Hackett, A., Holmes, R. and MacRae, C. (eds.). *Working with Young Children in Museums: Weaving theory and practice*. London: Routledge/Taylor & Francis Group. Pp. 27-33.

Wallis, N. and Noble, K. (2022) 'The slow museum: the affordances of a university art museum as a nurturing and caring space for young children and their families.' *Museum Management and Curatorship*, pp. 1–22. [Online] [Accessed 3/2/24] url: <https://doi.org/10.1080/09647775.2023.2269145>

Waterhouse, A.-H. L., Otterstad, A. M. and Boucher, K. (2022) "'Jeg skal sjekke": Urban buggy-wayfaring and adventurous lines with data-ing and reconfigurations of children.' *Contemporary Issues in Early Childhood*, 23(3) pp. 220-236.

Watts, V. (2013) 'Indigenous Place-Thought and Agency Amongst Humans and Non Humans (First Woman and Sky Woman Go On a European World Tour!).' *Decolonization: Indigeneity, Education and Society*, 2(1) pp. 20-34.

Weiss, S. (2023) *A Concrete Crisis Has the UK Literally Crumbling*. Wired. [Online] [Accessed 11/7/24] url: <https://www.wired.com/story/raac-concrete-crisis-uk-literally-crumbling/>

Wilkinson, C. and Wilkinson, S. (2019) 'The only way is ethics? Applying for National Health Service ethical approval and governance for research with children.' *Children's Geographies*, 17(4) pp. 480–486.

Williams, N. and Keating, T. (2022). *Speculative Geographies: Ethics, Technologies, Aesthetics*. Singapore: palgrave macmillan.

Windling, T. (2013) *Into the Woods, 10: Wild Children*. Myth & Moor. [Online] [Accessed 11/7/24] url: <https://windling.typepad.com/blog/2013/06/into-the-woods-9-wild-children.html>

Winnicott, D. W. (1964). *The Child, The Family and The Outside World*. Pelican Books.

Witt, C. (2022) 'The space of care: Fernand Deligny, Renaud Victor and the making of Ce gamin, là (1975).' *French Screen Studies*, 22(1)pp. 23-43.

Woodhead, M. and Faulkner, D. (2008). 'Subjects, objects or participants? Dilemmas of psychological research with children.' In Christensen, P. and James, A. (Eds.) *Research With Children: Perspectives and Practices*. 2nd ed., Routledge, pp. 10-39.

World Health Organisation (2023) *WHO Covid-19 Dashboard*. [Online] [Accessed 23/6/23] url: <https://data.who.int/dashboards/covid19/cases>

Zara. (2019). *Mind The Gap, Walk the Plank and Emergency Exit Arts*. Halifax Piece Hall.

Zembylas, M. (2019) 'From the Ethic of Hospitality to Affective Hospitality: Ethical, Political and Pedagogical Implications of Theorizing Hospitality Through the Lens of Affect Theory.' *Studies in Philosophy and Education*, 39 pp. 37–50.